Assessment and summary of the Member States implementation reports for the IED, IPPCD, SED and WID

Industrial Emissions Directive
Final Report

Prepared by
Amec Foster Wheeler Environment & Infrastructure UK Ltd in collaboration with Milieu Ltd
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Authors: Josephine Armstrong, Victoria Cherrier, Claire Dupont, Ioanna Kourti, Keith Lawton, Keir McAndrew, Hetty Menadue.

Issued by: Victoria Cherrier

Authorised by: Keith Lawton

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Executive summary

Introduction

The purpose of this executive summary is to present the main findings from the analysis of implementation of Directive 2010/75/EU concerning industrial emissions (integrated pollution prevention and control) (IED). The findings in this report are based on the information contained in the reports submitted by Member States for the first reporting period under the IED, which covered the year 2013.

Reporting by Member States

While all Member States apart from Finland[1] submitted a response to the first IED implementation questionnaire (Annex I to Decision 2012/795/EU), the level of detail included in the responses varied greatly. Some responses consisted only of references to transposing legislation while others were detailed and comprehensive. Overall, little information was provided on the processes and actual steps taken toward the practical implementation of the IED.

This finding, identified throughout the analysis of the responses, is attributable to the fact that Member States have little to no practical experience with some features of the Directive. This will likely change by the next reporting period (covering 2013 to 2016) whereby Member States will have greater experience with implementing the IED and be in a position to provide further details on practical implementation issues.

The focus of this executive summary is on the new features introduced by the IED. More details on the implementation of the IED can be found in the report.

Non-compliance (Article 8)

The majority of the Member States stated the criteria that are used to determine the seriousness of breaches of permit conditions. The criteria are either set in the national legislation or in the permits.

The most commonly applied criterion concerns the vulnerability of the receptor (i.e. fauna and flora and local populations). Other criteria taken into account include the nature and size of the activity, properties of the substances, the quantity of emissions, exceedances of emission limit values or other thresholds or standards. Member States also reported operating without a valid permit as relevant criteria. Other criteria being considered include the likelihood of human exposure and previous infringements.

In general it was reported that the assessment of whether a breach of permit conditions poses an immediate danger to human health or threatens to cause an immediate significant effect upon the environment, relies on: expert assessment and / or training and guidance and tools developed for this specific purpose.

Permit conditions (Article 14)

All Member States indicated that the implementation of the requirement that the permit conditions are to be based on BAT conclusions is achieved through the transposition of Article 14(3) into their national legislation.

Member States reported several mechanisms that are used to ensure the use of BAT conclusions for setting permit conditions, which include:

- Guidance documents that assist the competent authorities.

[1] Finland responded that the IED was transposed into national law in September 2014 and thus no information was available for the reporting period covered by the questionnaire.

- General Binding Rules or other legislation that ensure that BAT conclusions are used as reference for setting permit conditions.
- Specific procedures that competent authorities have to follow during the issue of the permit (including comparison of permit conditions with BAT conclusions).
- Information provided by the operator during the permitting process about how they propose to meet the relevant BAT conclusions.

The responses of 12 Member States comprised only a reference to the relevant legislation and (in some instances) a link to the BAT conclusions, but with no information on how these are actually applied in practice.

Amongst the responses providing more of an insight into how the BAT conclusions are used during the permitting stage, the Czech Republic mentioned that competent authorities are required to indicate in their decision on permit applications which BAT conclusions and which BREFs are used to support the selection of operating conditions as well as a comparison of the proposed permit conditions with the relevant BAT conclusions. In Denmark, the competent authorities use BAT checklists that summarise the BAT conclusions. The responses from Bulgaria, Ireland, the Netherlands, Romania, Sweden and the UK included links to guidance for permitting that have been drafted by competent authorities and which include references to BAT conclusions.

All Member States reported the possibility to set stricter permit conditions than those achievable by the use of BAT, but generally little detail was included on the process used to decide whether stricter permit conditions were needed. The most commonly reported case for setting stricter permit conditions is in relation to meeting Environmental Quality Standards (EQS).

ELVs (Article 15)

The replies of 24 Member States quoted the relevant national legislation, requiring the ELVs to be set according to the BAT-AELs included in the BAT conclusions.

While this is an essential new feature of the IED, very little information was included in the responses. At best, in some cases links were provided to the procedures followed in order to decide which value within the BAT-AEL range to include as an ELV in the permit. Some additional information was provided as follows:

- In Belgium, the general principle is that the upper limits of the BAT-AELs are adopted as ELVs in the national legislation.
- Denmark, Germany and Sweden's guidance includes information on setting ELVs in relation to BAT-AELs and, for Denmark and Germany, which part of the BAT-AEL range should be used. Denmark noted that it is not automatic that new installations should meet the lower end of the BAT-AEL range.

On the implementation of the derogation provision included in Article 15(4), most of the Member States quoted their national legislation without providing further information about how they practically intend on implementing this provision. Three Member States reported that a procedure for granting derogations has been adopted, and four Member States have issued some guidance on the topic. Only one Member State reported having experience with applying a specific procedure.

Moreover, very little information about what would be considered disproportionally higher costs compared to environmental benefits was provided. Replies referred to the following:

- The cost which makes production uneconomical (Bulgaria).

- Whether the ratio between the costs of undertaking the adjustments and the quantities of emissions that need to be reduced in order to meet the levels is greater than the reference values provided in the Economics and Cross-media Effects Reference Document (Croatia).
- The fact that compliance with BAT-AELs does not have a beneficial effect compared to compliance with the current set of permit conditions, achieving BAT-AELs has a positive effect which is not significant given the extremely high cost, or territorial constraints render the cost of meeting BAT disproportionate (Italy).
- The cost associated with the technological investment required to meet the BAT-AEL outweighs certain critical issues such as the environmental gains achievable should BAT be applied (Malta).
- Cost of achieving the BAT-AEL is higher than the cost of harm caused (UK).

Many Member States highlighted that their limited feedback on this issue was due to a lack of practical experience with derogation requests. Several Member States indicated that examples of cost-benefit analysis would be useful, in particular to identify benefits. The IMPEL project "Sharing of draft proposals between Member States for implementing derogations from BAT-AELs under Article 15 paragraphs (4) and (5) of the industrial emissions Directive 2010/75/EU", was mentioned as a source of examples for derogations. Member States also reported that clarifications, guidance or examples of cost-benefit analysis provided by the European Commission would be useful, particularly with regards to the benefit part of the analysis.

Regarding the magnitude and time limitations of derogations, very limited practical information was provided.

Regarding the provisions on granting temporary derogations (Article 15(5)) eight Member States explicitly mentioned that they have not issued temporary derogations, whilst for the remaining Member States the situation is unknown.

Monitoring requirements (Article 16)

All Member States indicated that monitoring requirements are either directly or indirectly based on BAT conclusions. For the 24 Member States where monitoring requirements are directly based on BAT conclusions, the national legislation transposing the IED requires that monitoring requirements are aligned to the relevant BAT conclusions.

All Member States have adopted at least the same frequency for periodic monitoring of soil and groundwater as mentioned in the IED.

The majority of the Member States have implemented the possibility to use systematic appraisal of risk of contamination to justify lesser monitoring frequencies for soil and groundwater. Six Member States reported that this possibility has not been used during the reporting period whilst seven Member States indicated that the option to use systematic appraisal for risk of contamination is not available.

General Binding Rules (Article 17)

General Binding Rules (GBRs) have been adopted in 10 Member States.

All Annex I activities are covered by GBRs in at least three Member States. GBRs are most frequently applied for waste management activities, followed by combustion installations, the intensive rearing of poultry or pigs and the surface treatment of metals or plastic materials (6 out of 10).

Three Member States indicated that all pollutants included in Annex II of the IED are covered by GBRs. For the remaining Member States GBRs cover mostly air pollutants.

Water pollutants were less covered by GBRs and the most commonly reported were suspended solids and metals.

No detail has been provided by Member States on how it is ensured that GBRs are based on BAT, beyond the specification of the relevant legislation or repeating the provisions of the IED.

Developments in BAT (Article 19)

26 Member States reported that the responsibility of monitoring changes to BAT had been assigned to the accountable government department/agency (typically the Ministry of Environment or other governmental environment agencies).

Member States reported that they use publically available websites to inform the public of new or updated BAT conclusions. In three Member States changes to BAT conclusions are only communicated directly to those affected / those requesting information, and are not published by the competent authorities online.

Reconsideration and updating of permit (Article 21)

Member States reported on the type of information typically requested from operators to assist in permit reconsideration and updating, and this includes monitoring results, information from on-site inspections and information allowing the competent authority to verify that BAT is applied.

In five Member States, the information submitted as part of the reconsideration process is the same as that required for the initial permit application assessment. Reconsideration of permits is conducted during sector reviews in three Member States. This entails in one of them a systematic analysis of a sector to determine the information already available and the information needed.

The identification of the main activity of an installation is made in accordance with parameters such as the main economic activity of the installation or the activity with the most significant environmental impact. References were made to national legislation and European legislation, both of which are used to guide the determination of the main activity. In cases where several activities are conducted within the same installation, many Member States reported that the competent authority conducts an assessment taking into account either the main economic activity or the most polluting activity, or both.

The responses from almost all Member States quoted similar wording to the IED when describing circumstances initiating the reconsideration and update of integrated permits. The only variation was on whether these circumstances would trigger an immediate reconsideration of the permit or whether a case-by-case assessment was first undertaken to check whether the permit could be updated at a later stage, for example as part of a planned update schedule.

Site closure (Article 22)

Eleven Member States have designated all the IED activities as potentially requiring a baseline report. Other Member States (16) have indicated that baseline reports are required for a selection of activities.

The majority of Member States indicated that the draft version of the Commission guidance that was available during the reporting period has been taken into account to some extent when drafting the requirements for the content of the baseline report.

The responses provided on measures to adopt upon cessation of activities were similar. In most cases a survey must be conducted by the operator, repeating the measurements and sampling conducted for the baseline report. The results of this

survey are forwarded to the competent authority that compares the results with the baseline reports. The result of the comparison forms the basis of whether an installation has caused significant pollution and the actions to be undertaken to remedy any such pollution.

Environmental inspections (Article 23)

Nearly all (24) Member States have drafted an environmental inspection plan. It should be noted that in some Member States, these were only drawn up for the first time in 2014, so not yet during the reporting period. These plans are publicly available in most Member States.

In all Member States having an environmental inspection plan, routine inspection programmes are used; with the exception of Luxembourg, which reported it had not drafted routine programme yet.

All Member States provided details of how the systematic appraisal of environmental risks is carried out, demonstrating application of the criteria set out in Article 23(4) of the IED. In each case, the assessment criteria to be applied is either set out in the national legislation, the methodology forms part of the environmental inspection plan, or separate national guidance has been produced, which in many cases is based on the IMPEL Integrated Risk Assessment Method (IRAM) tool[2].

Non-routine environmental inspections are carried out in all Member States to investigate serious environmental complaints. In Ireland, these cover any complaints about a site, not only serious environmental complaints. In addition, in most Member States, non-routine environmental inspections are conducted following serious environmental accidents, incidents and occurrences of non-compliance.

All Member States reporting confirmed that the findings from site visits (i.e. environmental inspections) are communicated to the operator (typically in a report), though not all Member States provided details of how this is done. With regard to the public availability of the site visit report, in three Member States the site visit report is not made available to the public.

Access to information and public participation (Article 24)

While some Member States provided detailed explanations of their public participation procedures, most responses from Member States simply referred to the legislative provisions transposing Article 24 IED.

In all (26) Member States except Luxembourg the information is made available to the public online. Luxembourg reported that the information is made available by way of notice and a summary of the application is published in at least four daily newspapers.

Four Member States stated that not all relevant information is made available via the internet with two adding that some information is available online. The availability of all relevant information (online for specific information) is a legislative requirement under the national legislation transposing Article 24(3) of the IED and follow-up should identify whether these provisions have been fully implemented in the relevant Member States.

Emerging techniques (Article 27)

A range of initiatives were reported by Member States in relation to promoting emerging techniques. These includes the appointment of a private or public body to oversee the development of emerging techniques and encourage their applications (in

[2] http://www.impel.eu/tools/risk-criteria-database-iram/

11 Member States) or the setting up of an investment programme to facilitate access to public funding (in 10 Member States).

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1. Introduction

1.1 Purpose of this Report

This report has been prepared under a contract (070201/2014/693416/ENV.C3) between the European Commission and Amec Foster Wheeler Environment and Infrastructure UK Limited ('Amec Foster Wheeler') related to the assessment and summary of Member States' implementation reports for the IED, IPPCD, SED and WID. The work is being delivered in partnership with Milieu Ltd.

This report has been produced for the purpose of understanding the status of Member States' implementation of the Industrial Emissions Directive (IED, 2010/75/EU). The findings in this report are based on the information contained in the reports submitted by Member States for the first reporting period under the Directive covering the year 2013.

1.2 Study context

1.2.1 Industrial Emissions Directive

Industrial activities play an important role in the economic well-being of Europe, contributing to sustainable growth and providing high quality jobs. However, industrial activities also have significant impacts on the environment. The need to further control industrial emissions, as well as the need to lower the unnecessary administrative burden that existed in Union law concerning industrial emissions, led to the Commission's proposal for a Directive on industrial emissions (IED). This legislation recast seven Directives related to industrial emissions into a single clear and coherent legislative instrument. Following the ordinary legislative process, the IED was adopted by the European Parliament and the Council on 24 November 2010[3].

The IED seeks to prevent, reduce and control air, water and soil pollution originating from industrial installations. It clarifies and strengthens the role of Best Available Techniques (BAT) and contains the new concept of "BAT conclusions", which are adopted as implementing acts by the European Commission and have legal status.

All permit conditions for installations falling under the IED are to be reconsidered and, if necessary, updated to ensure compliance with the BAT conclusions within 4 years of the publication of the BAT conclusions concerning the main activity of the installation.

The IED also strengthened provisions on soil pollution, inspections and some of the minimum requirements set by its predecessors and it aims to encourage the development, piloting and use of novel and innovative techniques.

1.2.2 Reporting by Member States

Article 72 of the IED requires that Member States ensure that information is made available to the Commission on their implementation of the Directive. This includes the submission of representative data on emissions and other forms of pollution, on emission limit values, on the application of best available techniques (in particular on the granting of exemptions) and on progress made concerning the development and application of emerging techniques.

Further reporting is required from Member States for the large combustion plants covered by Chapter III of the Directive.

[3] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32010L0075

The Commission adopted Decision 2012/795/EU in December 2012 on the type, format and frequency of information to be made available. The Decision provides two questionnaires; the first one (Annex I) covers the period from 7 January 2013 to 31 December 2013 and focuses on the changes that Member States had to adopt in order to implement the provisions of the IED. The second questionnaire (Annex II), to which Member States will be required to respond by 30 September 2017, covers the period 2013-2016. This study presents the results of the analysis of those responses by Member States on the Annex I questionnaire. Covering only one year, the conclusions that can be drawn from information contained in this report are limited by the amount of information that is available in Member States in these early stages of implementation.

1.3 Structure of this report

The report is structured as follows:

- Section 2 provides an analysis of the Member States' reports on the implementation of the IED;
- Section 3 presents the analysis of the responses to each question at EU level;
- Section 4 presents the conclusions of the study;
- Appendix A presents in a table all the hyperlinks reported by Member States; and
- Appendix B includes the IED Member State summaries developed from responses received by Member States.

2. Analysis of the completeness of Member States' reports on the implementation of the IED

2.1 Approach

The analysis of the reports submitted by Member States for the year 2013 was carried out systematically with reference to the questionnaire (Decision 2012/795/EU) and the IED itself. The implementation of the Directive for each Member State has been assessed in stages:

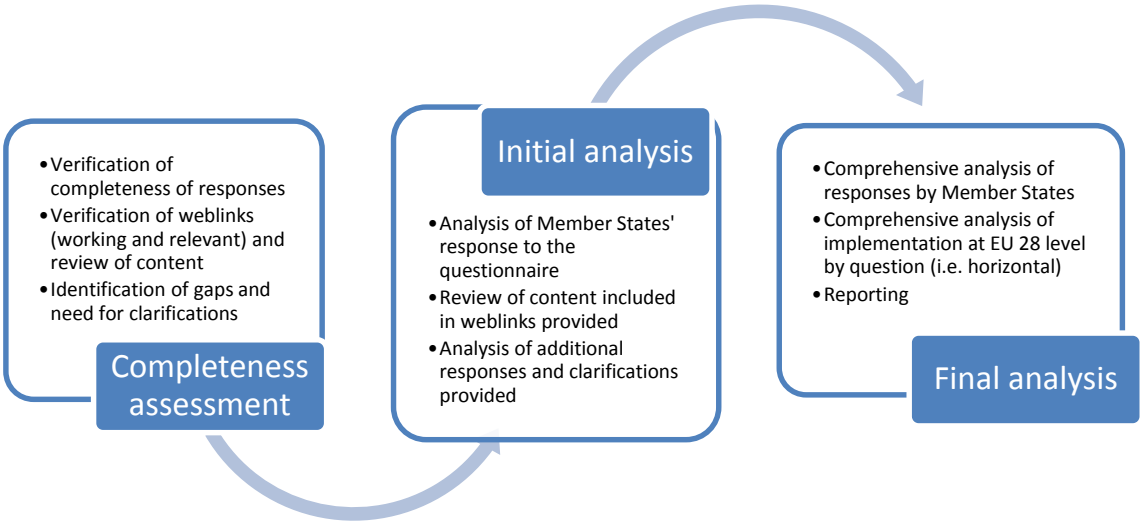
1. An analysis of the 'completeness' of the reports was carried out to understand the degree to which information provided by Member States answered the questions set out in the questionnaire. This also involved the verification of the web-links included in the Member State responses, namely whether the links were working and whether further indications were required to identify the relevant content of the links. A 'traffic-light' system has been used as a way of graphically representing the level of completeness of the Member State responses. The fours colours (green, hatched green, orange, red) distinguish the different level of completeness (complete, response provided but generic, partial response or incomplete), and supporting commentary is provided for information gaps or incomplete responses.

2. The information gaps were then assessed according to their importance (i.e. where a gap prevented full analysis of implementation, this was rated a higher priority than one that was more contextual). This assessment enabled the Commission to prioritise its gap filling requests to the Member States. The information provided by the Member States in response to the Commission's gap filling requests was then used in the third stage of analysis.

3. The third stage, an analysis of the status of the implementation of the Directive, involved a detailed question-by-question analysis of the Member States' responses. Where information was not provided by a Member State, even after requests for clarification sent by the Commission, it was not possible to make any concluding remarks about the level of implementation in the Member State. In addition, the information reported by Member States was used to conduct an analysis of the implementation of the IED at EU-28 level.

The diagram below presents the steps that were followed.

Figure 2.1 Steps adopted for analysis of the information received



The information included in this report is based solely on the data reported by Member States, the information contained in the web-links included in the responses from Member States, and any subsequent clarifications provided by the Member State. Appendix A presents all the web links reported by Member States. These links were accessed and checked as part of the analysis, however many were not translated or analysed in all cases. The Member State reports were translated into English by the Commission translation services, where necessary, while the Member State responses to the Commission's request for clarifications were translated by an automatic translation tool. The analysis in the report is based on the English translations, rather than the original language versions. Where problems were encountered with the quality of the automatic translation, Amec Foster Wheeler used all reasonable endeavours in order to interpret the information received.

2.1.1 Evaluation of completeness

For each of the 11 questions, an assessment was made as to the extent to which the Member State provided an adequate answer, or provided sufficient data in relation to the Commission's questionnaire. A 'traffic light' system was used to distinguish the different level of completeness for each question (c complete, response provided but generic, partial or no response provided). The results of this completeness assessment have been presented for each Member State in Table 2.2. Appendix B contains further commentary on the gaps identified within respective Member State assessments. The definitions attributed to the different colours are presented in Table 2.1.

Table 2.1 Key to completeness analysis

	Evaluation criteria for completeness
Green	The information provided by the Member State is complete, and the information is sufficient to understand how a specific aspect of the Directive has been implemented. All the links provided were functional.
Green hatched	The response provided by the Member State is formally speaking complete but too general, for example it consists only of a reference to a relevant legislative text. Those responses provide little insight in the practical implementation of the Directive in particular as regards the provisions newly added in comparison with predecessor legislation.
Orange	The information provided by the Member State only addresses part of the question, certain indents or provides limited detail. The information therefore does not provide sufficient information to understand the status of implementation.
Red	Information provided by the Member State may not be relevant or present at all and this raises uncertainties surrounding the status of implementation in respect of that aspect of the Directive.
White	The response is not required, e.g. information only had to be provided when a Member State responded 'yes' to a prior question.

In addition some questions requested information 'if available' or 'if known'. As such, when Member States stated that no information was available, or that particular information was not known, this has not been considered a gap.

Where there are particular issues regarding a Member State's report, such as an omission or an incomplete response, notes are provided in the respective Member State analysis (see Appendix B) to explain why an orange or red colour has been applied. Where the question is deemed to have been answered completely, no further comments have been provided.

2.1.2 Member State report evaluation criteria

The analysis of the Member State reports started with a systematic review of the information provided by the Member States. In order to draw conclusions on the implementation status based on the information contained in the reports, criteria were used to make a judgement about the degree to which the IED questionnaire has been answered.

Considering that all questions request qualitative information, the assessment required a judgement-based approach. The analysis of each Member State's report was undertaken with reference to both the Directive and the questionnaire.

2.2 Completeness of Member States' reports

Table 2.2 presents the overall completeness status of Member States' reports taking into account additional information submitted by Member States following the request for clarifications and further information by the Commission.

When drawing the conclusions on the state of implementation of the IED one must take into account the fact that 2013 was the first year that the IED had entered into effect (transposition deadline for Member States was 7 January 2013). As a result, limited experience concerning its implementation (i.e. on the newly introduced elements compared to previous legislation) is to be expected. Key findings from the completeness assessment for this first reporting period are:

- Overall the information submitted by Member States was found to be mostly formally complete. There has been a general effort to provide references to relevant articles in national legislation, guidance and internet links (which have been assessed when required).
- Out of the 28 Member States, 21 have provided a complete response to the questionnaire. The gaps identified are mainly due to non-working hyperlinks (e.g. Romania) or responses that present some minor gaps.
- Finland did not provide any response to the questionnaire explaining that the IED was only transposed into national law in September 2014, thus no information was available for the reporting period covered by the questionnaire. Croatia did not provide a response for one element of the questionnaire.
- The content of several responses was only partly satisfactory. In several instances the responses provided are general references to the applicable legislation with limited detailed information on the practical steps taken as part of implementation. This is particularly noticeable for the questions that focus on some new features of the IED, for example in relation to questions 2, 3 and 4 (e.g. use of BAT conclusions and derogations).

  In addition, some responses are consistently less detailed than others. Those with the least comprehensive responses are questions 7 on the reconsideration of the permit conditions and question 9 on environmental inspections. Across all Member States, a total of 15 sub-questions were missing a response[4], of which 4 are on question 7 and a further 5 on question 9.
- The generic nature of some of the responses suggests that only few Member States had adopted the necessary guidance in these early stages of implementation. In some Member States, measures or processes to implement certain IED provisions have not yet been put in place due to the recent entry into force of the IED. Two examples of this issue are the approaches adopted for assessing derogations allowed under Article 15(4) of the IED, and the content and procedures for production of the baseline report (Article 22(2)). In both cases, it would be useful to have more information on the measures and processes that were planned to be adopted and their likely content and features.

[4] This excludes the number of questions for which Finland did not provide a response

Table 2.2 Overview of the responses from Member States

| Questions / MS | 1 - Non compliance | 2 - Permit conditions | | 3 - Emission limit values, equivalent parameters and technical measures | | | | | 4 - Monitoring requirements | | | 5 - General Binding Rules | | | | | | | 6 - Developments in BAT | | | 7 - Reconsideration and updating of permits | | | 8 - Site closure | | | | | | | | | 9 - Environmental inspections | | | | | | | | | | | | | | | | 10 - Access to information and public participation | | | | 11 - Emerging techniques |
|---|---|---

3. Analysis of Member States' responses by question

This section provides an overview of the status of the implementation of the IED across the EU-28 for 2013. The overview is based on the Member State specific analyses (presented in Appendix B), which were developed from a detailed question-by-question analysis.

This section follows the order of the questions as presented in the questionnaire. It draws conclusions on common themes regarding implementation status and highlights any trends across the Member States, as well as exceptions to those trends, taking into consideration completeness of the replies to the questionnaire.

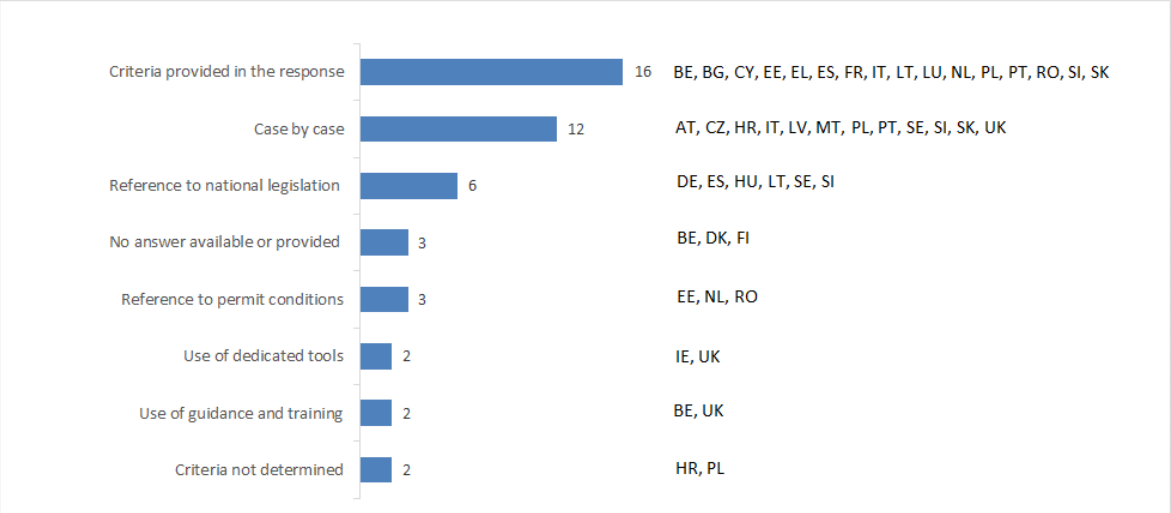
The text of each question in the Decision is presented at the start of each sub-section to help facilitate understanding.

3.1 Question 1: Non-compliance (Article 8)

1(a) - What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'

Figure 3.1 below presents the summary of the information provided by Member States in response to this question. Responses provided by 16 Member States named the criteria used to determine the seriousness of the breach of permit conditions. The answers provided by the remaining Member States referred either more generally to the expert assessments, national legislation, permit conditions, training and guidance or any dedicated tools developed, and did not provide any indication of how the immediate danger to human health or threat to cause an immediate significant adverse effect upon the environment are determined. Croatia and Poland specifically reported that no official criteria have been established however the response from Poland included indications on the types of non-official indicators that can be used to determine whether a breach of permit conditions poses immediate danger.

Figure 3.1 Responses provided with respect to criteria used to assess a breach of permit conditions



Note: Member States responses included several criteria hence Member States appearing in more than one category of responses.

3.1.1 Case by case assessments

12 Member States (Austria, the Czech Republic, Croatia, Italy, Latvia, Malta, Poland, Portugal, Sweden, Slovenia, Slovakia and the United Kingdom) reported that assessments are used as part of establishing the severity of a breach of permit conditions on a case-by-case basis. Austria, the Czech Republic, Croatia, Latvia, Malta, Sweden and the UK provided information on this assessment process and the type of documents and evidence considered. In some instances these responses were quite detailed (e.g. the Czech Republic and the UK). However, the responses did not include a description of the criteria used in the assessment. Croatia explicitly indicated that criteria are yet to be defined. Sweden added that the assessment considers not only the damage to the environment from emissions but also the impoverishment of valuable natural and cultural environments or biological diversity. Information on the criteria used during assessments were included in the responses from Italy, Poland, Portugal, Slovenia and Slovakia and are presented in Table 3.1.

3.1.2 Guidance and training

Belgium (Brussels) and the UK (Scotland) reported the use of guidance and the provision of training to help competent authorities determine the severity of a permit breach:

- Competent authorities in Belgium (Brussels) adhere to guidance provided by the European Union Network for the Implementation and Enforcement of Environmental Law' (IMPEL) in the document 'IED Inspections - Guidance for the implementation of the IED in planning and execution of inspections', specifically Chapter 5 'Implementation issues IED' and Annex VIII 'Levels of non-compliances'. In the context of the question, the guidance explains the meaning of the word "significant" rather than providing a set of rigid criteria for competent authorities to apply. The guidance states that "Significant here indicates that consequences of the incident or accident are not negligible", however it provides a degree of discretion to the competent authorities for assessing this.
- In the UK (Scotland), the regulator provides internal training to staff which covers issues such as a breach of permit conditions and helps inspectors take case-by-case decisions on what poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment.

3.1.3 Use of dedicated tools

In Ireland and the UK (England and Wales), dedicated tools have been developed to assess events of non-compliance with the permit conditions. The tools are based on a risk-based approach and help authorities to assess the level of potential impact. The final scores produced through the use of these tools allow the competent authorities to define whether a non-compliance incident causes immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment. Use of criteria set up in national legislation or permits.

Table 3.1 presents the summary of criteria reported by 16 Member States.

The most commonly applied criteria (reported by three or more Member States) concern the nature and size of the activity, the properties of the substances and the quantity of emissions, exceedances of ELVs or other thresholds or standards, as well as the vulnerability of the receptor (i.e. fauna and flora and local populations). Member States also reported that operating without a valid permit or breaching permit conditions were criteria used.

Table 3.1 Criteria reported to determine whether a breach of permit conditions poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment

	BE	BG	CY	EE	EL	ES	FR	IT	LT	LU	NL	PT	PL	RO	SK	SI	Number of MS reporting the criterion
Type, sensitivity / vulnerability of the receptor (environment and population e.g. proximity to schools, hospitals)	✓		✓		✓					✓			✓				5
Properties of the emitted substances (e.g. toxicity)	✓		✓		✓		✓			✓							5
Nature and size of the activity/process/site					✓		✓					✓	✓				4
Quantity of substance emitted	✓		✓	✓			✓										4
ELVs exceedance	✓	✓		✓						✓							4
Exceedances of other thresholds (e.g. environmental quality standards, monitoring of groundwater and soil) / breach of other environmental legislation				✓					✓						✓	✓	4
Operating without a valid permit or failure to comply with the permit conditions				✓		✓						✓		✓			4
Likelihood of human exposure (e.g. workers on-site, neighbouring population)	✓		✓														2
Previous infringements					✓			✓									2

Criteria set out in national legislation

Several Member States (Germany, Hungary, Lithuania, Slovenia, Spain and Sweden) reported that the relevant criteria or definitions are set out in the national legislation.

- Germany reported that the threat to the environment must be "more than a negligible threat to human health or the environment", but did not provide further explanation on this.
- Hungary indicated that permits can be breached in two situations, the first being in the case of "pollution" (which is defined in the legislation as emissions above the emission limit values). The second situation for breach of permit conditions is in the case of an environmental threat which is defined as an immediate threat of any major and measurable – either direct or indirect – significant adverse effect on the environmental medium or the service it provides.
- In Lithuania it is considered that non-compliance with the environmental quality standards is a criterion for breach of permit conditions.
- Slovenia reported that the criteria used to determine the severity of a permit breach are different thresholds specified in its national legislation, which may for example include limit/ warning/ alarm thresholds and/ or other requirements and rules.
- Spain quoted the relevant part of the legislation that sets out the conditions whereby a breach of a permit is considered to be severe. Amongst others, these include causing serious damage to the environment or putting human health at risk without an integrated permit, having a permit that is out of date (i.e. has not been updated or reviewed after the activity has changed), or failure to notify the authorities of an accident or incident.
- In Sweden, detriment to human health is defined as any disturbance that is liable to have adverse effects on health in medical or hygienic terms which are not minor or temporary. Damage to the environment not only means an impact due to an emission, but also the impoverishment of valuable natural and cultural environments or biological diversity. Sweden added that no criteria have been adopted as the assessments are undertaken on a case-by-case basis.

Criteria set out in permits

Estonia, the Netherlands and Romania reported that criteria to identify non-compliance are specified in permit conditions:

- In Estonia, an immediate danger to human health or threat to cause an immediate significant adverse effect upon the environment is determined by non-compliance with an environmental standard or with the quantity of emissions specified in the permit.
- In the Netherlands, the decision on whether the breach of permit conditions is s serious is decided by reference to whether compliance with the permit conditions can be ensured. In cases where compliance cannot be ensured, the breach is considered to be serious and the operator needs to suspend operations.
- In Romania, a breach of any of the permit conditions is considered as a risk of impact on the environment and human health. The operator is required to inform the competent authority of the breach and take immediate action to restore compliance as soon as is practicable. The competent authority can suspend the permit if it is not satisfied that the breach has been addressed adequately.

3.1.4 Member State responses that did not allow analysis of the approach applied

Denmark reported that environmental permits have to include a condition requiring the operator to immediately report any incidents of non-compliance to the authorities, to take necessary measures to mitigate potential damage, and to suspend or part-suspend the activity if there is a risk to human health or threat of adverse environmental impact. However the response did not specifically cover what criteria are used to determine the severity of the consequences resulting from the breach of a permit.

Belgium (Wallonia) reported that criteria are defined in the national legislation, however upon checking the relevant sections of the legislation referred to in the report, no relevant criteria have been identified.

3.2 Question 2: Permit conditions

2(a) - Provide a summary of any Member State policy or guidance on the following issues and,

2(b) - If published on the internet, provide a link to where this policy or guidance can be found.

2.1 - How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?

2.2 - How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?

3.2.1 Sub-question 2.1: How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?

Mechanisms reported by Member States on use of BAT conclusions

The mechanisms reported by Member States on the use of BAT conclusions for setting permit conditions has been reviewed and particular focus was given to the following mechanisms:

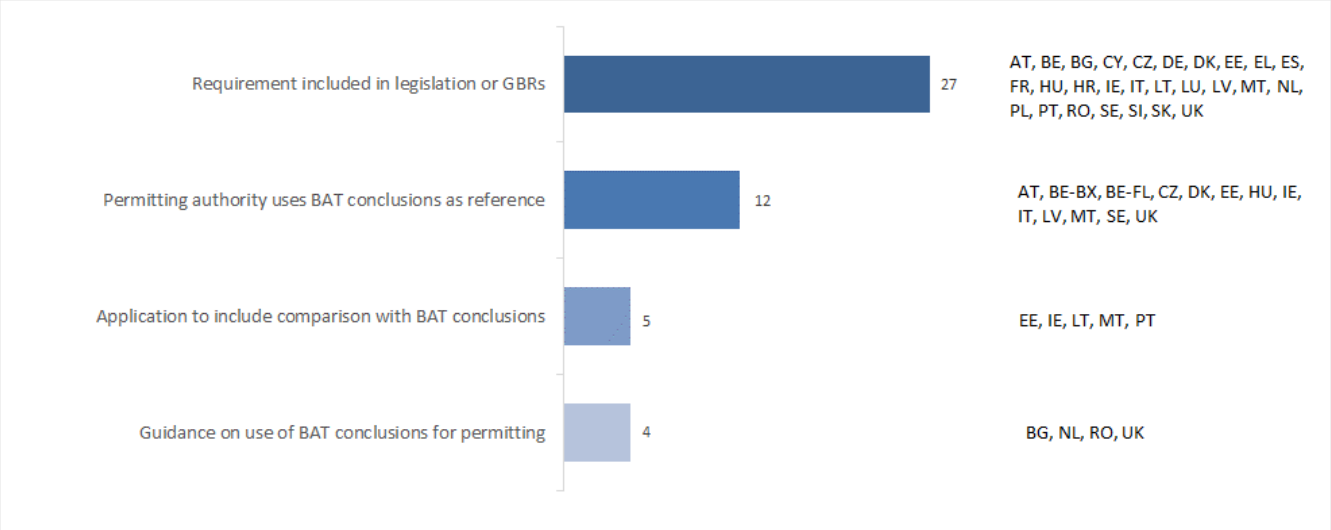
- General Binding Rules or other legislation ensures that BAT conclusions are used as a reference for setting permit conditions;
- Information provided by the operator during the permitting process about how they propose to meet the relevant BAT conclusions which the operator must then comply with as per permit conditions;
- Specific procedures that competent authorities have to follow during the issue of the permit (including a comparison between the permit conditions and the BAT conclusions); and
- Guidance documents issued to assist the competent authorities.

It is important to note that BAT conclusions are to be applied by Member States within four years after their publication in the Official Journal. Considering that the first ones were published in February/March 2012, these will have to be reflected in permits from February/March 2016. From the responses provided by Member States there does not appear to be differences between industrial sectors based on whether BAT conclusions are available or not.

Figure 3.2 presents an overview of the most common mechanisms used by Member States for ensuring that BAT conclusions are used when setting permit conditions.

Several of these mechanisms have been reported by the same Member State. For example, in Estonia, the legislation requires that the BAT conclusions are used as a reference for setting the permit conditions. In addition, the application assessment process requires the competent authority to compare the proposed emission limit values with the BAT associated emission levels included in the BAT conclusions and operators are required to justify how their application meets the relevant BAT conclusions.

Figure 3.2 Mechanisms used to ensure permits conditions are based on BAT conclusions



Note: Responses provided by several Member States were allocated to more than one category.

All Member States indicated that their legislation incorporated the requirement from Article 14(3) of the IED to ensure that permit conditions are set based on the relevant BAT conclusions.

Overall the responses from Member States were general and included little information on how BAT conclusions are concretely used to set permit conditions, as outlined below:

- Austria's stated that the BAT conclusions are used as the reference document for setting permit conditions but did not explain how. Emissions limit values to water (e.g. mean values for concentrations or loads) have been set out and adopted in national legislation in order to provide users with legal certainty.
- Belgium (Wallonia), Croatia, Cyprus, France, Hungary, Italy, Luxembourg, Poland, Slovakia, Slovenia and Spain's comprised a reference to the relevant legislation and (in some instances) a link to the BAT conclusions, but no information on how these are used concretely for setting permit conditions.
- Italy added that since BAT is defined explicitly in the BAT conclusions the 'Guidelines for the identification and use of the best available techniques' issued under the IPPC Directive are no longer used. Poland made a similar statement.

Some Member States provided information on how their legislation incorporated provisions on the use of BAT conclusions for setting permit conditions. For example:

- In Belgium (Flanders) the BAT conclusions are adopted as general binding rules for IPPC/ IED installations through an Implementing Decision of the Flemish Government (VLAREM III), which was approved in 2013 (covering the Glass and Iron/Steel BAT conclusions). The Implementing Decision will be amended following the publication of new BAT conclusions. Belgium (Flanders) explained that following the publication of a BAT conclusion, a reconsideration report is produced that compares the current environmental permit conditions of the installations concerned with the revised BAT conclusions.
- Germany reported that the obligation to use the BAT conclusions has been transposed to its general binding rules establishing the emission limit values associated with the best available techniques, as stated in the BAT conclusions. The general binding rules set out what techniques (including ELVs) are considered to be 'state of the art' for each type of installation and the competent authority must define the permit conditions in accordance with this.
- Some Member States' responses provided more of an insight into how it is ensured that the BAT conclusions were used as reference during the permitting stage.
- In the Czech Republic, the BAT conclusions are used for permitting and the national legislation states that competent authorities are required to indicate in their decision which BAT conclusions and which BREFs were used to support the selection of operating conditions. The formal decision must also include a comparison of the proposed permit conditions with the relevant BAT conclusions.
- In Denmark the BAT conclusions are appended to its national legislation and competent authorities must explicitly indicate how each relevant BAT conclusion was integrated in the permit conditions. Competent authorities use BAT checklists that summarise in a table the BAT conclusions. The checklists are also made available to operators.
- Greece's response provided information on the role of the environmental impact study (EIS) (which is a requirement of the permitting procedure) to ensure that the BAT conclusions have been respected in the installation. The EIS includes information on the BATs implemented (or proposed to be implemented) with direct links to relevant tables, graphs or sections of the BREFs and BAT conclusions.
- Latvia indicated that operators can request guidance from the authority when preparing permit application on applied techniques, the emission and consumptions levels, and the techniques considered for the determination of the BAT, as well as the BAT conclusions and the emerging techniques. Latvia indicated that documents are available summarising this information, for the relevant sectors.

The responses from five Member States (Estonia, Ireland, Lithuania, Malta and Portugal) explicitly indicated a legislative requirement that operators compare and demonstrate how the BAT conclusions have been taken into account when applying for a permit.

- Estonia indicated that the operator is required to provide proof that the equipment and technology used are in compliance with the BAT and the permit must include a reference to the applicable BAT conclusions.
- Ireland indicated that the operator must demonstrate that the installation is currently meeting the applicable BAT conclusions, or how it is proposed to meet them in the future.
- In Lithuania, the permit application includes a comparison between the operator's technology, operational methods and pollution prevention, and monitoring measures with the techniques listed in the BAT conclusions. However, discussions

can be held on the possibilities of implementing other BAT than those in the BAT conclusions.

- In Malta, operators are asked to compare the permit application content with the BAT. A link included in the response provided by the Member State led to the template of the application form which confirmed this information.
- Portugal reported that the adoption of the IED formalised the process already underway under the IPPC Directive, which was to automatically adopt the values associated as BAT included in the BREFs as the basis for defining permit conditions. Operators are asked to list the BATs implemented in their installation. When a BAT identified as not being implemented operators must provide a justification for this.

Details of guidance for permitting included in Member State responses

In six Member States (Bulgaria, Ireland, the Netherlands, Romania, Sweden and the UK) guidance for permitting has been drafted that includes reference to the BAT conclusions, as outlined in detail below.

However the guidance referred to by Romania appears to be a reminder that operators of activities for which BAT conclusions have been adopted are to be issued a notification of their obligation to comply with the new BAT requirements and that the permits of these installations will be reviewed by the competent authorities in order to determine compliance measures and deadlines[5]. As a result, this is not further analysed.

Bulgaria

Bulgaria's guidance[6] includes two parts: a methodology to determine the best available techniques, and an updated methodology on filling an application form for an integrated permit. The first methodology is relevant to setting permit conditions based on the BAT conclusions insofar as the guidance explicitly requires operators to submit to the competent authority evidence that their proposed activity and equipment are comparable with the BAT and the BAT conclusions. The guidance provides a table distinguishing three scenarios and the corresponding methodology that needs to be followed:

1 - For emerging techniques or for techniques identical to those described in the BAT conclusions (including parameters), the methodology is as follows:

- Operators must provide information on the equipment, emissions, consumptions and techniques to reduce emissions.
- Tables must be filled for emissions to water, air, waste water discharges.
- For each specific media, operators are required to ensure that the activity of the installation does not lead to a violation of the relevant existing legislation, for example air emissions are verified against ambient air quality requirements. This must be evidenced by using dispersion modelling in accordance with the methodology from the Ministry.
- In addition, modelling must be conducted in order to set the admissible emissions limits. The modelling must be conducted with the worst case scenario (i.e. maximum permissible load or capacity of the installation, maximum flow of emissions, and possible adverse weather conditions). The results of the modelling

[5] http://www.anpm.ro/upload/129740_Adresa_ref_Legea_278-2013.pdf

[6] http://www3.moew.government.bg/files/file/Industry/KR/Metodiki/Metodika_NDNT_2012.pdf

for categories of pollutants[7] are then compared to the ranges set out in the BAT conclusions.

- The guidance indicates that when the BAT conclusions define limits for the equipment and operation listed by the operator, the range specified in the BAT conclusions should be included in the table as a point of comparison. The value proposed by the operator must lie within the BAT-AEL range.

2 – The guidance includes information on how to consider installations using techniques other than those described in the BAT conclusions.

3- Lastly, for installations using techniques other than those set out in the BAT conclusions, on the basis that the BAT conclusions either do not address all the potential environmental impacts of an activity, do not describe all the processes of an installation, or have not been adopted, the operator is required to submit evidence accompanied by all the information as per the previous procedure. The guidance describes a similar procedure for changes to the permit.

Ireland

The Environmental Protection Agency provides guidance notes on defining BAT for installations submitting permit applications. The latest published notes are from 2012 and concern non-ferrous metal processing. The sectors for which BAT conclusions have been adopted by the time of reporting (i.e. iron and steel and glass manufacturing) have not been updated to reflect them. However Ireland's response indicated that the operator is required to assess the applicability of the BAT conclusions and outline its compliance with them in its permit application. The operator's submission is subsequently assessed by the competent authority and the relevant BAT conclusions are then transposed into the permit conditions.

The Netherlands

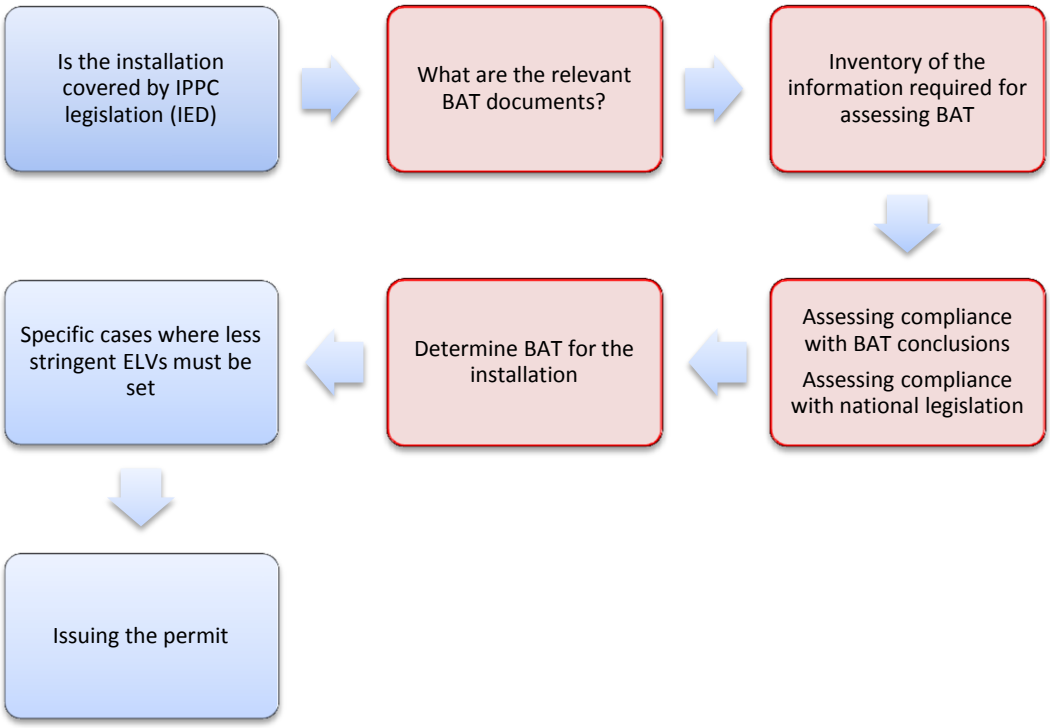
In 2013 the Netherlands published a 'Guide for determining BAT' which sets conditions and requirements to ensure that the BAT conclusions are referenced in the permitting process[8].

The guide covers several aspects related to the BAT such as applying the BAT conclusions when permitting, identifying the relevant BAT conclusions for a permit, and other general information on key BAT conclusions. This guide is only available electronically but can be downloaded as a pdf integrating the latest developments.

[7] For example this includes organohalogen compounds, organophosphorus compounds, carcinogenic substances, mutagenic substances, substances that may affect aquatic environment, persistent toxic substances, cyanides, metals, arsenic, biocides, suspended materials, substances leading to eutrophication and substances affecting oxygen balance.

[8] http://www.infomil.nl/onderwerpen/duurzame/bbt-ippc-brefs/menu/nieuws/handleiding-bbt/

The guide follows the following structure, in red are those most relevant steps to this question:



The information required from the operator includes any information submitted during the application, information submitted to the competent authority for monitoring requirements, results of supervision and inspection, and information submitted to satisfy reporting obligations, for example E-PRTR reporting.

The guidance details the information needed in order to assess the BAT for emissions to air, including information on sources, composition, and quantity/ concentration of emissions. The measurements must be representative of the operation associated with the highest emissions, i.e. maximum capacity of the installation. The way the installation is managed is also considered (e.g. if an environmental management system is used).

The guidance specifies that the determination of the BAT takes into account both the BAT conclusions and the Dutch information documents on BAT. It makes a distinction between new and existing installations.

The guidance includes a table on how to rate different elements of a permit application based on whether the technique proposed is identical to the BAT in the BAT conclusion or not:

- For installations using a technique described in the BAT conclusions as BAT and with an associated emission level, the assessment considers whether emission limits should be set no higher than the upper value of the BAT-AEL range for the installation.
- For techniques that are not included in the BAT conclusions, the assessment considers whether the technique can be considered as an equivalent offering the same level of environmental protection, taking into account criteria defined in the legislation and whether the emission limits should be set no higher than the BAT-associated emission level.

Sweden

Sweden's response included a link to guidance issued for operators and competent authorities, as well as the wider public with regard to the implementation of the IED in Sweden[9].

The guidance addresses, inter alia, the use of BAT conclusions in permitting.

The guidance clarifies the role that BAT conclusions take in setting permit conditions in Sweden explicitly stating that BAT conclusions are to be used as reference when conducting permitting activities.

Lastly, Sweden indicated that it considers its application of the technology requirement stricter because the BAT conclusions are used only as one source for permitting. Subsequently, the guidance highlights that the IED is the minimum regime to apply, and that the competent authorities must assess with each permit application the existing level of environmental protection.

UK

The information reported by the UK differentiates the requirements according to its regions. While most of the processes reported are based on those established as part of implementation of the IPPC Directive, the UK reported that updates were under way to adapt to the IED regime and provided further information for three of its countries.

In England, the guidance available for the competent authorities instructs them to assess and use BAT as the basis for setting permit conditions. This is done through the use of sector based guidance notes, which are based on the existing BREFs. The competent authorities were reported as being in the process of updating the permitting guidance to ensure that the BAT conclusions are used as the reference for setting permit conditions.

In Wales, operators are issued an information notice following the publication of a new BREF. The notice requires them to explain how they meet the BAT conclusions and this information is then reviewed by the competent authority. Following the review, a summary document is produced containing the permit condition decisions, which is attached to the permit. The response provided examples of how permit conditions are based on the BAT conclusions, including the management conditions, energy efficiency, and the setting of ELVs, which match the upper end of the BAT-AEL range.

In Scotland, the practical guide to permitting for Part A Activities was issued in 2012 and updated in 2014[10]. The guidance describes the mandatory requirements for permits and states that determining the BAT is straightforward in most cases as a consequence of the direct adoption of the BAT conclusions. ELVs for individual pollutants or groups likely to be emitted in significant quantities must match the BAT-AEL in the BAT conclusions. When assessing BAT, in the case where operators are proposing permit conditions that differ from BAT or for sectors where no BAT conclusion is available the competent authority uses a risk-based approach and focuses on significant environmental impacts and the major advantages and disadvantages of techniques to deal with these impacts. The guidance notes that 'techniques' relates to both technology and operation.

Website links

Table 4 summarises the links provided by Member States in response to this question relating to guidance. Note that most of the links provided are to the legislative texts

[9] http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-8663-3.pdf

[10] http://www.sepa.org.uk/media/35880/ppc-technical-guidance-note-guidance-for-part-a-activities.pdf

that have been adopted to transpose the IED and contain the legal requirements included in Article 14(3) that BAT conclusions are used as reference for setting permit conditions. These links are presented in Appendix A. More information on the guidance is set out below.

Table 3.2 Overview of links reported by Member States in response to question 2.1

Member State	Links	Description of information contained in the link
BG	Hyperlink	Link toward guidance on the use of BAT conclusions when permitting IED installations. The guidance is from 2012.
DK	Hyperlink 1 Hyperlink 2	Link 1 on BAT conclusions and how these are used, link 2 toward information on deviation from BAT
IE	Hyperlink	Link to guidance on use of BAT to set permit conditions
NL	Hyperlink 1 Hyperlink 2	Link 1 to the Guide for determining BAT.
RO	Hyperlink	Link to guidance from Romania on use of BAT
SE	Hyperlink 1 Hyperlink 2 Hyperlink 3	Link 3 to guidance on implementation of the industrial emissions legislation, from 2013.

3.2.2 Sub-question 2.2: How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?

All Member States reported the possibility to set permit conditions stricter than those achievable by the use of BAT, either during the initial permitting stage or following the permit review where it has been demonstrated that the permit conditions are inadequate or no longer appropriate.

Setting stricter permit conditions to meet an EQS

The most reported circumstance for setting stricter permit conditions is to meet an Environmental Quality Standard (EQS), as reported by Bulgaria, Cyprus, Estonia, Germany, Portugal, Romania, Spain, Lithuania and the UK.

- Germany's response indicated that normal and non-normal operating conditions are both taken into account to assess whether the BAT conclusions (and AELs) are insufficient to meet an EQS. It also indicated that the procedure is clearly defined in its national legislation and that additional guidance was not deemed necessary.
- Italy indicated that no guidelines were needed and that stricter conditions were set by the competent authority as needed to achieve a high level of protection of the environment.

- Portugal added that stricter conditions are not often set, but that where this has been the case it was mostly in relation to air or water quality problems that could be minimised by imposing stricter emission limits. The competent authority relies on the environmental bodies responsible for monitoring air or water quality to indicate any additional conditions to be imposed in the permit.
- Lithuania indicated that additional emission reductions can be required but also that an alternative to setting stricter permit conditions would be to encourage the operator to change the location of its operations.

Setting stricter permit conditions for reasons other than meeting an EQS

In addition to meeting an EQS, the following reasons were provided as justifying setting stricter permit conditions:

- To meet state of the art requirements (Austria). However, excessive measures are prohibited and no conditions may be imposed on the plant owner that go beyond what is necessary to safeguard legitimate interests;
- To prevent damage, nuisance, incidents or accidents that would significantly affect human health or the environment (Belgium (Flanders)) and limit the nuisance caused to human health and the environment to an acceptable level (Belgium (Flanders), Germany, France, Malta, Poland);
- To adapt to the specific local situation (Belgium (Flanders), Luxembourg, Romania, Slovenia);
- To protect sensitive environments, including Natura 2000 (Denmark, Malta, Romania);
- To achieve compliance with European regulations in relation to environmental management systems (i.e. EMAS) (Belgium (Flanders));
- To achieve the objectives laid down in policy plans, action plans and reduction schemes adopted by the national government (Austria, Belgium (Flanders), Hungary, UK); and
- To achieve the objectives laid down in ratified international conventions (Belgium (Flanders)).

Procedures for setting stricter permit conditions

While the responses were often generic, some Member States provided a more detailed explanation on their procedures, such as:

- Belgium's (Flanders) response provided a list of the factors that are taken into account when deciding which stricter permit conditions must be set. These include the location of the installation and the use of the local environment, the technical feasibility of the proposed measures, the economic feasibility of the proposed measures, the practical feasibility of the proposed measures, the efficiency and effectiveness of the proposed measures and the enforceability of the proposed measures.
- Denmark's response included a link to guidance on deviating from the BAT conclusions when setting permit conditions[11]. The guidance states that the reason to set stricter permit conditions must be included in the decision from the competent authority. Deviating from the BAT conclusions is an exception, and the response included the example of avoiding the deterioration of Natura 2000 sites.
- The Netherlands indicated that setting permit conditions is considered at the permit application stage, as BAT conclusions are considered a minimum

[11] http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/fravigelser-fra-bat/

requirement. In addition, stricter permit conditions may apply to a whole sector. For example, the GBRs on Livestock Farming and Housing set stricter requirements than BAT. No information was included in the response to understand why.

Two Member States indicated having adopted stricter permit conditions for a whole sector (Austria and the Netherlands). In 2013 Austria adopted binding emission limit values based on the 2006 BREF on large combustion plants. It is unclear whether this refers to the implementation of Chapter III of the IED instead. However it is important to note that there are no BAT conclusions newly adopted under the IED for these sectors.

It is noted that in Sweden setting stricter permit conditions than those stated in the BAT conclusions is assessed automatically for each permit application. In Sweden both BAT and BMT are implemented, the latter stands for Best Possible Techniques and is considered to be more stringent than the BAT. During the assessment of an installation's permit, the competent authority is entitled to set more stringent conditions than the BAT conclusions in order to meet the BMT requirements. No further example of this was included in the Swedish response. However, according to the Member State the purpose of taking this approach was to avoid setting weaker requirements for companies following the adoption of the IED.

3.3 Question 3: Emission limit values, equivalent parameters and technical measures (Article 15)

3(a) - Provide a summary of any Member State policy or guidance on the following issues and,

3(b) - If published on the internet, provide a link to where this policy or guidance can be found.

3.1 - How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

3.2 - How are derogations from Article 15(3) granted (Article 15(4))?

3.3 - How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

3.4 - Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

3.5 - How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

For all sub-questions a large number of Member States provided generic responses that gave little indication on the actual processes of how ELVs are set in practice or the steps followed for granting derogations.

3.3.1 Sub-question 3.1: How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

While this is an essential part of the IED implementation, Member States reported very little information on the procedure followed in order to decide which value within the BAT-AEL range to include as ELV in the permit.

24 Member States (Austria, Belgium (Flanders and Wallonia), Bulgaria, Cyprus, the Czech Republic, Estonia, France, Germany, Hungary, Ireland, Italy, Lithuania, Latvia,

Luxembourg, the Netherlands, Poland, Romania, Sweden, Slovenia, Slovakia and the UK) quoted the relevant text from their legislation, requiring the ELVs to be set according to the BAT-AELs included in the BAT conclusions.

Four Member States (Austria, Belgium (Flanders), Denmark, Germany and the Netherlands) reported in addition that BAT-AELs are part of the national guidance or regulation for permitting that is used by the competent authorities issuing the permits. However, little information was provided on how this integration has been made.

The more detailed responses received are presented below by Member State.

Austria

- Limit values are set based on national standards or, where there are none, the state of the art (e.g. ÖNORM, BAT documents).
- The publication of the implementing decision including sector-specific BAT conclusions marks the start of a review of the relevant waste water regulations at national level. GBRs have been adopted that integrate the requirements of the BAT conclusions for specific sectors. Austria indicated that the GBRs for the glass and steel sectors were recently reviewed. The reviews of the GBRs for the coal processing, chlor-alkali and tanning sectors were reported as being prepared.
- Austria's response does not indicate how the BAT-AELs are integrated in its GBRs.

Belgium (Flanders)

Following the publication of a BAT conclusion, a reconsideration report is produced that compares the current environmental permit conditions of the installations concerned with relevant BAT conclusions. This report forms the basis for incorporating the BAT conclusions (and BAT-AELs) into the Implementing Decision (VLAREM III). The Implementing Decision stipulates limit values, not ranges; these limit values must be respected when permitting. Belgium (Flanders) indicated that as a general principle the upper limits of the BAT-AELs are adopted as ELVs in the national legislation. In addition, the BAT conclusions which are not wholly incorporated into the Implementing Decision are also considered individually during the permitting process by the competent authorities.

ELVs are also expressed for periods of equal or shorter duration than BAT-AELs and for the same reference conditions. Stricter ELVs are used when the upper range of the BAT-AEL is less stringent than existing ELVs, when required in order to meet regional policy plans or, when it emerges that a stricter ELV is feasible while screening the installation during the permitting stage. Further information on setting stricter ELV is included in section 3.2.2.

Denmark

In Denmark, the competent authorities use BAT checklists that summarise in a table the BAT conclusions. Furthermore, for BAT-AELs that are expressed as ranges in the BAT conclusions, the competent authority has developed some further instructions on choosing which end of the range to apply. It is further specified that when these instructions are not available, the competent authority must take a decision based on the particularities of the installation. Lastly, Denmark stressed that it is not automatic that new installations should meet the lower end of the BAT-AEL range.

Denmark has issued several guidelines related to restricting air emissions, noise, odour, and waste water to help the permitting authorities in setting ELVs in the permits, as outlined below:

- *Guidelines for air emissions regulation*[12]: The guidelines include information and guidance about:
    - The BAT principle;
    - Application of BAT;
    - Mass-flow limits;
    - Emission limit values;
    - Emission limit values for energy plants; and
    - Recommended emission limit values etc. for thermal and catalytic oxidation installations for the destruction of organic solvents.
- Furthermore Denmark has issued guidance for how to set ELVs for "Livestock/Intensive rearing of poultry or pigs" by using BAT[13].
- Other guidelines were mentioned with less relevance to ELVs and BAT-AELs, such as the B-value Guidelines[14], the Guidelines for odour[15]and the Guidance on the Order on waste water permits[16].

Germany

The federal/ regional working group on emission control (Bund-Länder Arbeitsgemeinschaft Immissionsschutz (LAI), has drafted a manual (LAI manual: 'Guidelines for the application of national provisions implementing the IED report of the ad hoc working party'[17]) for the authorities implementing the IED.

The LAI manual provides a more detailed explanation of the provisions of the law but does not include a description of the specific processes that have to be followed.

However, for a range of sectors, specific guidance published under the LAI manual has been developed on implementing BAT conclusions. For example, the guidance for the iron and steel sector states for specific abatement techniques where in the BAT-AEL range (i.e. upper and lower limits) ELVs should be set[18].

The Netherlands

The manual described in response to sub-question 2.2 was also referred to in response to this question. The Netherlands explained that the manual covers several issues related to the implementation of the IED such as the determination of the main activity, necessary information for assessing BAT, the BAT and associated emission levels. The manual explicitly mentions that under normal operating conditions the

[12] Vejledning fra Miljøstyrelsen nr. 2 2001: "Luftvejledning, Begrænsning af luftforurening fra virksomheder"

[13] Introduktion til Miljøstyrelsens vejledende emissionsgrænseværdier opnåelige ved anvendelse af den bedste tilgængelige teknik (BAT) for husdyrbrug omfattet af husdyrgodkendelsesloven § 11 og § 12", Miljøministeriet – Miljøstyrelsen 2010

[14] Vejledning fra Miljøstyrelsen nr. 2 2002:"B-værdivejledningen, Oversigt over B-værdier" - The "B-value" is used in Denmark as a health based limit (air quality criterion) for a company's contribution to air pollution in the environment.

[15] Vejledning nr. 5/1984:"Ekstern støj fra virksomheder" – This guideline provides details concerning a number of concepts related to odour perception.

[16] Bekendtgørelse om spildevandstilladelser mv. Efter miljøbeskyttelseslovens kapitel 3 og 4 (BEK nr 1448 af 11/12/2007)

[17] http://www.lai-immissionsschutz.de/servlet/is/26513/

[18] http://www.lai-immissionsschutz.de/servlet/is/26513/20131112%20Vollzugsempfehlungen%20Eisen-%20und%20Stahlindustrie%20%28IS%29.pdf?command=downloadContent&filename=20131112%20Vollzugsempfehlungen%20Eisen-%20und%20Stahlindustrie%20%28IS%29.pdf

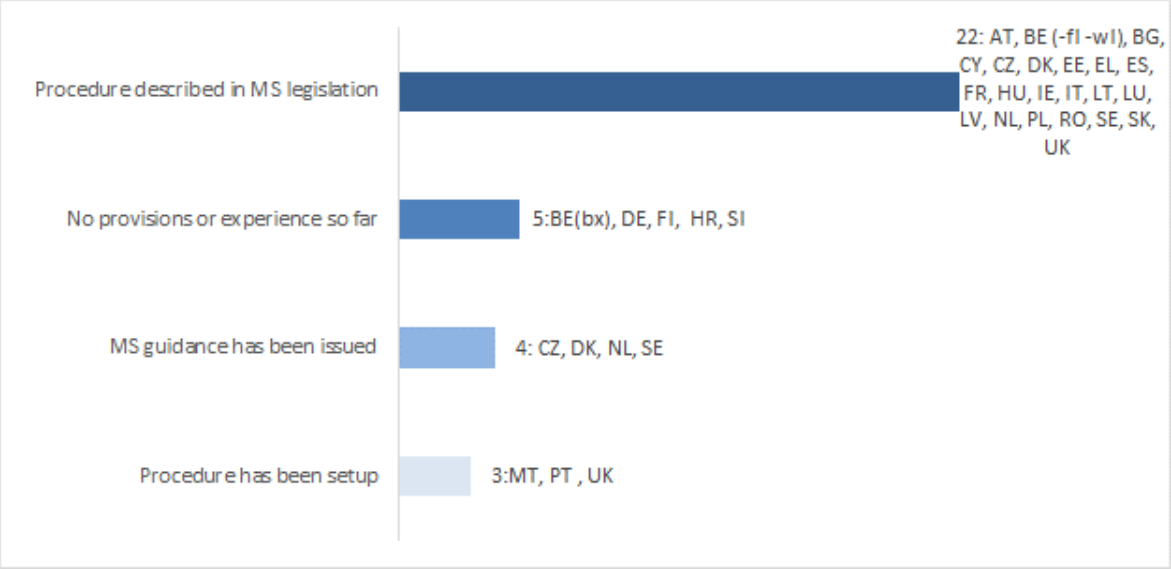
emission limits set must not be higher than the BAT-associated emission levels determined in the BAT conclusions.

3.3.2 Sub-question 3.2: How are derogation from Article 15(3) granted?

Several Member States (Croatia, Denmark, Slovenia and Sweden) reported that they follow the IMPEL project "Sharing of draft proposals between Member States for implementing derogations from BAT-AELs under Article 15 paragraphs (4) and (5) of the industrial emissions Directive 2010/75/EU".

The majority of the responses indicated the possibility to grant a derogation being set in the national legislation but provided no further information on practical steps taken to implement the provision. Figure 3.3 presents the mechanisms reported by Member States for granting derogations according to Article 15(4) of the IED.

Figure 3.3 Reported mechanisms for granting derogations according to Article 15(4)



Note: Responses provided by several Member States were allocated to more than one category of responses hence the numbers in the figure do not add to 28.

In relation to the criteria for a derogation request being valid, the majority of Member States reported all of those included in Article 15(4) of the IED.

One Member State (Slovakia) reported that the permitting authority may take into account the socio-economic conditions of the region in which the installation is located, e.g. if the region has a high unemployment rate. This is an additional criterion that is not included in the provisions of the IED for granting derogations.

Four Member States (the Czech Republic, Germany, the Netherlands and Sweden) reported that some form of guidance related to derogations is available, as outlined below.

The Czech Republic

The Czech Republic has drafted guidance concerning the economic evaluation of the achievement of emission levels associated with the best available techniques[19]. The granting of a derogation relies on the results of the expert assessment, which must prove that the IED conditions are met. To do this, a calculation tool is provided to guide the cost benefit analysis which underpins the derogation process. The operator is required to submit an application accompanied by an expert assessment demonstrating that the derogation would not result in serious environmental pollution.

The guidance document covers:

- The procedures that permitting authorities and operators have to follow in order to assess the need for derogation;
- The steps to determine the main economic activity of the installation;
- The elements that need to be included in the application and be evaluated in order to decide whether a derogation can be granted. This includes the application document and an expert assessment of each of the exemptions from BAT-AELs sought;
- The procedure for the economic assessment of achieving BAT-AELs includes the determination of scenarios, the calculation of costs and an economic evaluation of impacts. The economic assessment is guided by a set of spreadsheets that assist the operator in calculating the costs and assessing the benefits. The spreadsheet includes two tables to populate. One table is to be completed with the proposed techniques (known as the design scenario) and the other with the BAT conclusions (known as the BAT scenario). The information required for the economic assessment (projected over a 30 year period) includes an estimation of the costs of the installation, the operational expenses, materials costs, the maintenance needs, salaries, tax, revenues and subsidies. The evolution of costs under both scenarios is compared with the aim of understanding the difference between costs (including capital and operating but also indirect) and revenues due to the application of the BAT-AELs. The outputs of the calculations are the basis for the expert assessment of the derogation from the BAT-AELs.
- The assessment for the derogation includes the choice of BAT, whether the operator has chosen the economically most appropriate way to achieve the emissions limit values, the technical feasibility of the design, the impact of pollution from the installation, the methodology used for calculation, the verification of those calculations, and the verification of the economic calculations.

The guidance provides details on how to estimate the various costs and revenue data that are required. However, it does not include information on the rationale for decision making and what difference is considered to be disproportionate.

Germany

The German responses referred to the LAI manual ('Guidelines for the application of national provisions implementing the IED report')[20] also referred to as providing information on considering BAT conclusions and described in section 3.2.2. The LAI

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http://www.mzp.cz/www/ippc4.nsf/b77a7a146f29c439c1256cda0034ce22/ff25a67616f160acc1257d5d00435eb4?OpenDocumenthttp://www.mzp.cz/www/ippc4.nsf/b77a7a146f29c439c1256cda0034ce22/ff25a67616f160acc1257d5d00435eb4?OpenDocument

[20] http://www.lai-immissionsschutz.de/servlet/is/20172/Arbeitshilfe%20zur%20IE-Richtlinie%20mit%20AH%20AZB.pdf?command=downloadContent&filename=Arbeitshilfe%20zur%20IE-Richtlinie%20mit%20AH%20AZB.pdf

manual from 2014 provides a more detailed explanation of the provisions of the law but do not include a description of the practical process that has to be followed for granting a derogation. In Germany, derogations are allowed only due to technical characteristics of the installation.

The Netherlands

The guidance prepared by the Netherlands explains the possibilities to deviate from the BAT-AELs included in the BAT conclusions[21]. The guidance has been prepared by the Ministry of Infrastructure and Environment and presents the methodologies that can be used to calculate cost-effectiveness as there are generally several tools for determining the cost and the overall consideration.

The guidance comments on the applicability of each of the criteria included in the IED:

- On the geographic conditions it states that in practice there will be few cases where this criteria will be retained to justify a derogation from BAT-AELs because of the limited variation in landscape, climate and soil types within the Member State. However, the availability of water and the ability to discharge water play a role in the BAT and was highlighted as one of the possible geographic conditions relevant to the Netherlands.
- Local environmental conditions cannot be used as a justification to set less stringent requirements than the BAT-AELs. Local conditions can only be used to justify stricter permit conditions.
- On the technical characteristics of the installation, the guidance indicates that it is only in exceptional cases that the competent authority would consider the assessment of the economic feasibility of a technique. This would arise when an assessment at a sectoral level is not possible, or when there are no BAT conclusions relevant for the activity in question. A possible reason for derogation would be a sector that needs more than 4 years to adapt to newly adopted BAT conclusions. The guidance includes an example of this which is the conversion of a glass furnace to comply with BAT.

The guidance provides links to the recommended methodologies:

- Methodology to be used for the calculation of the cost; and
- Methodologies for identifying and calculating the environmental impacts of a process or a product.

Sweden

A guidance document has been issued in 2013 by the Environmental Protection Agency on the overall implementation of the IED (see Section 3.2.2) and is directed to competent authorities, municipalities, regulators and operators[22].

The guidance discusses, among other elements, issues related to derogations. An application for a derogation must be lodged with the licensing authority who would then consider it. The guidance states that local environmental conditions can be understood as the difference of receptors and their sensitivities to emissions.

The response includes an example: it is considered BAT to cover slurry tanks (and liquid manure) however, due to local conditions this applies only in the southern part of the country. Considering the assessment of the disproportionality of costs, the guidance provides the example of a facility that does not have space to add

[21] http://www.infomil.nl/onderwerpen/klimaat-lucht/ner/digitale-ner/afwijken/

[22] http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-8663-3.pdf

abatement equipment and for which there is no on-site possibility to expand. Re-location of the installation would incur costs which could be considered to be disproportionate.

3.3.3 Sub question 3.3: How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

Undertaking the cost-benefit assessment

Very few Member States actually provided a response on 'how' the cost-benefit assessment is undertaken practically, and some indications of the processes were included only in the responses from Bulgaria, Croatia, the Czech Republic, Italy, Malta, the Netherlands and the UK.

- 12 Member States (Austria, Bulgaria, Cyprus, Greece, Ireland, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Spain) reported that the assessment is undertaken on a case-by-case basis;
- 11 Member States (Croatia, the Czech Republic, Denmark, Estonia, France, Italy, Netherlands, Poland, Slovakia, Sweden and the UK) reported that it is undertaken according to Member State legislation/guidance or criteria. When reported, information on criteria used is presented below;
- Five Member States (Croatia, the Netherlands, Spain, Portugal and Romania) reported that the Economic and Cross-Media Effects BREF would be taken into account when conducting the cost benefit assessment. With the exception of Croatia (see below), the responses did not include further details on the use of this BREF;
- Ten Member States (Belgium (Brussels and Flanders regions), Croatia, Germany, Denmark, Hungary, Lithuania, Luxembourg, Romania, Slovenia and Slovakia) explicitly reported that they did not have any experience with cost-benefit analysis related to derogations during the reporting period.

The response from the Netherlands includes a link to the guidance which includes a description of some of the features of the cost benefit assessment methodology as described in Section 3.3.2[23]. The methodology is an assessment initially developed in order to calculate the cost-effectiveness of abatement techniques for emissions of NOx, SOx, dust and VOCs. It is unclear whether the assessment can be used for other pollutants. The guidance explains that while most environmental measures have more beneficial impacts than the effect for which they are designed and implemented, the methodology takes into account only the main impacts. Other effects are not considered unless a technique is explicitly introduced to tackle multiple components.

Disproportionately higher cost

Information about what is considered to be a disproportionally higher cost compared to the environmental benefit was provided by five Member States including Bulgaria, Croatia, Italy, Malta and the UK. These included:

- Bulgaria: The cost which makes production uneconomical. No further information is given and it is unclear how this relates to an assessment of disproportionality between costs and benefits.
- Croatia: The assessment considers whether the ratio between the costs of undertaking the adjustments and the quantities of emissions that need to be

[23]http://www.infomil.nl/onderwerpen/klimaat-lucht/ner/digitale-ner/kosteneffectiviteit/

reduced in order to meet the levels is greater than the reference values provided in the Economics and Cross-media Effects BREF.

- Italy: The following can be considered as cases with disproportionate costs:
    - Compliance with the BAT-AELs does not have any beneficial effect compared to compliance with the current set of permit conditions. Note that it is unclear how this parameter relates to the test of disproportionality as described in the IED, which compares costs and benefits rather than assessing only the added benefits from compliance with stricter permit conditions.
    - Achieving the BAT-AELs has a positive effect, but it is not significant given the extremely high cost.
    - Territorial constraints make it impossible to implement the best available techniques in a specific plant, or it is only possible at a completely disproportionate cost compared to what the installation would have to bear within 'normal' territorial context.
    - The particular geographical location means that the BAT-AELs cannot be achieved even if the BAT are fully and correctly applied.
- Malta: The cost associated with the technological investment required to meet the BAT outweighs certain critical issues such as the environmental gains achievable should BAT be applied. The response provided an example where the achievement of the BAT-AELs would incur higher energy costs and consumption, leading to a specific treatment process being unfeasible. Malta added that installations with a derogation would be submitted to stricter monitoring requirements, extended beyond the facilities' main emission points.
- The UK's response included a link to the latest update of the Green Book from 2013[24]. The Green Book provides guidance on appraisal and evaluation for public bodies. The response indicated that cost of achieving the BAT-AEL is considered to be disproportionate if it is higher than the cost of harm caused.

Romania also reported that the relevant authority has drawn up terms of reference for a "Study on the evaluation of the cost-benefit ratio for the application of derogations from emission limit values (ELVs) and the criteria for determining the disproportionately high costs compared to the environmental benefits".

The lack of experience with assessing costs and benefits in the context of granting derogations is a very important element highlighted by the Member States. It was reported that clarifications, guidance or examples of cost-benefit analysis provided by the European Commission would be useful, particularly with regards to the benefit part of the analysis.

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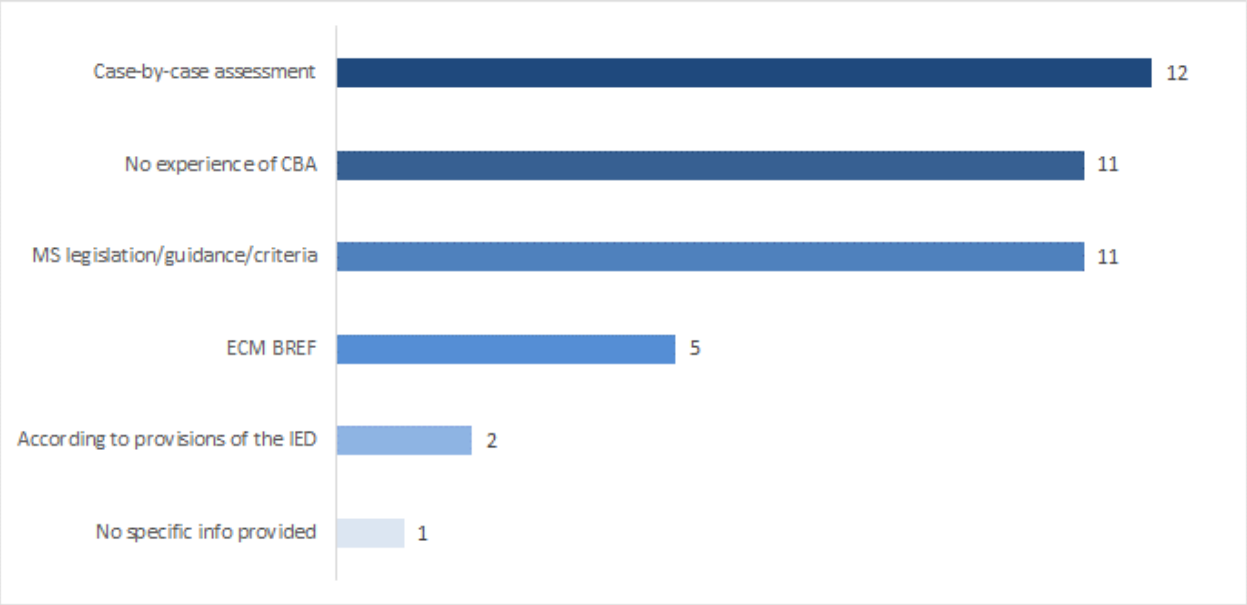
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf

Figure 3.4 Methods reported for undertaking a cost-benefit assessment



Note: Responses provided by several Member States were allocated to more than one category of responses hence the numbers in the figure do not add to 28.

3.3.4 Sub-question 3.4: Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

The responses given by Member States regarding the magnitude and time limitations of derogations were varied in the level of detail provided.

Details provided included:

- In eight Member States (Austria, Belgium (Flanders), the Czech Republic, Estonia, Greece, the Netherlands, Poland, Portugal) it was reported that both magnitude and time limitation can be imposed in derogations. However, no further information was included in the response. (It could be because the question only asks Member States whether there are any limitations of time and magnitude in the derogations.)
- Six Member States (Bulgaria, Luxembourg, Latvia, Malta, the Netherlands and Portugal) reported that the derogation conditions are reassessed upon the permit reconsideration. Romania reported that a study initiated by its authorities (see previous section) aims to specify, *inter alia*, guidelines on the setting of limits on the magnitude or duration of derogations.

The little information reported by Member States on this point could indicate that decisions on the limitations on the magnitude or duration of derogations would be taken on an ad hoc basis.

3.3.5 Sub-question 3.5: How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

The majority of Member States (73%) merely quoted the provisions of the IED allowing temporary derogations and reported that these were implemented without including details on how these were practically implemented.

Hungary provided some details on the steps followed after the temporary derogation has ended. Operators must submit a completion document, listing the equipment of the installation and demonstrating compliance with the permit conditions. The content of the completion document is verified by the inspectorate.

Malta reported that when the operator includes in its application techniques which are alternative to BAT, the competent authority request a testing period during which all emissions are monitored. During the testing period, some additional requirements are added on the operator to mitigate impacts. The response included an example of a waste treatment plant for treated effluent discharged into sea where the operator was instructed to not discharge to sea and instead dispose all effluent as waste for export.

Three Member States (Denmark, Germany and Sweden) reported that it can be done according to Member State guidance or secondary legislation, with Denmark and Sweden including links to relevant guidance.[25] However, these only consisted in repeating the provisions of the IED without added details.

In five cases (Belgium (Brussels), Ireland, Malta, Portugal and UK) it was reported that derogations were granted on a case-by-case assessment which includes an assessment of impact in Belgium.

Lastly, while this was not the focus of the question, eight Member States (Austria, Belgium (Brussels and Flanders), Bulgaria, Croatia, the Czech Republic, Denmark, Slovakia and the UK) provided additional information and stated that no temporary derogations had been granted.

3.4 Question 4: Monitoring requirements

4(a) - Provide a summary of any Member State policy or guidance on the following issues; and

4(b) - If published on the internet, provide a link to where this policy or guidance can be found.

3.4.1 Sub-question 4.1: How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?

All Member States indicated that monitoring requirements are based on BAT conclusions with some (e.g. the Czech Republic and Lithuania) indicating that the same process as for setting any other permit conditions is applied.

The majority of the Member States (Belgium (Brussels and Wallonia), Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, France, Germany, Greece, Italy, Latvia, Malta, Poland, Portugal, Slovenia and Spain) provided only general responses, referencing the transposing legislation while providing little information on how in practice BAT conclusions were used to this end.

In addition, often the responses include information on the use of BAT conclusions but also the use of BREFs for setting monitoring requirements in permits.

Six Member States' responses included further details:

[25] Denmark: http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/fravigelser-fra-bat/ and Sweden: http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-8663-3.pdf

- Belgium (Flanders) indicated that it has ensured that monitoring requirements are based on BAT conclusions by incorporating the BAT conclusions in the national legislation, which sets monitoring requirements identical to those set out in the BAT conclusions.
- In Greece, the report on the assessment of the environmental impact of the installation, which is required as part of the permitting application process must include monitoring information and information on how the monitoring conditions relates to those included in the BAT conclusions and the BREFs.
- The Netherlands' response indicated that the monitoring requirements based on BAT conclusions are included in its general binding rules. It also included a link toward guidelines on monitoring[26] as explained below.
- Romania has adopted a series of guidelines for monitoring installations which include: monitoring and self-monitoring emissions of sulphur dioxide, nitrogen oxides and dust from large combustion plants[27], technical guidelines for integrated environmental permitting procedure[28], and guidelines for monitoring emissions of volatile organic compounds due to the use of organic solvents[29].
- Sweden indicated that permit conditions relevant for monitoring are dealt with by the supervisory authority and they include the programme for control and inspection.
- In Slovakia, the supervisory authority (i.e. the Inspectorate) defines emission monitoring requirements and sets a methodology for measurements, their frequency and the procedure for evaluating emissions and emission monitoring requirements in such a way that the results are available over the same period of time and same reference conditions as the BAT-AELs.

Finally, three responses included elements about existing guidelines on monitoring. These are briefly summarised for each Member State below.

Belgium (Wallonia)

The link included in the response led to the application form for an integrated permit[30] in which one section is devoted to monitoring of emissions. However, it does not mention BAT conclusions and it is unclear whether the application form has been updated to take into account the adoption of the IED as the references are to the IPPC Directive (96/61/EC).

The Netherlands

The Netherlands indicated that guidance[31] has been issued on measuring and reporting emissions. It stipulates that monitoring requirements are based on BAT conclusions however these are general guidelines for monitoring emissions and do not provide information on how BAT conclusions should specifically be taken into account.

Furthermore, the guidance on determining BAT described in section 3.2.1 also includes a range of measures and recommendations with relation to monitoring which refer to BAT conclusions and BREFs[32].

[26] http://www.infomil.nl/onderwerpen/klimaat-lucht/meten-rapporteren/
[27] http://www.mmediu.ro/app/webroot/uploads/files/2015_06_17_Ghid_monitorizare_lcp.pdf
[28] http://www.mmediu.ro/app/webroot/uploads/files/2015_06_17_Ghid_aplocare_procedura_AIM.pdf
[29] http://www.anpm.ro/anpm_resources/migrated_content/files/ARPM%20Galati/AIM/documente%20depuse/GhidulTehnicGeneralIPPC.pdf
[30] http://environnement.wallonie.be/legis/pe/pe005ter.htm
[31] http://www.infomil.nl/onderwerpen/klimaat-lucht/meten-rapporteren/
[32] http://www.infomil.nl/onderwerpen/duurzame/bbt-ippc-brefs/handleiding-bepalen/

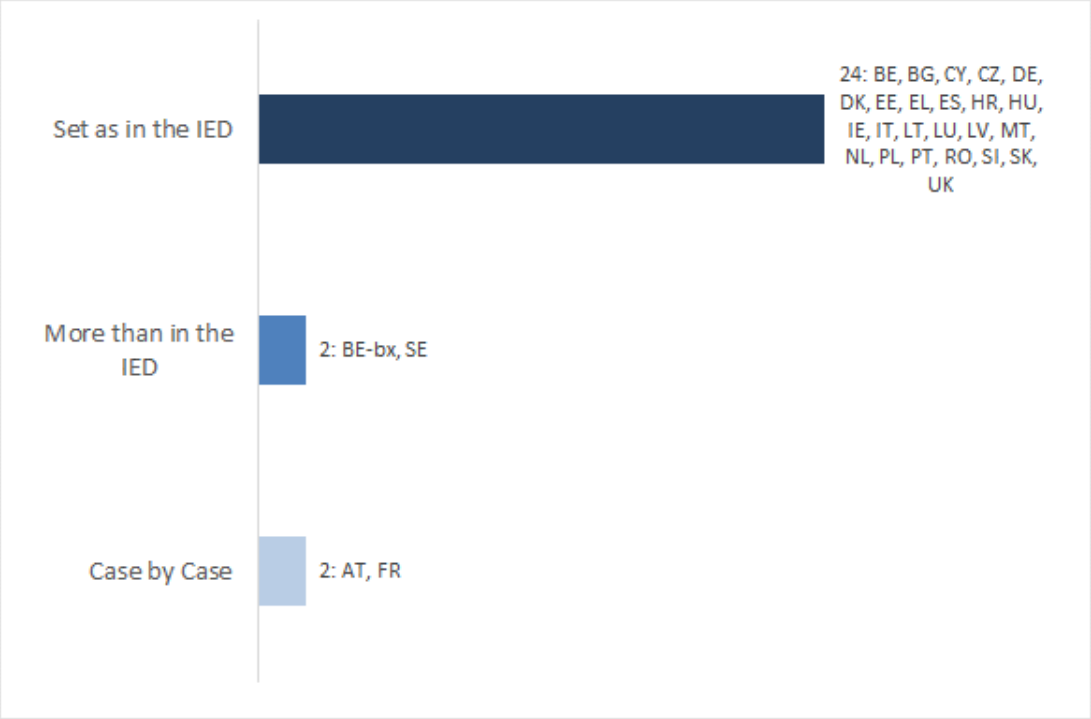
Romania
Guidance has been made available to competent authorities related to monitoring Links were provided to guidance on monitoring emissions of sulphur dioxide, nitrogen oxides and dust from large combustion plants[33], technical guidelines for integrated permitting[34] and guidelines for monitoring emissions of VOCs[35].

Note that the information reported by Romania refers specifically to the way BREFs are taken into account for setting permit conditions.

3.4.2 Sub-question 4.2: How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?

Figure 3.5 presents the frequencies for monitoring reported by Member States during the first reporting period under the IED.

Figure 3.5 Information reported on minimum frequencies for monitoring of soil and groundwater



Note: Belgium provided one response for each of its regions hence the numbers in the figure amounts to 28 despite Finland and Slovenia indicated that this provision was not implemented during the reporting period.

Only Belgium (Brussels) and Sweden indicated that more frequent monitoring of soil and groundwater contamination than stated in the IED is required.

- In Belgium (Brussels), the frequency for monitoring soil and groundwater is set at once every 5 years for all IED activities. This means that over the 15 years lifetime of an integrated permit, an IED installation will be monitored at least four times (including the mandatory monitoring of soil to be conducted at start and end of the operation).

[33] http://www.mmediu.ro/app/webroot/uploads/files/2015_06_17_Ghid_monitorizare_lcp.pdf
[34] http://www.mmediu.ro/app/webroot/uploads/files/2015_06_17_Ghid_aplocare_procedura_AIM.pdf
[35] http://www.anpm.ro/capitolul-v-cov-din-solventi-

- In Sweden, the initial monitoring of soil and groundwater contamination following the permit start date is required within four years, the subsequent monitoring has the same frequency than those set in the IED.

Austria and France have indicated that minimum reporting frequencies are set following case-by-case assessment.

- In Austria, the frequency is determined following an assessment of the level of danger posed by the activity, the relevant hazardous substances used, the measures taken to protect the soil and groundwater and following a consultation with a groundwater expert.
- France indicated that frequencies are set on a case-by-case basis, looking, for example for groundwater contamination, at the hydrogeological conditions of the site of the installations. In France, monitoring is conducted during high and low water periods. For pollutants where the risk of contamination is considered very low, a frequency of once every five years can be applied. Furthermore, France considers that soil monitoring is difficult to repeat, and reports it can be conducted every ten years in situations with very low risk of contamination. These situations are appraised in agreement with the provisions of article 16.2 of the IED allowing monitoring to be based on a systematic appraisal on the risk of contamination (more on this below).

For the remaining Member States, the minimum frequencies are set in accordance with the IED.

Four Member States (Ireland, Italy, Malta and the Netherlands) indicated that the information from the assessment of the environmental impacts and the baseline report are taken into account in setting the most appropriate frequencies, which can be stricter than the IED. Finally, Luxembourg indicated that in addition to the monitoring of soil and groundwater, installations using dangerous substances are required to conduct monitoring of pipes and distribution systems.

3.4.3 Sub-question 4.3: How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?

A total of 15 Member States indicated that systematic appraisal of risk of contamination can be used to set less frequent monitoring conditions and that the provision has been used. This includes Austria, Belgium (Flanders and Wallonia), Croatia, Cyprus, the Czech Republic, Estonia, Greece, Lithuania, the Netherlands, Poland, Portugal, Romania, Spain, Sweden and the UK.

For those Member States where systematic appraisal of risk of contamination can be used, the responses provided details on the type of information that is considered during the process. These include:

- Information already gathered on conditions of soil and groundwater including from monitoring (Belgium (Flanders), Estonia, Greece, France, the Netherlands, Romania and Sweden).
- Information included in the baseline report (the Czech Republic, the Netherlands, Portugal).
- Systematic impact assessment (Bulgaria, France).
- Use of parameters such as regular examinations or reference to conclusions of competent experts on use of equipment, buildings and measures which pose a risk of groundwater or soil contamination (Lithuania).

- Need to meet specific criteria through compliance checks, lack of incidents on site and operational performance being above the permit requirements (Malta).
- Sensitivity of receiving environment (Croatia).

On the use of systematic risk assessment, Member States provided the following information:

- Belgium (Flanders) reported that its competent authority, the OVAM included the results of 55,851 preliminary soil surveys in 2014 in a database. The response does not indicate the share of these surveys which concern IED installations. Furthermore, a systematic appraisal of the risks to contamination posed by existing installations was conducted in 2012 that included a listing of soil polluting activities and establishments and the verification and adjustment of the soil monitoring frequencies. This appraisal was reported by Belgium (Flanders) as providing an opportunity to check that the legislation (VLAREBO Regulations introduced in 2007) was still appropriate.
- In the Netherlands, the Soil Protection Guidelines[36] are used to guide the systematic appraisal of the risk of contamination. The guidelines, updated in 2012, include a soil risk checklist which define for each category of activity what can be considered as a negligible soil risk and the relevant options / measures to protect the soil.
- Portugal indicated that in some instances, for installations which have been exempted from submitting the baseline report (i.e. for which the risk of contamination is considered to be minimal), an assessment of the contamination risks will be required every 5 years, but the actual frequency of monitoring may be lower than is specified in the IED.
- Spain also reported that its national legislation includes criteria and requirements for monitoring and that it is currently working on developing tools to ensure that the Autonomous Communities apply coordinated criteria.

Seven Member States (Belgium (Brussels), France, Hungary, Ireland, Luxembourg, Latvia and Slovenia) indicated that the option to use systematic appraisal for risk of contamination is not applied. However Belgium added that while no monitoring is required at a lesser frequency than every 5 years, for installations where pollution is already present in the soil and groundwater, a biannual monitoring can be imposed. Six Member States (Bulgaria, Denmark, Germany, Italy, Malta and Slovakia) reported that the provision has not been used during the first reporting period. Denmark added that EU guidance on monitoring will be used to set conditions, and Italy reported that national guidance is expected to be issued upon the completion of the work being undertaken by its competent authorities on monitoring.

3.5 Question 5: General Binding Rules

5. Are General Binding Rules used for implementing Directive 2010/75/EU?

Ten Member States reported the use of General Binding Rules (GBRs) for the implementation of the IED. These are Austria, Belgium, Croatia, Denmark, Italy, Latvia, Netherlands, Slovakia, Sweden and the UK. Whilst Italy indicated that GBRs are used to implement the IED, it also reported that these have not been adopted yet due to a late transposition of the IED.

[36] http://www.rwsleefomgeving.nl/onderwerpen/bodem-ondergrond/nrb/

3.5.1 Sub-question 5.1: Which activities (as listed in Annex I to Directive 2010/75/EU) do the General Binding Rules cover?

The responses to these questions are included in Table 3.3 which presents, for each Member State the pollutants covered by the GBRs. Note that the questionnaire does not require Member State to specify the pollutants covered by GBRs for each activity, and the tables should not be understood as suggesting that the GBRs cover all the pollutants of the activities.

Table 3.3 GBRs and IED activities covered by them.

MS	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	2.5	2.6	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	4.5	4.6	5.1	5.2.(a)	5.2.(b)	5.3.a	5.3.b	5.4
AT	x				x	x		x	x		x		x		x								x	x			
BE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
DK	x																						x				x
HR											x				x	X							x				
LV													x														
NL	x																x						x				
SE	x	x	x	x	x	x	x	x	x	x	x	x	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x
SK	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
UK																						x	x	x	x	x	x

MS	5.5	5.6	6.1.(a)	6.1.(b)	6.2	6.3	6.4.(a)	6.4.(b)	6.5	6.6	6.7	6.8	6.9	6.1	6.11
AT											x				
BE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
DK										x	x				
HR										x					
LV															
NL										x					
SE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SK	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
UK	x	x													

Sub-question 5.1(a): What requirements does the General Binding Rules set?

GBRs as defined in Article 3(8) of the IED can be used by Member States to set the emission limit values or other conditions (at sector level) to be used directly when setting permit conditions.

An overview of the activities covered by GBRs is presented in Table 3.3. It shows that GBRs have been used to implement the IED for all Annex I activities in Belgium (Flanders and Brussels), Sweden and Slovakia.

Other activities that are subject to GBRs in some Member States. From the information reported by Member States, it appears that GBRs are being used to implement the sectoral chapters of the IED related to large combustion plants, waste incineration and emissions from solvents. The activities reported by Member States are the following:

- Waste management activities – mainly for the disposal or recovery of waste in waste incineration plants (5.2) for which eight Member States use GBRs (Austria, Belgium (Brussels and Flanders), Croatia, Denmark, the Netherlands, Sweden, Slovakia and the UK). Denmark also uses GBRs for landfill activities, and the UK (England and Wales) use GBRs for waste management activities generally.
- Combustion of fuels in installations with a total rated thermal input of 50 MW or more (1.1) for six Member States (Austria, Belgium (Brussels and Flanders), Denmark, the Netherlands, Slovakia and Sweden).
- Intensive rearing of poultry or pigs (6.6) – six Member States (Belgium (Brussels and Flanders), Croatia, Denmark, the Netherlands, Slovakia and Sweden). Note that in the case of Croatia no GBRs have been issued, but there are provisions in the national legislation to allow it.
- Surface treatment using organic solvents (6.7) – five Member States (Austria, Belgium (Brussels and Flanders), Denmark, Slovakia and Sweden).

Some Member States have adopted GRBs for a range of other activities:

- Austria: GBRs are used for activities relating to the production and processing of metals (2.1, 2.2, 2.4, 2.5) and activities relating to the mineral industry including production of cement, lime and magnesium oxide (3.1) and the manufacture of ceramic products (3.5) as well as the manufacture of glass.
- Latvia: GBR for emissions to air and water from the manufacture of glass fibre with a melting capacity exceeding 20 tonnes per day.
- The Netherlands: GBRs for the production of inorganic chemicals (4.2).

Sub-question 5.1(b): What pollutants do the General Binding Rules cover?

The polluting substances covered by GBRs in different Member States are summarised in Table 3.4 and Table 3.5.

Table 3.4 Air pollutants covered by GBRs

	SOx	NOx	CO	VOC	Metals	PM	Asbestos	Chlorine	Fluorine	Arsenic	Cyanides	Carcinogenic or mutagenic substances - air	Polychlorinated dibenzodioxins and polychlorinated dibenzofurans
AT	X	X	X	X	X	X		X	X	X	X	X	X
BE	X	X	X	X	X	X	X	X	X	X	X	X	X
DK	X	X	X	X	X	X		X	X	X	X	X	X
LV	X	X	X	X	X	X		X	X	X			
NL	X	X	X	X	X			X	X				X
SE	X	X	X	X	X	X	X	X	X	X	X	X	X
SK	X	X	X	X	X	X	X	X	X	X	X	X	X
UK						X							

Table 3.5 Water pollutants covered by GBRs

	Organo-halogen	Organo-phosphorus	Organotin	Biocides	Materials in suspension	Eutrophication substances	COD/BOD	Annex X to Directive 2000/60/EC	Carcinogenic or mutagenic substances	Persistent hydrocarbons	Metals	Arsenic
AT												
BE	X	X	X	X	X	X	X	X	X	X	X	X
DK	X				X			X			X	X
LV										X	X	X
NL				X	X						X	
SE	X	X	X	X	X	X	X	X	X	X	X	X
SK	X	X	X	X	X	X	X	X	X	X		
UK												

The tables show that all IED Annex II polluting substances to air and water are covered by GBRs in Belgium (Brussels and Flanders), Sweden and Slovakia.

A selection of pollutants are covered by GBRs in Austria, Denmark, Latvia, the Netherlands, and the UK as follows:

- In Austria, GBRs cover all Annex II polluting substances to air (excluding asbestos).
- In Denmark, all Annex II polluting substances to air (excluding asbestos) are covered by GBRs along with five polluting substances to water[37].
- In Latvia, 15 polluting substances to air are covered by GBRs, including two non-Annex II substances (selenium and formaldehyde). 16 polluting substances to water are covered by GBRs, comprising mostly heavy metal as well as hydrocarbons, ammonia and other non-Annex II pollutants (sulphates, fluorides and phenol).
- In the Netherlands, a limited selection of Annex II polluting substances to air and water are covered by GBRs[38].
- In the UK (England and Wales), the air pollutants covered by GBRs include dust, bio-aerosols and odour. No pollutants to water are covered.

The pollutants covered by GBRs have not been specified in the responses provided by Croatia and Italy.

3.5.2 Sub-question 5.2: How do General Binding Rules ensure an 'integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?

Member States indicated in all cases that provisions have been adopted to ensure that an integrated approach is taken and to avoid the transfer from one medium (air, soil or water) to another, with a high level of environmental protection equivalent to that achievable through individual permit conditions.

In the UK and Slovakia the local conditions of the installations are taken into account when applying the GBRs. Detail concerning the process that is in place to ensure an integrated approach is mentioned by Denmark, the Netherlands and the UK (Wales). The UK (Wales) reported that a risk assessment of issuing a permit using the GBRs is conducted.

3.5.3 Sub-question 5.3: How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?

In all cases where GBRs are intended to be used for the implementation of the Directive, provisions to use BAT as the basis for GBRs are included in the national legislation.

[37] Including: Organohalogen compounds and substances which may form such compounds in the aquatic environment; Metals and their compounds; Arsenic and its compounds; Materials in suspension; and Substances listed in Annex X to Directive 2000/60/EC.

[38] Including the following polluting substances to air: Sulphur dioxide and other sulphur compounds; Oxides of nitrogen and other nitrogen compounds; Carbon monoxide; Volatile organic compounds; Metals and their compounds; Arsenic and its compounds; Cyanides; and Substances and mixtures which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air. Including the following polluting substances to water: Metals and their compounds; and Biocides and plant protection products.

The majority of responses included reference to national legislation or repeated the provisions of the IED but provided no further information on practical steps taken to ensure that GBRs are based on BAT.

3.5.4 Sub-question 5.4: How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?

Member States indicated in all cases that the latest BAT must be referred to when drafting or updating GBRs. In some cases Member States have specified a timeframe within which GBRs must be updated to reflect changes:

- In Italy, the legislation stipulates that where a BAT update has not been reflected in GBRs within six months of the issue date, the GBRs become invalid;
- In Latvia and Sweden, a longer timeframe of four years is allowed to reflect changes to BAT in GBRs which is the same deadline allowed for permits to be updated.

Other Member States have committed to 'regular' reviews to ensure that the latest BAT is used without specifying a timeframe within which the changes must be reflected (e.g. UK).

3.5.5 Sub-question 5.5: What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?

The responses from Member States all highlighted that their GBRs make reference to the IED, typically in the introductory text or an explanatory note included in the rules.

No further information was included in the Member States' responses.

3.5.6 Sub-question 5.6: If the General Binding Rules are published on the internet, provide a link to where they can be found.

Table 3.6 below presents the web link reported by Member States in response to the question on general binding rules.

Table 3.6 Web links to GBRs as reported by Member States in response to sub-question 5.6

Member State	Link reported	Information contained in the link
AT	Hyperlink	Link to official legislation search website
BE	Hyperlink 1 Hyperlink 2 Hyperlink 3	Links to official legislation search websites
DE	Hyperlink 1 Hyperlink 2 Hyperlink 3 Hyperlink 4 Hyperlink 5 Hyperlink 6 Hyperlink 7 Hyperlink 8	Link 1 to legislation on the protection from adverse environmental effects caused by air pollution, noise, vibration, and similar processes. Link 2 to GBR on the implementation of the federal anti-pollution law. Concerns emission limits to volatile halogenated organic compounds. Link 3 to GBR on the implementation of the federal anti-pollution law. Concerns large scale firing, gas turbine and combustion plants. Link 4 to GBR on the implementation of the federal anti-pollution law. Concerns incineration and co-incineration of waste. Link 5 to GBR on the implementation of the federal anti-pollution law. Concerns emission limits to volatile organic compounds from the usage of organic solvents in specific installations. Link 6 to technical guidance regarding air pollution control. Link 7 to legislation on Water management. Concerns the management of surface waters, coastal waters, marine waters and ground water, public water supply, protected areas, waste water, hazardous substances, river development, coastal and flood protection, other topics regarding water management. Link 8 on legislation to the requirements to pouring waste water into water bodies.
DK	Hyperlink	Link to official legislation search website
LV	Hyperlink	Link to relevant national legislation
NL	Hyperlink 1 Hyperlink 2	Links to official legislation search websites
SE	Hyperlink 1 Hyperlink 2	Link 1 to national legislation transposing IED Link 2 to general binding rules on large

Member State	Link reported	Information contained in the link
	Hyperlink 3 Hyperlink 4 Hyperlink 5	combustion facilities Link 3 to general binding rules on combustion of waste Link 4 to general binding rules on use of organic solvents Link 5 to general binding rules on production of titanium dioxide
SK	Hyperlink 1 Hyperlink 2	Link 1 to environmental portal information website Link 2 to competent authority website
UK	Hyperlink 1 Hyperlink 2	Link 1 to England general binding rules Link 2 to Wales general binding rules

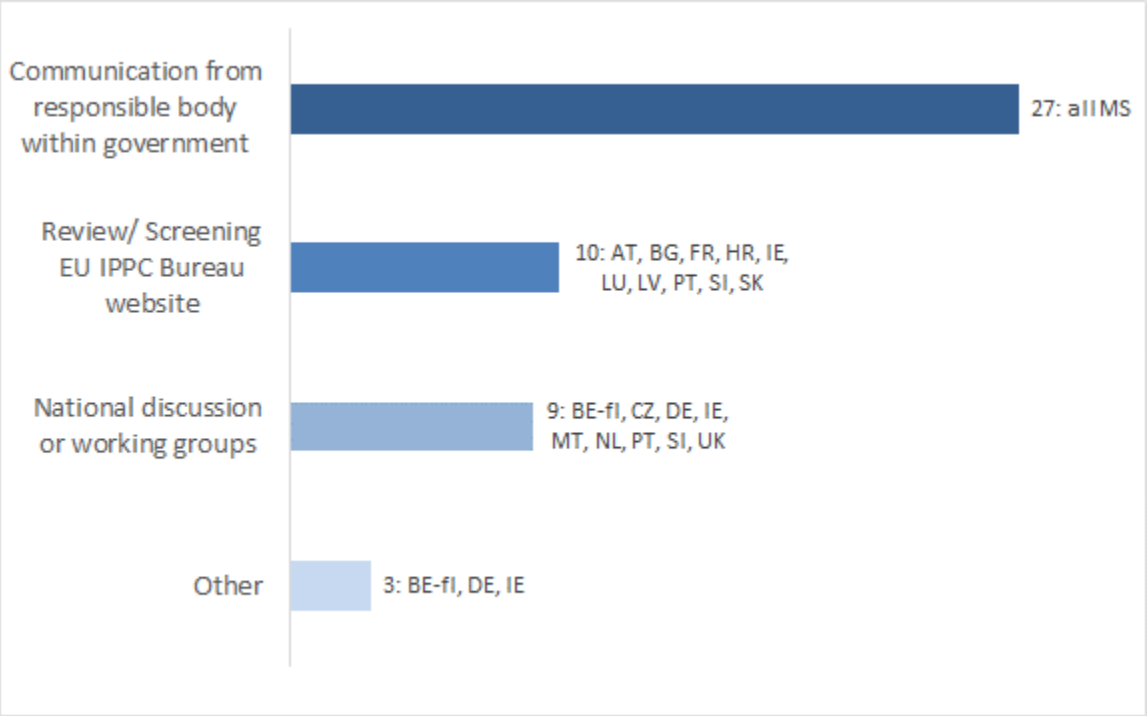
3.6 Question 6: Developments in BAT

3.6.1 Sub-question 6.1: How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?

Overall all Member States have reported that the responsibility of monitoring changes to BAT belongs to their competent authority; typically this is the Ministry of Environment or other government environment agency. However in Hungary, the Ministry of Agriculture is responsible while in the Czech Republic both the Ministry of Industry and Trade and the Ministry of Environment report changes to BAT. In the case of Germany, Italy and Spain, it is further specified that while the Ministry of Environment is responsible for monitoring, the regional authorities are responsible for further dissemination of the developments observed (once informed of them by the respective central governments).

Figure 3.6 presents the responses grouped in categories. In 10 Member States (Austria, Bulgaria, Croatia, France, Ireland, Latvia, Luxembourg, Portugal, Slovenia and Slovakia) the responsible government department/agency is required to review the European IPPC Bureau website. In addition, national workshops or forums at which developments in BAT are discussed have been set up in nine Member States (Belgium (Flanders), the Czech Republic, Germany, Ireland, Malta, the Netherlands, Portugal, Slovenia and the UK). Training is also provided in Ireland to ensure monitoring is carried out appropriately (not presented in the figure below as it is only reported in one Member State).

Figure 3.6 Ways to ensure that competent authorities follow the publication of new or updated BAT conclusions



3.6.2 Sub-question 6.2: How do competent authorities make that information available to the public concerned?

With the exception of Luxembourg, Malta and the UK, all Member States reported that they use publically available websites to inform the public of new or updated BAT conclusions.

In Luxembourg, Malta and the UK, changes to BAT conclusions are also communicated directly to those affected / those requesting information, and are not available online. Romania and Sweden also inform operators directly about developments in BAT, along with publishing the information online.

As well as informing the public via the internet, Belgium (Brussels), Cyprus, Denmark and Germany publish new or updated BAT conclusions in their official legislation (also available online).

Additional methods of dissemination are referred to by Belgium (Flanders), France and Germany, including:

- Hard copies of the relevant documents are available to those affected by the changes or if requested (Belgium (Flanders) and France);
- An electronic newsletter is circulated to subscribers with updates (Belgium (Flanders)); and
- Public events are hosted by the responsible authorities to announce updates (Belgium (Flanders)).

Sub-question 6.2(a) - If published on the internet, provide a link to where this information can be found.

The table below presents the web-links reported by Member States where information on BAT conclusions is publicly available.

Table 3.7 Web links reported by Member States in relation to information on BAT conclusions

Member State	Link reported	Information contained in the link
AT	Hyperlink	Link to welcome page of competent authority
BE	Hyperlink 1 Hyperlink 2 Hyperlink 3 Hyperlink 4	Link 1 to information for IED installations in Brussels Capital region Link 2 to information for IED installations in Flanders region Link 3 to information on BAT conclusions Link 4 to legislation transposing IED for Wallonia region
BG	Hyperlink	Link to IED page in competent authority website
CY	Hyperlink	Link to competent authority website
CZ	Hyperlink	Link to IED page in competent authority website
DE	Hyperlink	Link to information on BAT conclusions and BREF
DK	Hyperlink	Link to information on BAT conclusions and BREF
EE	Hyperlink	Link to IED page in competent authority website
EL	Hyperlink	Link to information on environmental permitting including BAT conclusions and BREF
ES	Hyperlink	Link to information on BAT conclusions and BREF
FR	Hyperlink	Link to information on BAT conclusions and BREF
HU	Hyperlink	Link to IED page in competent authority website
IE	Hyperlink	Link to information on BAT conclusions

Member State	Link reported	Information contained in the link
		and BREF
IT	Hyperlink	Link to relevant national legislation
LT	Hyperlink	Link to information on BAT conclusions and BREF including from other Member States
LV	Hyperlink	Link to information on BAT conclusions and BREF
MT	Hyperlink	Link to IED page in competent authority website
NL	Hyperlink	Link to IED page in competent authority website
PL	Hyperlink	Link to IED page in competent authority website
PT	Hyperlink 1 Hyperlink 2	Link 1 to relevant national legislation Link 2 to information on BAT conclusions and BREF
RO	Hyperlink 1 Hyperlink 2	Link 1 to relevant national legislation Link 2 to information on BAT conclusions and BREF
SE	Hyperlink	Link to information on BAT conclusions and BREF
SI	Hyperlink	Link to information on BAT conclusions and BREF
SK	Hyperlink 1	Link to IPPC information system

3.7 Question 7: Reconsideration and updating of permits

7(a) - Provide a summary of any Member State policy or guidance on the following aspects of the process for reconsidering and updating permit conditions and,

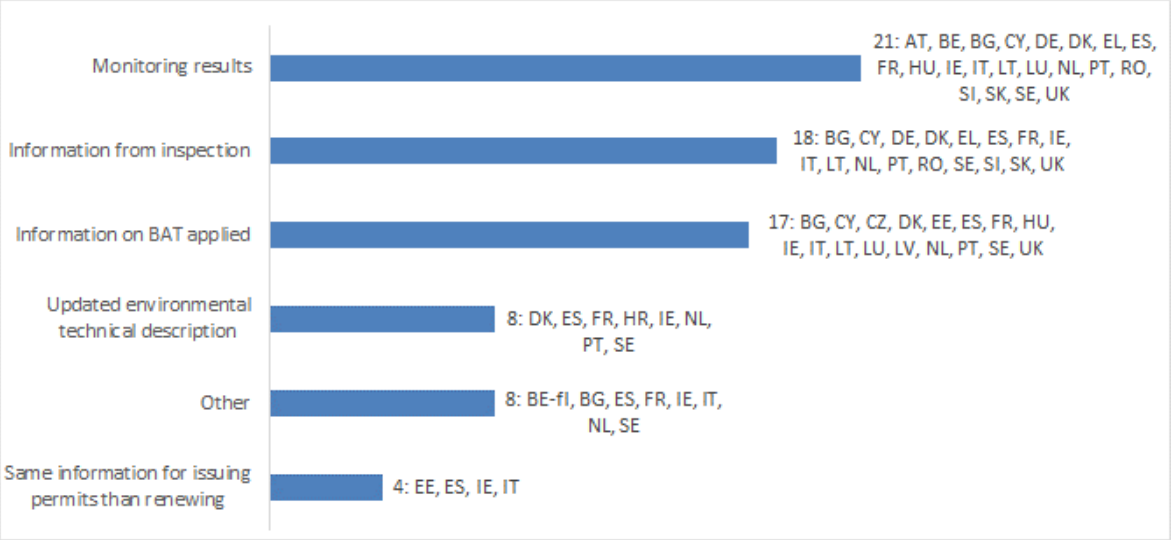
7(b) - if published on the internet, provide a link to where this policy or guidance can be found.

3.7.1 Sub-question 7.1: What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?

The IED does not specify the information to be used in order to carry out the permit reconsideration but Article 21(2) provides examples such as results of emission monitoring and other data that enables a comparison of the operation of the installation with the best available techniques.

Member States reported on the type of information typically requested from operators for the permit reconsideration and updating. This is presented in the figure below.

Figure 3.7 Most common information requested from the operators for permit reconsideration / updating



Note: Some Member States provided responses to more than one category hence the numbers in the figure do not add to 28.

The majority of Member States have indicated that monitoring results are required by the competent authorities for reconsidering/updating the permit. Furthermore, 18 Member States have added that information generated during the inspection of the installation is used in the reconsideration process.

Typically, the responses from Member States suggest the reconsideration of permit conditions includes a review of the information submitted by the operator as part of the annual reporting obligation (e.g. Germany and Sweden), a review of relevant BAT for the sector including a verification on whether any new BAT conclusions have been adopted (e.g. Belgium) and a verification that the installation complies with the latest BAT (e.g. Romania).

In five Member States (Estonia, Ireland, Italy, Portugal and Spain), the information to submit as part of the reconsideration of permit conditions is the same as that required for the initial permit application.

Two Member States reported distinctions between the reconsideration and the initial application process in terms of the information to be submitted. Malta and Romania indicated that there is a specific information form for permit reconsideration/updating.

Finally, Belgium (Flanders) indicated that the competent authority conducts a systematic analysis of the sector to determine the information already available (e.g. information from previous reporting and archives from permit application) before requiring more information from operators.

3.7.2 Sub-question 7.2: How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

The criteria reported by Member States to define the "main activity" of an installation are presented in Table 3.8.

Table 3.8 Criteria reported by Member States to define main activity

Criteria	Member States referring to the criteria
Main economic activity	AT, BE, BG, CZ, DE, DK, IE, IT, MT, NL, RO and SI
Activity with the most significant environmental impact	CZ, DK, LV, PT, RO, SI and UK
National legislation defines 'main activity' with no further reference to criteria included in the legislation	BE, DE, EE, ES FR, HU, PL, SE, SK and UK
Activity determined by the technical design of the installation	LT, NL
Activity which reaches the capacity threshold set out in Annex I of the IED	CY, CZ
Use of other tools (e.g. NACE codes in Bulgaria and Romania, NOSE-P codes39 in Romania)	BG, RO

Three Member States (the Czech Republic, Denmark and Romania) reported that several criteria are taken into account to define the main activity. When this is the case, a hierarchy of the criteria is applicable.

In cases where several activities are conducted within the same permitted site, Member States reported that the competent authority identify either the main economic activity, the most polluting activity, or both.

- Belgium (Flanders) and Romania reported that in this situation, generally, the Annex I activity is considered to be the main activity. However, if the main economic activity is not representative of the processes undertaken at the facility then the main activity would be the most polluting activity at the facility. Belgium indicated that this would arise in exceptional cases only. The responses did not provide information on the decision that would be taken if both were Annex I activity.
- Latvia has reported that the assessment considers that the main activity is the one for which the requirements for environmental protection are the strictest.
- Three Member States (the Czech Republic, Portugal and Sweden) indicated that the 'main' activity is the one from which most of the industrial emissions are emitted (which is not necessarily the one conducted most extensively at the installation). Portugal provided the example of a paper production factory operating below the IED threshold for paper production, but including a biomass

[39] NOSE P codes are part of the nomenclature for source of emissions, defined by Eurostat

boiler with a rated thermal input of more than 50 MW. In that case, the combustion of fuels would be considered as the main activity for the purpose of environmental permitting. Sweden provided a similar example including a small-scale wood impregnation activity carried out at a large sawmill.

- Croatia, France, Romania and Slovakia's responses focused on the process rather than providing information on the criteria used. The Member States indicated that the operator makes the initial proposal for the main activity which is then assessed and verified by the competent authority. Slovakia added that in case of difficulties, the operator can conduct an in situ inspection of the installation in order to clarify the main activity.
- Greece indicated that the determination of the main activity only takes into account the main economic purpose of the project or activity.
- In Spain, the main activities are the industrial activities listed in Annex I of the legislation transposing the IED regardless of whether they are their main industrial or economic activities.

Six Member States reported that specific guidance has been issued for defining the main activity of an installation.

Austria

Austria indicated that rules have been adopted for defining the main activity in the waste management sector, as follows:

- The preliminary processing of waste prior to the processing cannot be the main activity; and
- For an installation conducting several waste management activities, the capacities and quantity thresholds of each activity are considered.

Austria's response did not include a link to this guidance.

Czech Republic

The Czech Republic's guidance on permitting includes information on deciding the installation's main activity (see Section 3.2.1).

The document states that in situations where the main activity of the installation is unclear, the competent authority can take into account the following aspects to guide their decision:

- the purpose of the installation;
- the main production of the installation; and
- the impact of the activity on the environment.

The guidance document also refers to the E-PRTR Regulation, and indicates that the definition of activities provided in the E-PRTR guidance issued in 2006 can be used.

Denmark

Denmark provided a link to its national competent authority website which presents guidance on activities covered by the IED. The main activity is usually the main economic activity, taking into account for example revenue, production volume and capacity data[40]. If the main activity falls under the scope of the IED, then all of the installation is regulated under the IED regime. However if only secondary activities of the company are subject to authorisation, then the permitting applies only to those secondary activities[41]. It is unclear whether this interpretation is in line with the definition of 'installation' in the IED. In cases where the main activity is not clearly

[40]http://miljogodkendelsesvejledningen.dk/opslag/godkendelsespligt/hoved-og-biaktiviteter/

[41] http://miljogodkendelsesvejledningen.dk/introduktion/

identifiable, then the competent authority considers the nature, extent and impact of the installation's pollution in relation to the different activities operated.

Germany
Germany's response indicated that Annex 1 to the Federal legislation on emissions transposing the IED[42] is used by competent authorities to define the main activity and it includes all types of industrial installation, including those regulated by the IED and specify the type of permitting required for each activity. However the national legislation referred to does not appear to include criteria on how to make the decision.

France
In France, a classification of all activities has been conducted and is used by the competent authorities to define the main activity when issuing or re-issuing the integrated permit. The response did not include a link toward this classification.

Sweden
Sweden's guidance on the implementation of the IED (see Section 3.2.2) includes defining the main activity. It states that for the purpose of setting permit conditions, such as ELVs, the main activity is defined as the largest and most environmentally damaging installation's operation.

3.7.3 Sub-question 7.3 - How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

All Member States (with the exception of Finland) quoted similar wording to the IED as initiating the reconsideration and update of integrated permits, but also sole other situations were described which can lead to permit reconsideration. Overall, the following situations were reported:

- The publication of a new or revised environmental quality standard (Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, France, Greece, Germany, Hungary, Croatia, Ireland, Italy, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden and UK);
- Concerns for the operational safety of the installation (Belgium (Brussels), Croatia, Cyprus, Denmark, Estonia, France, Germany, Ireland, Italy, the Netherlands, Poland, Romania, Slovakia, Spain, Sweden and the UK);
- Complaint due to pollution caused by the installation (Austria, Belgium (Brussels and Flanders), Bulgaria, Cyprus, Denmark, Estonia, France, Germany, Hungary, Croatia, Italy, Ireland, Malta, the Netherlands, Poland, Romania, Slovakia, Spain, Sweden and the UK);
- Information submitted by the operator on performance or change to the installation (Austria, Belgium (Brussels), the Czech Republic, Estonia, the Netherlands and Slovakia);
- Publication or update of a new BAT conclusion (Denmark, Estonia, Hungary, Slovakia and Spain);
- Results of an environmental inspection (Estonia and Germany);
- End of validity of a permit (Cyprus and Denmark);
- Change in sensitivity of the surrounding environment (Sweden).

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http://www.bmub.bund.de/fileadmin/Daten_BMU/Download_PDF/Luft/blmschv_4_en_bf.pdf

Four Member States (France, Slovenia, Portugal and Spain) indicated that the situation described in Article 21(5) would require the competent authorities to start the review process of permits immediately, whereas three (Belgium (Flanders), Malta and UK) reported that the permits would be updated as part of the planned schedule.

Member States indicated that the competent authority initiates the reconsideration of the permits. For example, Greece reported that installations are required to submit reports with appropriate additional measures including the proposed measures to ensure compliance with the requirements of a new or revised environmental quality standard.

Poland indicated that its national provisions allow the competent authority to initiate the review of the permit and in some cases to revoke or restrict the permit.

3.8 Question 8: Site closure

The provisions surrounding site closure are a new feature of the IED. All Member States provided responses to question 8 with the exception of Finland and Slovenia. Slovenia reported that the provisions related to baseline report had not been transposed into its national legislation yet.

3.8.1 Sub-question 8.1: How is it decided which activities require a baseline report especially:

8.1(a) Which activities listed in Annex I to Directive 2010/75/EU have typically been found to involve the 'use, production or release of relevant hazardous substances' (Article 22(2))?

The information reported by Member States showed a range of different approaches, which can be distinguished as follows:

- Member States that have designated all the IED activities as potentially requiring a baseline report (Belgium (Wallonia), the Czech Republic, Estonia, France, Germany, Malta, Poland, Romania, Slovakia and Sweden).
- Member States that have indicated that baseline reports are required for a selection of activities (Austria, Belgium (Brussels and Flanders), Bulgaria, Croatia, Denmark, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Portugal, Spain and the UK).

  In some instances it was not clear whether the Member States are reporting activities for which baseline reports were issued during the reporting period, or more generally activities for which baseline reports are required. It would be interesting to get further information on how the IED is interpreted to limit the requirements of baseline reports to only selected activities.

  - Austria and Croatia only mentioned waste management activities. It is unclear why other activities would be excluded.
  - Italy indicated that baseline reports are required only for refining of oil and gas activities. No further information was provided.
  - Latvia only mentioned chemical production activities.
  - In Belgium (Brussels) region baseline reports are required for all IED activities with the exception of the food and drink activities and intensive farming. For Belgium (Flanders) it was indicated that baseline

reports are required for IED activities which are listed in the Soil Decree as high risk activities[43].

- The Netherlands require a baseline report for all activities with the exception of intensive farming.

Some Member States have indicated that the assessment of whether a baseline report is required is done on a case-by-case basis (Austria, Cyprus, Denmark, Poland and the UK) Cyprus indicated that it has not completed its procedure for categorising activities that require a baseline report and as a result, a case-by-case approach is adopted for each installation applying for its first permit. No such approach is taken in Belgium (Flanders) and Romania, where baseline reports are required for all installations operating the activities concerned.

The Czech Republic and Germany reported that the focus is not only on the activities operated at the installation but also on the hazardous substances used. France reported a similar approach.

Greece added that the baseline report is required as part of the EIA assessment which is required for all project and activities regulated by the IED.

Malta indicated that in addition to the links with the CLP Regulation, its competent authorities consider that any installation generating waste which is considered as hazardous in Decision 2000/532/EC is required to submit a baseline report.

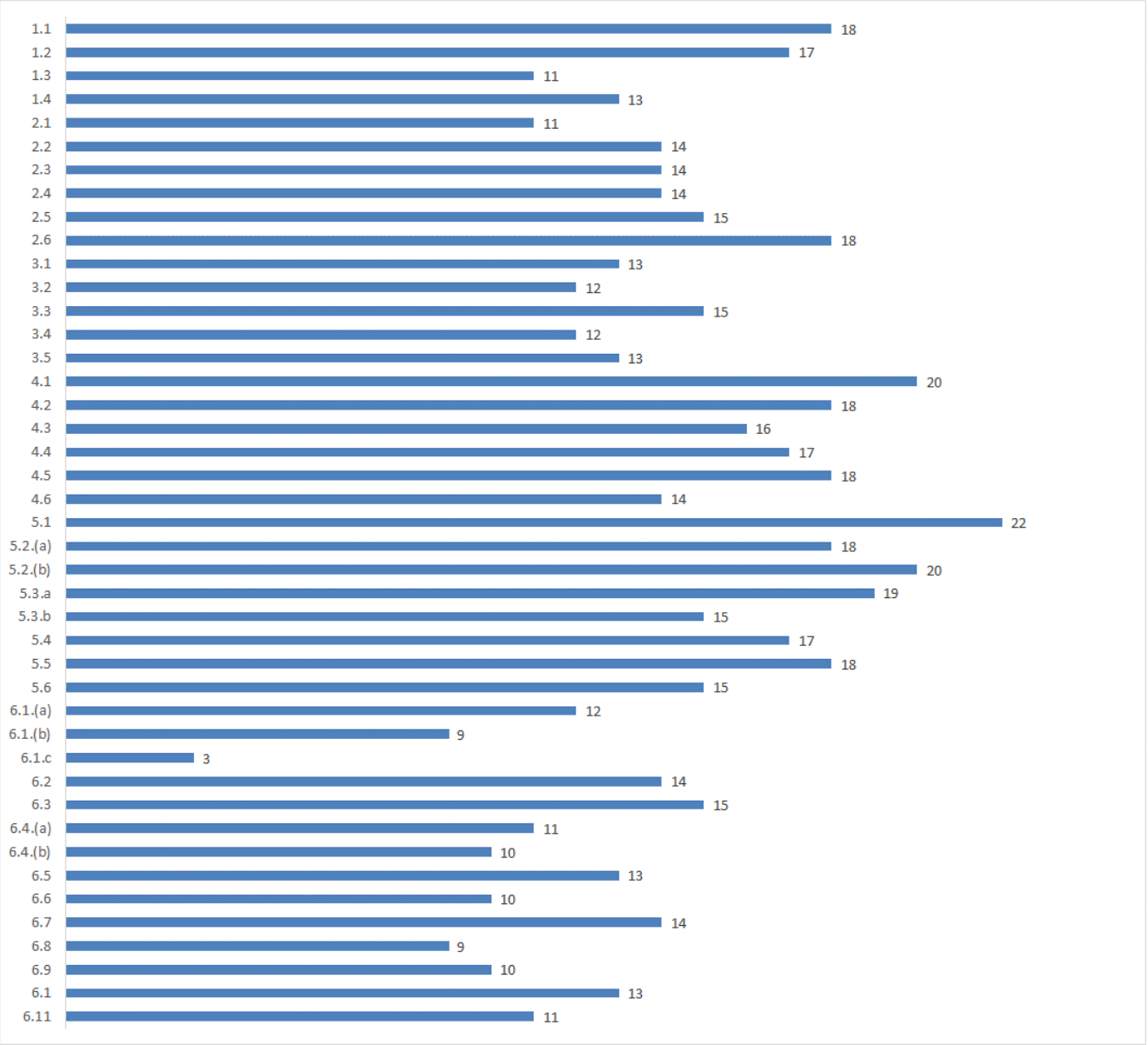
Sub-question 8.1(b): How is regard given to the 'possibility of soil and groundwater contamination at the site of the installation' (Article 22(2))?

Eleven Member States (the Czech Republic, France, Germany, Italy, Malta, the Netherlands, Portugal, Romania, Slovakia, Sweden, and the UK) referred to national guidance and legislation including criteria to take into account concerning baseline reports. In addition, Austria, Belgium (Flanders), Croatia, Estonia, Spain, Hungary, Latvia, Malta, Portugal, Romania, Slovakia, Sweden and the UK made reference to testing of the groundwater or soil for possible contamination as a way to determine whether a baseline report is required.

The figure below presents for each activity, the number of Member States that indicated it requires a baseline report.

[43] Belgium (Flanders) reported that Appendix 1 of VLAREM I includes a list of activities regarded as causing nuisance. If an activity in this list is designated as IPPC/IED ('X' in column 4) and VLAREBO ('O', 'A' or 'B' in column 8) then a baseline report is required. This is indicated by an 'S' in column 8.

Figure 3.8 Number of Member States reporting Annex I activities as having been found to involve the use, production or release of relevant hazardous substances



Waste management activities (5.1 to 5.6) and chemical industry (4.1 and 4.2) are most often reported by Member States, followed by combustion above 50MW and refining of oil and gas (1.1 and 1.2) and the surface treatment of metals or plastic (2.6).

Details on the guidance adopted at national level were included in some Member States responses, as follows:

Denmark

Denmark provided a link to the guidelines on the baseline report which provide assistance in identifying the relevant substances and activities[44]. A substance is considered when used, released or produced from an activity covered by Annex 1 of the national legislation transposing Annex I of the IED. The substance must present a risk of soil and groundwater contamination. For example a butane gas tank stored at ambient pressure is not considered to be a source of risk to soil or groundwater pollution.

France

Taken from the relevant guidance document, France indicated that two criteria are used to determine whether a hazardous substance has the potential to contaminate soil or groundwater[45]:

- an exclusion criteria stating that the use of substances which are gaseous at room temperature and which will not solidify or liquefy in the event of accidental or chronic release, and solid substances which are not water-soluble or powdery are not considered to have the potential to contaminate soil or groundwater and therefore do not alone require a baseline report. France included as an example propane and dichlorine as relevant for the exclusion rule;
- an inclusion criteria stating that the use of any priority substances with respect to water pollution and subject to environmental quality standards requires a baseline report to be produced.

Malta

Malta reported that gases are not considered as being relevant even if displaying hazardous properties; the rationale being that, if released, they cannot contaminate land or groundwater.

The response referred to Maltese requirements that the following are considered: the quantity of substances/wastes and whether they have the potential for significant contamination of groundwater/land in these quantities, the nature of the substances/wastes, the impact of a release, including the potential for dispersal, the sensitivity of land and groundwater receptors in the area and the likelihood of an event happening indicating the precautions in place on site to prevent release of such substances/wastes (e.g. bund wall and safety valves). However the Maltese response did not include a link toward relevant guidelines.

The Netherlands

In the Netherlands, the baseline report must be conducted in accordance with the Soil Protection Guidelines[46]. The guidelines include a checklist which has been recently updated (2012). For each category of activity, the checklist provides measures to apply in order to reach a negligible risk of soil contamination. The guidelines also include information on conducting soil testing, which is mandatory before the start of the activity.

[44] http://miljogodkendelsesvejledningen.dk/opslag/saerlige-problemstillinger/basistilstandsrapport

[45] http://www.developpement-durable.gouv.fr/IMG/pdf/Guide_Elaboration_Rapport_de_Base_IED_Dechet-v2-2.pdf

[46] http://www.rwsleefomgeving.nl/onderwerpen/bodem-ondergrond/nrb

Sweden

Sweden has produced draft guidance on the baseline report, based on the Commission guidance[47]. It indicates the activities which are required to produce a report, and exemptions (e.g. animal husbandry activities). It also includes the requirement that any installation handling chemical products in liquid form must produce a baseline report as it is assumed that there is always a risk that an accident will cause pollution.

UK

In the UK the H5 Guidance, for site condition report, integrates the requirements of the IED and provides a template for reporting[48].

Sub-question 8.1(c): What information are operators required to include in baseline reports (Article 22(2))?

The content of the baseline report has been described by several Member States, as presented below. This shows the diversity of the information and details required:

- Belgium (Flanders) indicated that the requirements of the baseline report were integrated within the existing 'preliminary soil survey' instrument, the purpose of which is to determine whether there are any clear indications of the presence of soil contamination. The survey involves a background contamination assessment and collection of a limited number of samples allowing a quantified comparison between the state of the site described in the report and the state of the site upon definitive cessation of activities. If the survey reveals contamination, further investigation is required in the form of a detailed soil survey.
- Belgium (Wallonia) described the content of the baseline report which seems to go beyond the concept of baseline report described in the IED by including expert proposals for appropriate requirements that would ensure the protection of the soil and groundwater. Other more traditional include for measures concerning monitoring for appropriate requirements for the regular maintenance and surveillance of the measures taken to prevent emissions to soil and groundwater; the periodic monitoring of soil and groundwater in relation to relevant hazardous substances likely to be found on site; the frequency of this periodic monitoring, unless the frequency is specified in the sector-specific conditions and a non-technical summary of the information.
- In Croatia, Estonia, Luxembourg, the Netherlands, Poland, Portugal and Slovakia the baseline reports must include at least information about the activities conducted, and past activities of the site, information about soil and groundwater contamination measurements and new measures to be adopted.
- France's response included an overview of the baseline report structure which, according to the legislation, is required to comprise the following chapters:
    - Chapter 1: description of the site and its environment, and evaluation of challenges;
    - Chapter 2: research, compilation and evaluation of existing data;
    - Chapter 5: interpretation of results and discussion of uncertainties.

  Where existing data does not enable the pollution status of soil and groundwater to be sufficiently understood, the report must also include the following chapters:
    - Chapter 3: definition of programme and investigation methods;

[47] http://www.naturvardsverket.se/upload/stod-i-miljoarbetet/vagledning/industriutslappsdirektivet/vagledning-om-statusrapport-ied-utkast-2013-10-06.pdf

[48] https://www.gov.uk/government/publications/environmental-permitting-h5-site-condition-report

- Chapter 4: implementation of investigation programme and delayed laboratory analyses;
- Chapter 5 presents the results, a discussion of the results and the soil and groundwater contamination status determined for the IED site covered by the baseline report. The results must include:
  - a summary table providing an overview of the analytical results;
  - a critical assessment of the analytical results, together with on-site observations and information presented beforehand in the baseline report;
  - a discussion of the uncertainties and their impact on the results.
- The results must also be presented in the form of a map with geo-referencing where samples were taken. Any inaccessible areas for which the status cannot be established owing to existing equipment, constructions, sealed areas, etc., must be identified and demarcated. Where soil investigations were impossible to carry out, justification must be provided.

- Hungary detailed the content of the baseline report, which must include:
  - a description of the past and present use of the site including elements such as a precise delimitation of the site;
  - general map, aerial photos, archived maps or photo documents that best show the changes in former use;
  - description of the site in terms of its geography, climate, geology, hydrogeology, flora and fauna as well as natural values to be safeguarded;
  - history of site use including a detailed description of past and present activities;
  - study of whether the hazardous substances used, produced or emitted during past or planned activities on the site may cause soil or groundwater pollution, description of testing methods including for example;
  - sampling and laboratory testing methods;
  - applied software and standards and on-site measurements and tests, description of the quality;
  - quantity and concentration of pollutants and their relation to established limit values, including remedial targets;
  - forecasting the movement of pollutants in space and time (trend analyses, trend recognition);
  - physical delimitation of the vulnerable zone, impacts of pollutants or contamination on the environment;
  - description of water use practices in general and of vulnerable water use practices in the contaminated zone; and
  - a description of the outcome and methodology of a simplified and detailed quantitative remedial risk assessment.
- Lithuania requires the following information as part of its Regulation on eco-geological surveys:
  - goals and objectives of surveys carried out;
  - information about the current use of land and, if available, previous use of land;

- specification of the site and activities of the entity concerned and its analysis;
- scope and methodology of surveys carried out, including small-scale maps showing sampling sites;
- description of geological and hydrogeological conditions and representation of the geological framework in geological sections;
- assessment of soil; and
- ground and groundwater contamination and conclusions on the environmental impact of pursued activities and recommendations for detailed eco-geological surveys.

Lithuania added that a preliminary eco-geological survey report (i.e. baseline report) may be based only on the results of the direct underground survey (physical and chemical test data) carried out no more than five years ago.

- Malta indicated that the baseline report should include the proposed method for assessing whether there has been a change in the contamination status of the site during its operation in view of comparing for future activities and future site closure (e.g. sampling, analysis, statistical tests to be used). For groundwater, baseline values are to be identified, and for land, general assessment criteria are appropriate. The source of these values/criteria should be documented. Malta added that guidelines from other EU Member States may be used, however the level of confidence in the results is to be identified. In the case of existing installations, the baseline report should determine whether the site poses a significant risk to human health or the environment as a result of the activities carried out by the operator before the baseline report was carried out. In case existing contamination from the activity which is posing an immediate risk of further contamination is found, mitigation measures shall be proposed. The methodology should also be well documented, to ensure that during the lifetime of the plant and at cessation, a quantified comparison with the baseline is possible. Following the baseline report an ongoing monitoring programme shall also be designed which takes into account the findings of the baseline report.
- The UK provided a link toward its applicable guidance, which includes a template for the baseline report. The sections to include are:
  - Site details;
  - Condition of the land at the time of issuing the permit, including geology, hydrogeology and surface waters;
  - Permitted activities;
  - Changes to the activity;
  - Measures taken to protect land;
  - Pollution incidents;
  - Soil and water quality monitoring;
  - Decommissioning and removal of pollution risk;
  - Reference data; and
  - Statement on site condition.

In addition, the following Member States provided reference to the legislation establishing the content of the report: Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Greece, Hungary, Ireland, Italy, Latvia, Malta, Poland, Portugal, Romania and Sweden.

Sub-question 8.1(d): How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

The majority of Member States (Austria, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, France, Germany, Hungary, Ireland, Italy, Luxembourg, Malta, Poland, Portugal, Romania, Sweden, Slovakia and the UK) indicated that draft version of the Commission guidance that was available during the reporting period has been taken into account to some extent when drafting the requirements for the content of the baseline report.

Four Member States (Belgium, Croatia, Malta and Spain) commented on the fact that the guidance was still at draft status in 2013. As a result while it was taken into account that national guidelines and rules were adopted to complement the Commission guidance.

Germany indicated that its national guidance was adopted before the issuing of the Commission guidance. It has assessed the approach presented in its national guidance and compared it to the Commission's approach and found both of them compatible.

The Czech Republic emphasised that whilst the Commission's draft guidance was taken into account, the priority was to use as much as possible of the existing legislation and methodology.

Italy added that it is currently drafting national guidance.

The UK has indicated using fully the Commission guidance, and ensured that its national guidance was mirroring the Commission guidance. However, considering that the EC guidance was published in 2014, this response is understood as providing information on the current status of implementation of the IED rather than exclusively during the 2013 reporting period.

Finally, Greece and Spain reported having a limited experience with the Commission guidance as it was not available during the period this reporting exercise focused on (year 2013), and Greece added that no baseline reports have been submitted by operators.

3.8.2 Sub-question 8.2: Actions upon the definitive cessation of activities

Sub-question 8.2(a): How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

The responses provided by Member States were all very similar, indicating that a survey must be conducted by the operator and submitted to the competent authorities. This survey must repeat the measurements and samplings conducted for the baseline report. The comparison of the soil and groundwater contamination found at decommissioning with the state identified in the baseline report forms the basis for deciding whether an installation has caused significant pollution.

Four Member States (Belgium, Germany, Ireland and Slovakia) indicated that the process involves accredited remediation experts. Germany added that it does not have any empirical data on this issue for the reporting period.

Denmark and Greece's responses indicated that specific remediation legislation has been adopted and is applicable upon definitive cessation of activities. Ireland provided a link toward its guidance on contaminated land and groundwater at licensed sites which includes template reports for the assessment of contamination[49].

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http://www.epa.ie/pubs/advice/waste/contaminatedland/contaminatedland/Guidance_

Portugal indicated that installations which have definitely ceased operations during the reporting period have not drawn up baseline reports that could be used as a comparison. For these installations, the competent authorities required that sampling and analysis of the results was undertaken, comparing the values measured with the Dutch and Ontario standards as there is no applicable standard in Portugal. Portugal also added that most of the installations requesting cessation of activities were carrying out manufacture of ceramic products or intensive rearing of pig and poultry and as such were considered to present a minimal contamination risk.

Sub-question 8.2(b): How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

The majority of Member States (Belgium (Brussels and Flanders), Bulgaria, Denmark, France, Greece, Hungary, Ireland, Lithuania, Luxembourg, Latvia, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia Spain, Sweden and UK) reported that if the measured concentrations exceed either the intervention standards stated in the legislation or environmental quality standards then it is considered that the installation has caused a significant pollution. Some variations on the application of this measure can be identified:

- Austria added that the assessment is made on a case-by-case basis.
- Ireland considers that there is significant pollution caused when the activity has increased the concentration levels of hazardous substances in the soil or groundwater of the installation site compared to the original state.
- Belgium (Flanders) indicated that in cases where no standard has yet been established for the parameters in question, new contamination will only lead to a detailed soil survey if there are clear indications of serious soil contamination. This is identified by using historical contamination information.
- Croatia indicated that the state of the contamination of soil and water is assessed by a specific assessment of environmental conditions carried out by the competent authorities.
- The UK (England) indicated that a 'no deterioration' principle has been adopted, which means that any recognisable deterioration is considered to be significant.

Cyprus, the Czech Republic, Germany, Italy, Luxembourg indicated that the specific procedure to assess significant pollution has not yet been completed. Germany added that a federal/regional working group has been established and is preparing criteria, and Italy indicated they were working on guidelines.

Hungary reported that no contamination has been identified during the reporting period.

- France has adopted a methodology for the interpretation of environmental status of installations. The aim of the methodology is to ensure the compatibility of the use of a site and the environment. The methodology relies on an assessment of the acceptability of the impacts to the population around the installations, from its current or past uses. The baseline assessment is used as a comparative tool. The guidance provides a detailed description of the criteria to assess and how to consider them, and includes a template and tools for the assessment.
- Ireland provided a link to its Independent Closure Audit tool[50] which is used at the definitive cessation of activities. Ireland does not have specific legislation addressing contaminated land. The methodology described in the applicable

on_the_Management_of_Contaminated_Land_and_Groundwater_at_EPA_Licensed_Sites_FINAL.pdf

[50] https://www.epa.ie/pubs/advice/licensee/Guidance%20on%20Cessation_.pdf

guidance is a risk based approach, which includes a site characterisation stage, a corrective action feasibility and design stage, a corrective action implementation and an aftercare stage. The operator is required to contact the competent authority once it knows that the activity will stop for more than 6 months.

Sub-question 8.2(c): How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

In all Member States except Austria, Belgium (Brussels and Wallonia), Germany and Greece the risks are assessed as part of the review of the application for the permit and when cessation of activities is notified. Whilst all Member States reported information on their procedure to evaluate the risks to human health or the environment, very few details were included in the responses, which remained overall general.

Some Member States have indicated that guidance has been adopted in order to assist competent authorities with identifying significant pollution:

- Austria indicated that it is assumed that there is always a significant risk to the environment in relation to water if the condition of the groundwater deteriorates. Austria also considers that there is a significant risk to human health if the limit values of the Drinking Water Regulations are exceeded.
- Luxembourg has reported using the 'ALEX' checklist for the state of Rheinland-Pfalz.
- Malta has identified reference values for groundwater contamination and general assessment criteria for land pollution.
- France and Ireland responses referred to their national risk evaluation methodologies which are being used in this context.
- Greece's response listed the criteria that are stated in its national legislation. These include:
    - the type of pollution and pollutant;
    - the magnitude of pollution;
    - the size and nature of the activity; and
    - its status with the surrounding environment including population affected and distance from natural recipients.
- Romania indicated the elements considered for the assessment of significant risk to human health or the environment. However no further information is included on how the decision in made. The elements considered are:
    - the chemical nature of contaminants and their bioavailability;
    - the possibility of spread of the contamination and
    - the potential exposure pathways, taking into account the spread of the contamination depending on soil properties, terrain and the environment and people which may be affected.

Sub-question 8.2(d): How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

All Member States reported information on this point with the exception of Croatia. However the responses are of limited added value as the majority of Member States (Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Germany, Hungary, Ireland, Italy, Latvia, the Netherlands, Poland, Romania, Slovenia, Spain, Sweden and

the UK) have provided information on the source of the measures (i.e. adopted legislation and/or issued guidance) rather than describing the measures.

Upon the decision to definitely cease operations, eight Member States require the operator to provide a site closure plan. These are known as remediation reports in Belgium (Brussels), a remediation project strategy in Belgium (Flanders), a remediation plan in Poland, aftercare measures included in the baseline report for Estonia and Ireland, management plan in France, waste management strategy in Latvia and the decommissioning plan in Malta and an Independent Closure Audit in Ireland.

The following Member Stata provided useful insight into definitive closing of activities:

- Belgium (Flanders) and Estonia indicated that the objective is to achieve the soil quality target value and ensure that the soil can be used for other purposes in the future with no restrictions.
- Portugal reported that the measures are established on the basis of the intended future use for the site.
- France added that when deciding on measures to demand from operators only the technical feasibility is taken into account, and cost/benefit assessment is not applicable.
- In the Netherlands, restoration must be conducted insofar as this can reasonably be achieved using the best available techniques.
- In Italy, financial guarantees are requested from the operator as a security for meeting the remediation obligations.
- Finally, Luxembourg reported that no specific measures have been established.

Templates have been drafted by several Member States including Belgium (Brussels), Ireland and the UK.

Web-links reported in response to question 8

The table below lists the web links reported by Member States containing information on measures taken upon cessation of activities and guidance related to site closure.

Table 3.9 Overview of web links reported by Member States in response to question 8

Member State	Hyperlink	Description
BE	Hyperlink 1 Hyperlink 2 Hyperlink 3 Hyperlink 4 Hyperlink 5 Hyperlink 7 Hyperlink 8 Hyperlink 9 Hyperlink 10 Hyperlink 11	Link 1 to information on risk activities Link 2 to information on soil survey Link 3 to environmental permit Link 4 to methodology on sampling and analyses Link 5 to information on risk assessment Link 7 to regional code of good practice Link 8 to related regional legislation Link 9 to website on soil protection Link 10 regional code of good practice Link 11 to related regional legislation
CZ	Hyperlink 1 Hyperlink 2	Link 1 to information on significant change Link 2 to related national legislation
DK	Hyperlink 1 Hyperlink 2 Hyperlink 3	Link 1 to relevant national legislation Link 2 to BAT conclusions guidance Link 3 to guidance on baseline report
ES	Hyperlink 1 Hyperlink 2 Hyperlink 3	Links to related national legislation
FR	Hyperlink 1 Hyperlink 2 Hyperlink 3	Link 1 to guidance on baseline report Link 2 to explanatory note on soil contamination Link 3 to note circulated on soil contamination
IE	Hyperlink 1 Hyperlink 2	Link 1 to contaminated land page Link 2 to information on management of contaminated land
NL	Hyperlink	Link to information on the Dutch Soil Protection legislation
PT	Hyperlink	Link to all guidance available on IED
SE	Hyperlink	Link to guidance on status report
UK	Hyperlink 1 Hyperlink 2	Link 1 to model procedures for the management of land contamination Link 2 to guidance on site condition report

3.9 Question 9: Environmental inspections

3.9.1 Sub-question 9.1: What 'environmental inspection plans' have been drawn up (Article 23(2))?

24 Member States reported they had drawn up an 'environmental inspection plan'. In some of those countries (e.g. Slovenia), these plans were only drawn up for the first time in 2014, so in fact after the reporting period. In other countries, the inspection plan is to apply from 2014/2015 on, even though it may have been drawn up in 2013.

Greece, Italy and Luxembourg indicated that, while the relevant national legislation transposing the IED sets out the legal requirement for the introduction of an environmental inspection plan, their secondary legislation setting out powers of inspectors or the criteria to be applied when drawing up such plans has not yet been adopted and therefore such plans have not yet been drawn up.

It is important to note that while environmental inspections plans were already mentioned in the Inspection Recommendation, the requirement to draw inspection plan is a new feature of the IED.

Sub-question 9.1(a): What do the 'environmental inspection plans' contain?
Member States with an environmental inspection plan in place either stated that it complied with the requirements of Article 23(3) of the IED or provided a summary of the contents of the plan, which evidenced that the information set out in Article 23(3) of the IED is included in the plan. For those Member States that did not explicitly indicate that article 23(3) had been applied, the plan itself was checked, where possible, using an online machine translation.

One issue was identified in relation to the Portuguese Annual Activity Plan, which includes the control activities and inspections that will be carried out each year, as well as the allocation of financial and material resources. However, from the information provided and consulting the plan as well as complementary documents (available only in Portuguese), it did not appear that all of the elements set out in Article 23(3) IED are covered, an example being a register of the installations covered by the plan was not included.

Furthermore, the relevant documents for the UK (i.e. the Area Action Plans setting out the key regulatory activities and resources required) are only available to the public through FOI requests and not made widely available online and therefore could not be checked, although guidance on their preparation was made available.

Sub-question 9.1(b): Where are 'environmental inspection plans' publicly available?
Of the 24 Member States that have an environmental inspection plan in place, 21 publish the plan on the internet, while for the remaining 3 (Belgium, Malta and the UK) the plan is available upon request from the competent authority.

The environmental inspection plan is not publicly available on the internet or otherwise in two Member States (Romania and Slovakia). The Romanian response states that it is intended to make the environmental inspection plan publicly available in the future through a database (i.e. the Artemis database of the National Environmental Guard (GNM)).

3.9.2 Sub-question 9.2: What 'programmes for routine environmental inspections' have been drawn up (Article 23(4))?

Sub-question 9.2(a): What do the 'programmes for routine environmental inspections' contain?
Luxembourg indicated that while environmental inspection plans had not yet been drawn up, inspection programmes have already been prepared for individual

installations. These contain information on the installation and the activities covered by the routine environmental inspections.

So, in total, 25 Member States had drawn up 'programmes for routine environmental inspections'. In accordance with the IED requirements, these programmes set out the frequency of site visits for IED installations based on the national plan, and in many cases are therefore drawn up in tabular form, listing the installations to be inspected, and the inspection frequency for each. Italy indicated that its legislation on environmental inspection is being adopted and that no programme has been adopted yet.

Examples of other information included in the programmes include:

- Details of the legal basis for inspections (Austria, Germany);
- What control measures, samples and measurements will be taken during the inspection or a check-list for the inspection (Belgium, Germany, Estonia, Hungary, Luxembourg, Poland); and
- In some cases also the proposed date of the inspection and the inspector that will carry out the inspection (Czech Republic).

Sub-question 9.2(b): Where are the 'programmes for routine environmental inspections' publicly available?

Programmes for routine environmental inspections are publicly available on the internet or upon request from the competent authority or available to consult at the offices of the competent authority in 13 Member States (on the internet in Austria, Croatia, Germany, Estonia, Spain, Hungary, Lithuania, the Netherlands, Slovenia, Sweden, and upon request/for consultation in Belgium, Romania and UK).

A number of the remaining Member States stated that the programmes are not publicly available (Belgium, Bulgaria, Cyprus, Denmark, Latvia and Slovakia). Some explanations were provided by Bulgaria (the programmes include details of unannounced inspections) and Denmark (the programmes are considered to be internal working documents).

Sub-question 9.3: Provide a summary to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency? (Article 23(4))?

All Member States provided details of how the systematic appraisal of environmental risks is carried out. The responses refer to an assessment of the potential and actual impacts of the installation on human health and the environment, the record of compliance with the permit conditions, and whether or not the operator participates in EMAS, and therefore apply the criteria set out in Article 23(4) of the IED. In each case the assessment criteria to be applied are either set out in the national legislation, the methodology forms part of the environmental inspection plan, or separate national guidance has been produced, which is many cases is based on the IMPEL IRAM tool[51].

Eight Member States (Greece, Spain, Hungary, Italy, Lithuania, Luxembourg, Romania and Slovakia) cited the legislative provisions transposing Article 23(4) of the IED.

Three Member States (Cyprus, Croatia and Slovenia) have referred directly to the IMPEL IRAM tool.

Italy referred to the legislative criteria as well as the development of national criteria based on an IMPEL project carried out in three regions of Italy.

[51] 'IED Inspections: Guidance for the implementation of the IED in planning and execution of inspections' June 2013, available at http://www.impel.eu/tools/risk-criteria-database-iram/.

The remaining 16 Member States' responses referred to the assessment undertaken at the national level and the methodology for this assessment. In some Member States, it is part of the national environmental inspection plan (within the National Environmental Inspection Plan in Austria, the Plan of Action for 2013 in the Czech Republic, the Environmental Inspection Plan 2013-2019 in Latvia, the national plan in Estonia, and as part of the monitoring programmes in Germany). In other Member States the methodology is set out in a separate guidance document, or is applied by the regulator in accordance with its overall enforcement policy/inspection system and the national transposing legislation (France, the Netherlands, and Poland).

Member States which have adopted specific guidance are listed below:

Bulgaria
Installations are classified on the basis of the following two risk criteria: impact on the environmental components and factors, and measures taken and activities implemented by operators as regards the reduction of adverse effects on human health and the environment (regulatory conformity). Risk assessment is carried out on the basis of an analysis of impact indicators given a specific weighting, taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents, compliance with the permit conditions, a valid registration of the operator as per EMAS.

Denmark
The risk assessment is based on the probability of an effect occurring and the impact of the effect on people and the environment. Five parameters are taken into account: (i) environmental management system and environmental improvements, (ii) compliance with legislation, (iii) handling and storage of chemicals and hazardous liquid waste, (iv) emissions to air, soil and water, and (v) the proximity to sensitive areas. By weighting these factors, an overall risk score is determined for each installation, which is used to establish the frequency of inspections of between 1 and 3 years. An IT system is used to support the routine planning of inspections based on the systematic appraisal of the environmental risks. While the Danish response does not include further information, it is of note that the methodology described is similar to IRAM.

Ireland
A Risk Based Method of Enforcement (RBME)[52] is used to categorise sites into one of nine categories based on factors including the complexity of the site, emissions, location, operator management and the enforcement record. The minimum frequency of site visits is then determined based on the categorisation of the site, and ranges from once every year to every 3 years.

Malta
The "IPPC/IED and environmental permitting operational tools" is used (not available on the internet). The methodology uses a combination of the environmental complexity (scores are assigned to attributes such as number of emission points, waste management, and presence of environmental management system) and environmental impact of the installation, based on the location of the site, proximity to sensitive receptors, record of compliance, complaints received etc. The overall risk of an installation is classified as high, medium or low and assigned a minimum inspection frequency.

Portugal
The "RISK" analysis model, developed in 2009, assesses the risks from IED installations in accordance with the requirements of Recommendation 2001/331/EC on

[52] http://www.epa.ie/pubs/advice/licensee/methodology/

minimum criteria for environmental inspections, and following the IMPEL "Doing the Right Things" and "Setting Targets & Performance Monitoring" guides. The model generates a classification allowing the available resources to be channelled to activities with the highest risk. The frequency and type of inspection are determined based on the risk classification, with "high risk" installations being inspected annually.

Sweden

The guidance takes into account the size and nature of the activity and its emissions, the complexity, general condition and age of the facilities, the operators compliance, the scope and quality of the operators self-monitoring, the existence of an environmental management system, local and regional conditions and environmental problems, and any changes in owner. Installations with a significant risk must be inspected at least annually, and otherwise installations are inspected every 3 years.

UK

The scheme used in England has 3 tiers. For the most complicated installations, an environmental risk assessment is carried based on 5 attributes (complexity of activities, emissions and inputs, location and the state of the environment around the site, operator performance and compliance rating). This is then converted into an OPRA (Operator Pollution and Risk Appraisal) profile used to determine the fees and how the regulator plans its resources (including inspections) for the site. A similar risk assessment tool; the dynamic regulatory effort assessment model ("DREAM"), is used in Scotland. It combines a pollution hazard appraisal with the compliance assessment in order to determine the frequency of inspections for the following year. In Northern Ireland, a Risk Assessment Model (RAM) is used to score each site based on the complexity of the site, the potential and actual impacts taking into account the level and types of emissions (air, water, soil, habitats, and accidents), the sensitivity of the local environment, compliance with the permit conditions, and participation in EMAS.

Weblinks

Table 3.10 presents the web links reported by Member States in response to question 9.3.

Table 3.10 Overview of web links reported by Member States in response to question 9.3

Member State	Guidance link	Description
BG	Hyperlink	Link to guidance entitled "Instructions for planning and reporting of inspections"
DK	Hyperlink	Link to guidance on the environmental risk assessment
IE	Hyperlink	Link to the Risk Based Method of Enforcement (RBME)
SE	Hyperlink	Link to the Swedish EPA's "Manual (2001:4) Operational Supervision"
UK	Hyperlink	Link to the guidance on the OPRA (Operational Risk Appraisal Scheme)

3.9.3 Sub-question 9.4: Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

25 Member States carry out non-routine environmental inspections to investigate serious environmental accidents, incidents and occurrences of non-compliance. Italy and Portugal have indicated that non-routine environmental inspections are only carried out to investigate serious environmental complaints.

Nine Member States (the Czech Republic, Germany, Greece, Spain, Ireland, Poland, Portugal, Romania and Slovakia) indicated that they carry out non-routine environmental inspections in 'other' circumstances, but only three Member States specified those circumstances, as follows:

- Following an order of the Public Prosecutor (Greece);
- To investigate any complaints, not only serious environmental complaints (Ireland); and
- Following special instructions (Slovakia).

3.9.4 Sub-question 9.5: What information do the site visit reports typically contain? (Article 23(6))?

All Member States indicated that the site visit reports must contain information on the relevant findings regarding compliance with the permit conditions and conclusions as to whether further measures are required. In addition, some Member States listed additional information such as details on the installation, the inspectors carrying out the inspection, and any administrative measures taken as a result of the site visit.

Sub-question 9.5(a): How are site visit reports notified to the operator?
All 27 Member States confirmed that the site visit report is notified to the operator, though not all Member States provided details of how this is done.

In six Member States (Greece, Spain, Hungary, Latvia, Lithuania and Poland) a copy of the site visit report is provided to the operator in person at the end of the inspection. In Denmark and Ireland, it is specified that the site visit report is provided electronically to the operator, while in the remaining Member States, the report may be provided to the operator either by email or post.

Sub-question 9.5(b): How are site visit reports made publicly available?
24 Member States make site visit reports publicly available in accordance with Article 23(6) of the IED. In 12 Member States these are available on a website, in seven Member States on request (Belgium, France, Luxembourg, Malta, Poland, Portugal and the UK), and in three Member States (Cyprus, Ireland and Sweden) these are available for inspection at the offices of the competent authority. Two Member States (Estonia and the Netherlands) did not specify how the site visit report are made publicly available.

In three Member States (Austria, Greece and Romania) the actual site visit report is not made available to the public, either on the internet or upon request.

- In Austria however, a summary of the inspection report is made available to the public on the website of the competent authority and members of the public can request additional information on the inspection from the authority.
- In Greece, an annual report of the Environmental Inspectorate is made available, although the national legislation transposing the IED does require that each individual site visit report is made publicly available within 4 months of the inspection.

- In Romania, a computerised system is currently being developed in order to make site visit reports publicly accessible in the future.

Sub-question 9.5(c): Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC (1) (Article 23(6))?

As Article 23(6) of the IED makes reference to Directive 2003/4/EC on public access to environmental information, Member States were asked whether there were any circumstances under which site visit reports had not been made available.

Only one Member State (Malta) indicated that reports may be temporarily withheld from the public where there are ongoing legal proceedings in cases of serious environmental breach. In all other Member States, while confidential information, commercially sensitive information or information which affects national security etc. may be withheld from publication in accordance with the national legislation transposing Directive 2003/4/EC, there were no circumstances in which the reports have not been made available in the Member States during the reporting period.

3.9.5 Sub-question 9.6: What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?

In order to ensure compliance with further measures identified following an inspection, Member States use a number of measures which involve the competent authorities setting a deadline for compliance (16 Member States), further verification and/or a follow-up site visit by the competent authorities to check that the 'necessary actions' have been completed (17 Member States), and further enforcement action (22 Member States). In some Member States (Austria, France, Hungary, Lithuania, Romani and UK) all three measures are used.

3.10 Question 10: Access to information and public participation

3.10.1 Sub-question 10.1: How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?

In each Member State, public participation is provided for in respect of each of the procedures set out in Article 24(1) of the IED.

While some Member States provided detailed explanations of their public participation procedures, most responses from Member States referred to the transposing legal provisions. These legal texts set out the information that is to be provided to the public, at what stage in the procedure the public is to be notified of the permit application and information on where the documents are available (e.g. a specified timescale is provided for or 'as soon as reasonably practicable'). They also require that the public is to be provided with details of the timescales and means by which they can provide comments and raise questions, and place a requirement on the competent authorities to take into account any comments received before making a decision on the application. In 13 Member States (Austria, Belgium, Cyprus, Croatia, Ireland, Italy, Luxembourg, Latvia, Malta, the Netherlands, Poland, Romania and Slovakia) public consultation is carried out by way of oral hearings or at public inquiries, or this is carried out in addition to written submissions.

3.10.2 Sub-question 10.2: How is information made available to the public (Article 24(2) and (3))?

Information is made available to the public either:

- by way of public notices (13 Member States: Belgium (Flanders), Croatia, France, Hungary, Latvia, Luxembourg, Malta, Netherlands, Portugal, Romania, Slovenia, Sweden and the UK);
- by way of inspection at the offices of the competent authorities or local municipality (7 Member States: Croatia, Hungary, Ireland, Italy, Latvia, Malta and Romania);
- in newspaper publications (16 Member States: Austria, Belgium (Flanders), Bulgaria, Croatia, Cyprus, Estonia, France, Hungary, Ireland, Latvia, Luxembourg, Malta, Netherlands, Romania, Spain); and
- online (26 Member States (Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Romania, Slovenia, Slovakia and the UK).

Luxembourg is the only Member State to indicate that it does not make information available online, although it is now a requirement of the national legislation. Instead, information is made available to the public by displaying a notice in the offices of the municipality where the installation is located and the neighbouring municipalities, displaying a notice at the proposed location of the installation, publishing a summary of the application in at least four daily newspapers in Luxembourg, and allowing the file to be inspected at the premises of the local municipality.

When a decision on granting, reconsideration or updating of a permit has been taken, the competent authorities are then required to make certain information (as set out in Article 24(2) of the IED) available to the public, which includes the content of the decision, a copy of the permit, and the reasons on which the decision is based, amongst other information.

3.10.3 Sub-question10.3: Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?

Four Member States (Luxembourg, Malta, Portugal and UK) stated that not all relevant information is made available via the internet.

As explained above, Luxembourg does not make any information available online. The Maltese and Portuguese responses state that not all information is available on the internet, but do not specify what is not available. For the UK (Scotland), the regulator is currently updating its website to enable access to all relevant information. The availability of all relevant information is a legislative requirement under the national legislation transposing Article 24(3) of the IED and further implementation reviews should identify whether these provisions have been implemented in the relevant Member States.

3.11 Question 11: Emerging techniques

11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BREF?

The questionnaire sought feedback from Member States on techniques and processes to encourage the development and application of emerging techniques, especially those identified in BREFs.

Member States have replied that they have chosen to:

- Appoint a private or public body to oversee the development of emerging techniques and encourage their development (12 Member States: Belgium, Croatia, Denmark, Germany, Greece, France, Hungary, Lithuania, Portugal, Romania, Sweden and the UK). The information included on how it is ensured that these private or public bodies encourage the development and application of emerging techniques is presented below;
- Set up an investment programme or to facilitate access to public funding (11 Member States: Bulgaria, Denmark, France, Germany, Greece, Hungary, Ireland, Netherlands, Poland and Sweden as well as Belgium (Flanders and Wallonia));
- Use additional legislation (3 Member States: Belgium (Flanders and Wallonia), Poland and Portugal).

These approaches are further explained below.

In addition 12 Member States which did not provide any information on a systematic approach to encourage the development and application of emerging techniques.

Appoint a private or public body to oversee the development of emerging techniques

In most cases such support is in the form of online knowledge platforms and portals, which are intended to provide easy access to relevant information concerning BAT and emerging techniques (Belgium (Brussels and Flanders), Croatia, Denmark, France, Hungary, Lithuania, Portugal, Romania, Sweden and UK). These platforms also offer interested stakeholders an opportunity to network and collaborate. Such platforms typically operate at a national level and encompass a range of activities across industry.

A handful of Member States have taken a more targeted approach, for example:

- Denmark: the Environmental Technological Development and Demonstration Programme covers, so far, 2 specific activities – intensive dairy farming and asphalt production. No further information was included in the response to understand why these sectors were chosen in particular and the extent to which emerging techniques in these sectors need support.
- Belgium (Flanders): the Flemish Knowledge Centre for Water focusses on emerging techniques in relation to water management. Note that other broader innovation initiatives exist, e.g. the government agency for innovation by science and technology (IWT) which supports Flemish businesses and research centres more generally.
- In the UK a national platform exists for the offshore sector and operators of combustion installations on offshore platforms.

It is noted that not all platforms operate at a national level. For example, Belgium and the UK run initiatives at regional level and Germany has additional support available at federal level, with resource and energy efficiency agencies established in certain Länder to support the development and application of emerging techniques (e.g. EEA in North Rhine Westphalia etc.).

In Hungary and Romania, the public bodies assigned to develop emerging techniques and their application also organise workshops, conferences and working groups. While in Wallonia, the regional government has created a competition cluster to encourage the development of environmental technologies (GreenWin).

Investment programmes and facilitating funding opportunities

The funding opportunities referred to in the questionnaire responses include both generic programmes and those designed specifically to encourage the development of emerging techniques and their application. The funding opportunities listed by Member States as relevant for the development of emerging techniques include:

- LIFE[53] (Greece and Ireland);
- National environmental funds (Belgium (Wallonia), Bulgaria, France and Poland);
- General EU funds (Hungary).

In addition some information was included on specific funding sources, however it is unclear how these relate to IED. The funding described include:

- Funding for environmental technology (48 million SEK between 2011 and 2012 in Sweden);
- Subsidy programmes to support the application of emerging techniques (the Netherlands);
- Environmental Innovation Programme (UIP) of the Federal Ministry for the Environment (BMUB) and aid programmes of the Federal Ministry of Research (BMBF) which target the development and application of emerging techniques (Germany); and
- Innovation Mezzanine offers a subordinated loan up to €500,000 for an SME innovation project or an R&D industrial project (Belgium (Flanders)).

Supporting legislation

In four instances the responses provided by Member States refer to additional legislation that is used to encourage the development of emerging techniques and their application:

- Belgium (Flanders): outlining tax exemptions for the salaries of research assistants working in business and knowledge institutes (up to 80% reduction on tax).
- Belgium (Wallonia): outlining incentives to encourage the sustainable use of energy.
- Poland: establishing provincial funds for environmental protection and water management, the development and implementation of new environmental protection and water management techniques and technologies, in particular aimed at limiting emissions and water consumption, and at fuel efficiency.
- Portugal: establishing the Consultative Commission for Integrated Pollution Prevention and Control – responsible for identifying, monitoring and publicising BAT.

Website links

Links to relevant websites provided by four Member States are listed in Table 3.11. It includes links to research projects, information platform and funding opportunities.

Table 3.11 Overview of web links reported by Member States on emerging techniques

Member State	Link provided	Information contained in the link
BE	Hyperlink 1 Hyperlink 2	Links to relevant initiatives
DK	Hyperlink	Links to news items on emerging techniques
IE	Hyperlink	Links to page listing funding possibilities
NL	Hyperlink 1	Link 1 to environmental investment rebate

[53] http://ec.europa.eu/environment/life/funding/lifeplus.htm

	Hyperlink 2 Hyperlink 3	programme Link 2 to entrepreneur page Link 3 to LIFE programme

4. Conclusions

4.1 Overview

This section provides the main conclusions that could be drawn from the overall analysis of the implementation of the IED in the EU during the first reporting period (2013). It highlights key issues and relevant conclusions for the implementation and for the reporting.

These conclusions are based solely on our assessment of the information provided by Member States in their responses to the questionnaire and the information contained in the links included in Member States' responses.

4.2 Conclusions on the implementation status of the IED

Overall, the implementation of the IED appears to be on-going, but there are many provisions newly introduced by the IED for which Member States had only gathered a limited, if any, experience during the first year of implementation.

While very few questions have been left blank, many of the responses provided by Member States are general and refer only to the legislation transposing the new provisions of the Directive, rather than providing a description of processes and steps undertaken to apply the provisions in practice.

The generic nature of some of the responses suggests that very few Member States have adopted detailed guidance on the main new elements of the IED in the early stages of implementation.

Conclusions on the implementation of the IED are presented below for each Article the questionnaire focused on.

4.2.1 Non-compliance (Article 8)

The majority of the Member States provided in their response the criteria that are used to determine the seriousness of breaches of permit conditions. The criteria are either set in the national legislation or in permits. For other Member States, the assessment of whether a breach of permit conditions poses an immediate danger to human health or threatens to cause an immediate significant effect upon the environment, relies on: expert assessment and / or training and guidance and tools developed for this specific purpose.

4.2.2 Permit conditions (Article 14)

All Member States simply indicated that the implementation of the requirement that the permit conditions are to be based on BAT conclusions is achieved through the transposition of Article 14(3) into their national legislation. All Member States reported the possibility to set stricter permit conditions than those achievable by the use of BAT, but generally insufficient detail was included on the process used to decide whether stricter permit conditions were needed. The most commonly reported case for setting stricter permit conditions is in relation to meeting Environmental Quality Standards (EQS).

4.2.3 ELVs (Article 15)

The replies of 24 Member States, quoted the relevant text from the national legislation, requiring the ELVs to be set according to the BAT-AELs included in the BAT conclusions.

While this is an essential new feature of the IED, very little information was included in the responses. At best, in some cases links were provided to the procedures followed in order to decide which value within the BAT-AEL range to include as an ELV in the permit.

On the implementation of the derogation provision included in Article 15(4), most of the Member States quoted their national legislation transposing the relevant provisions of the IED without providing further information about how they practically intend on implementing them. Three Member States (Malta, Portugal and the UK) reported that a procedure for granting derogations has been adopted, and four Member States (Belgium (Brussels), Croatia, Germany and Slovenia) have issued some guidance on the topic.

Moreover, very little information about what are considered disproportionally higher costs compared to environmental benefits was provided by most Member States. The replies received indicate that most Member States appear to have very limited or no experience with the practical implementation of these features of the IED.

Further information gathering over the next reporting period should focus on developing greater insight into this area and in particular on the methodologies used for deciding on the granting of derogations and the assessment used by Member States to determine whether the criteria set under Article 15(4) are applicable.

4.2.4 Monitoring requirements (Article 16)

All Member States indicated that monitoring requirements are based on BAT conclusions. Again, no further details were provided on how this is done in practice (i.e. whether or not minimum frequencies mentioned in the BAT conclusions are made mandatory) All Member States have adopted at least the same frequency for periodic monitoring of soil and groundwater as mentioned in the IED.

4.2.5 General Binding Rules (Article 17)

General Binding Rules (GBRs) have been adopted in 10 Member States (Austria, Belgium (Flanders and Brussels), Croatia, Denmark, Italy, Latvia, the Netherlands, Slovakia, Sweden and the UK). In all cases, the national legislation provides that BAT has to be the basis for GBRs. However, no further detail has been provided by Member States to outline how this is ensured in practice.

Most of the GBRs reported by Member States appear to be related to the implementation of the minimum standards applicable to large combustion plants, waste incineration and co-incineration plants and solvent activities.

This area could benefit from further focus in future reporting in order to obtain greater insight into the practical implementation of these provisions.

4.2.6 Developments in BAT (Article 19)

In 26 Member States the responsibility of monitoring changes to BAT is assigned to the accountable government department/agency, typically the Ministry of Environment or other government environment agencies.

4.2.7 Reconsideration and updating of permit (Article 21)

Information requested from operators to assist in permit reconsideration and updating typically includes monitoring results, information from on-site inspections and information allowing competent authorities to verify that BAT is applied.

Almost all Member States quoted similar wording to the IED when describing circumstances initiating permit reconsideration and update. The only variation was on whether these circumstances would trigger an immediate reconsideration of the

permit or whether a case-by-case assessment was first undertaken to check whether the permit could be updated at a later stage, for example as part of a planned update schedule.

The publication or update of a new BAT conclusion was quoted by five Member States as leading to the reconsideration and if relevant update of permits.

4.2.8 Site closure (Article 22)

Eleven Member States have designated all the IED activities as potentially requiring a baseline report while the 16 other Member States indicated that baseline reports are required for a selection of activities.

Twenty Member States indicated that the draft version of the Commission guidance that was available during the reporting period has been taken into account to some extent when drafting the requirements for the content of the baseline report.

This area could benefit from further focus in future reporting in order to obtain greater insight into the practical implementation of the provisions related to site closure.

4.2.9 Environmental inspections (Article 23)

24 Member States reported that they have drafted an environmental inspection plan and for 21 Member States these plans are available online. It should be noted that in some Member States, such as Slovenia, these plans were only drawn up for the first time in 2014, and, therefore, were not yet in place during the reporting period. These plans are publicly available in most Member States, with the exception of Romania and Slovakia.

All those Member States also reported the use of routine inspection programmes (site visits) except Luxembourg.

All Member States provided details of how the systematic appraisal of environmental risks is carried out. The responses referred to the application of the criteria set out in Article 23(4) of the IED.

Non-routine environmental inspections are carried out in all Member States to investigate serious environmental complaints.

All 27 Member States confirmed that the findings from the site visit (typically a report) are communicated to the operator, though not all Member States provided details of how this is done.

Three Member States (Austria, Greece and Romania) explicitly stated that the site visit report is not made available to the public and one Member State (Malta) indicated that reports may be temporarily withheld from the public where there are ongoing legal proceedings in cases of serious environmental breach.

This area could benefit from further focus in future reporting in order to obtain greater insight into the practical implementation of the risk based approach and how the information is made publicly available.

4.2.10 Access to information and public participation (Article 24)

While some Member States provided detailed explanations of their public participation procedures, most responses from Member States simply referred to the legislative provisions transposing Article 24 IED.

Four Member States (Luxembourg, Malta, Portugal and UK) stated that not all relevant information is made available via the internet, which seems to run counter to the requirement under the Article 24(3) of the IED.

4.2.11 Emerging techniques (Article 27)

A range of initiatives were reported by Member States in relation to promoting emerging techniques. These include the appointment of a private or public body to oversee the development of emerging techniques and encourage their applications (in 11 Member States) or the setting up of an investment programme to facilitate access to public funding (in 10 Member States).

4.3 Conclusions on reporting and recommendations for future reporting

As this report covers the first reporting period for the IED, it is considered important to provide feedback on gaps or issues identified with the reporting itself and to highlight any possible misinterpretation of the questions by Member States in order to improve future reporting.

No major issue has been noted on the structure of the questionnaire, or the drafting of the questions. The questions covered the main aspects of implementation and were mostly clear and suitable to obtain the right level of information. No comments were included in Member States responses to suggest difficulties in interpreting the questions.

However, it was noted that questions requiring 'how' a specific feature was implemented tended to have rather generic responses and reference to national legislation, rather than describing the steps taken to apply the specific provisions in practice. This is particularly visible for questions 2 (permit conditions), 3 (emission limit values) and 4 (monitoring requirements). While it is noted that the introduction of the questionnaire emphasises that the information requested is about processes, this does not appear to have been sufficiently considered by the Member States.

In a few instances, overlaps were observed between sub-questions leading to responses being repeated, or the Member State referring to previous responses. This is the case of question 8 on site closure, where responses provided to the different sub-questions were very similar.

In order to assist the next reporting period there could be value in including additional guidance on the type and depth of information expected from Member States, potentially with a reference example to aid understanding.

While requesting links to websites (where the information is available) may be a way to make the response to the questionnaire less time consuming, some Member States only provided links to the welcome page of the competent authority with no instructions on how to reach the relevant part of the website, which should not be considered a sufficient response. These links have been highlighted in Appendix A. For future reporting it would useful to add instructions requesting links to specific pages rather than general relevant websites.

In addition, when information is moved around on websites or updated, links can be modified and the information included in the report may no longer be accurate. A possible way around this issue would be to ask Member States to provide the link and the name of the document or page the links refers to, so that a search can be conducted if the link is not working. Finally, most websites' pages do not include a 'last updated' field, which makes it difficult to understand whether the information presented has been recently updated or not and/or was relevant within the reporting period.

Appendix A
Web links reported by Member States

MS	Link to information	Description of information contained in the link
AT	AT Link 1 AT Link 2 AT Link 3 AT Link 4 AT Link 5 AT Link 6	1. General information on BREFs and BAT conclusions 2. Website of the Federal Chancellery where the full EU Directive is available 3. Contains Sources for IPPC plant-related BAT conclusions and BAT documents 4. Additional information for BAT for boiler and gas turbine emissions. 5. Outlines inspection programmes and plans 6. Homepage of the electronic environmental data management portal
BE	BE-bx Link 1 BE-bx Link 2 BE-bx Link 3 BE-bx Link 4 BE-bx Link 5 BE-bx Link 6 BE-bx Link 7 BE-bx Link 8 BE-bx Link 9 BE-bx/wl Link 1 BE-wl Link 1 BE-wl Link 2 BE-wl Link 3 BE-wl Link 4 BE-wl Link 5 BE-wl Link 6 BE-wl Link 7 BE-wl Link 8 BE-wl Link 9 BE-fl Link 1 BE-fl Link 2 BE-fl Link 3 BE-fl Link 4 BE-fl Link 5 BE-fl Link 6 BE-fl Link 7 BE-fl Link 8 BE-fl Link 9 BE-fl Link 10	1. Brussels: Link toward legislation on permitting, adopted in 1997 but updated in 2015. 2. Brussels: Alternative link to industrial emissions legislation. 3. Brussels: A public interest organisation that provides support for business. 4. Brussels: A public interest organisation that provides support for business. 5. Brussels: List of activities considered to be at risk for pollution 6. Brussels: guidance on soil contamination and legislation from 2009 7. Brussels: Guidance on soil / groundwater pollution. 8. Brussels: Information on remediation projects. 9. Brussels: Information on risk in soil pollution. 1. Brussels/Wallonia: Guidance document on risk. 1. Wallonia: Link to transposing legislation on permitting, adopted in 1999 but updated in 2015. 2. Wallonia: Link to environmental legislation for the region. 3. Wallonia: Consolidated version of 1999 legislation. 4. Wallonia: Information on binding rules. 5. Wallonia: Contains link to information on BAT conclusions and BREFs. 6. Wallonia: Consolidated version of 2008 legislation on soil.

MS	Link to information	Description of information contained in the link
	BE-fl Link 11 BE-fl Link 12 BE-fl Link 13 BE-fl Link 14 BE-fl Link 15 BE-fl Link 16 BE-fl Link 17 BE-fl Link 18 BE-fl Link 19 BE-fl Link 20 BE-fl Link 21 BE-fl Link 22 BE-fl Link 23 BE-fl Link 24	7. Wallonia: Link to the code of good practice for soil. 8. Wallonia: legislation on the measures of permitting, adopted 2002 and updated in 2014. 9. Wallonia: Online portal for publically available information on industrial emissions. 1. Flanders: Link toward legislation on permitting, adopted in 1985, last updated in 2014. 2. Flanders: Unofficial, consolidated versions of amendments to legislation in 2013. 3. Flanders: Unofficial, consolidated versions of amendments to legislation in 2013. 4. Flanders: Unofficial, consolidated versions of amendments to legislation in 2013. 5. Flanders: Consolidated version of 2013 soil legislation. 6. Flanders: Consolidated version of 2013 soil legislation. 7. Flanders: Homepage of the ministry for environment. 8. Flanders: Homepage for Flemish legislation search. 9. Flanders: Unofficial, consolidated summary of Flemish environmental legislation. 10. Flanders: Portal with links to information on BAT conclusions and BREFs. 11. Flanders: Site where stakeholders can sign up to newsletters on latest BAT information. 12. Flanders: contains BREF and BAT conclusions information. 13. Flanders: contains BREF and BAT conclusions information. 14. Flanders: Link to the action plan for Cadmium pollution. 15. Flanders: Link to the action plan for PM pollution. 16. Flanders: Link to standard procedures on soil, updated 2015. 17. Flanders: Guidance on soil monitoring. 18. Flanders: Link to risk assessments guidance document, updated 2014. 19. Flanders: Link to the Flemish risk assessment model. 20. Flanders: Codes of good practice on soil remediation. 21. Flanders: Link to 2013 order on environmental inspection plans. 22. Flanders: Database of decisions regarding permitting applications and amendments. 23. Flanders: Portal for publically available information on industrial emissions. 24. Flanders: portal for environmental technical and scientific information.

MS	Link to information	Description of information contained in the link
BG	BG Link 1 BG Link 2 BG Link 3 BG Link 4 BG Link 5 BG Link 6 BG Link 7	1. Guidance on the use of BAT conclusions when permitting IED installations from 2012. 2. Information on BAT conclusions for all sectors. 3. Instructions for planning and reporting of inspections. 4. Site providing guidance on the content of inspections. 5. Contains an example of an inspection plan from a supervisory authority. 6. Explains the content of an inspection (2010). 7. Online portal allowing public access to industrial emissions information.
CY	CY Link 1 CY Link 2 CY Link 3	1. Link to the homepage of the ministry for environment. 2. Publically available information on hearings related to the environment. 3. Database containing public information on applications submitted for permits.
CZ	CZ Link 1 CZ Link 2 CZ Link 3 CZ Link 4 CZ Link 5	1. Link to the homepage of the Czech ministry for environment. 2. The IPPC portal of the Ministry of Industry and Trade. 3. Link to information on annual inspection plans. 4. Link to programmes for environmental inspection routines. 5. Tool for searching for Czech environmental legislation.
DE	DE Link 1 DE Link 2 DE Link 3 DE Link 4 DE Link 5 DE Link 6 DE Link 7 DE Link 8 DE Link 9 DE Link 10 DE Link 11 DE Link 12 DE Link 13 DE Link 14 DE Link 15 DE Link 16 DE Link 17 DE Link 18 DE Link 19 DE Link 20 DE Link 21 DE Link 22 DE Link 23 DE Link 24 DE Link 25	1. Links to transposing legislation including general binding rules. 2. Order 2 of legislation transposing the IED, last updated 2015 3. Order 13 of legislation transposing the IED, last updated 2015 4. Order 17 of legislation transposing the IED, last updated 2013. 5. Legislation on VOCs from organic solvents used in industry. 6. Guidance on the Federal Pollution Control Act, from 2002. 7. Link to legislation on water pollution 8. Regulation on requirements for sewage discharge 9. Supporting legislation to enable the transposition of the IED 10. Legislation on air and noise pollution 11. Order 9 of legislation transposing the IED 12. Website containing links and information on BREF and BAT conclusions 13. Regulation on the approval and monitoring of waste water treatment plants 14. Legislation promoting the circular economy and waste

MS	Link to information	Description of information contained in the link
	DE Link 26 DE Link 27 DE Link 28 DE Link 29 DE Link 30 DE Link 31 DE Link 32 DE Link 33 DE Link 34 DE Link 35 DE Link 36 DE Link 37 DE Link 38 DE Link 39 DE Link 40 DE Link 41 DE Link 42 DE Link 43 DE Link 44 DE Link 45 DE Link 46 DE Link 47 DE Link 48 DE Link 49 DE Link 50 DE Link 51 DE Link 52 DE Link 53 DE Link 54 DE Link 55 DE Link 56 DE Link 57 DE Link 59 DE Link 60 DE Link 61 DE Link 62 DE Link 63 DE Link 64	management 15. Regulation on landfill and long term storage of waste 16. Guidance on installations and activities requiring permitting 17. Guidance on baseline reporting for soil and groundwater contamination 18. Link to environmental inspection plans for the region of Baden-Wurttemberg 19. Link to environmental inspection plans and program for the region of Bavaria 20. Website containing links to information on monitoring and inspections in Bavaria 21. Webpage containing information on IED for the region of Lower Bavaria 22. Link to environmental inspection plans and monitoring for the region of Central Franconia 23. Link to information on environmental legislation in Lower Franconia 24. Link to environmental inspection plans for the region of Lower Franconia 25. Link to environmental inspection plans for the region of Upper Franconia 26. Link to environmental inspection plans for the region of Bremen 27. Link to environmental inspection plans for the region of Hesse 28. Link to environmental inspection plans for the region of Hamburg 29. Link to environmental inspection plans for the region of Mecklenburg-Vorpommern 30. Link to environmental inspection plans for the region of Lower Saxony 31. Link to the environmental monitoring programme for North Rhine-Westphalia 32. Link to environmental inspection plans for the region of North Rhine-Westphalia 33. Link to environmental inspection plans for the region of Rhineland-Palatinate 34. Link to the environmental monitoring programme for Rhineland-Palatinate 35. Link to environmental inspection plans for the region of Schleswig-Holstein 36. Link to environmental inspection plans for the region of Saarland 37. Link to environmental inspection plans for the region of Saxony 38. Environmental inspection plans for mining installations in Saxony-Anhalt

MS	Link to information	Description of information contained in the link
		39. Environmental inspection plans for non-mining installation in Saxony-Anhalt 40. Link to environmental inspection plans for the region of Thuringia 41. Link to programmes for environmental inspections in the region of Baden-Wurttemberg 42. Link to programmes for environmental inspections in the region of Bremen 43. Link to programmes for environmental inspections in the region of Hesse 44. Link to programmes for environmental inspections in the region of Hamburg 45. Link to programmes for environmental inspections in the region of Lower Saxony 46. Link to programmes for environmental inspections in the region of Schleswig-Holstein 47. Example environmental inspection programme for the region of Saxony 48. Link to programmes for environmental inspections in the region of Thuringia 49. An example of an inspection programme in the city of Erfurt in Thuringia 50. An example of an inspection programme in the city of Erfurt in Thuringia 51. Guidance document on the appraisal of environmental risk during an inspection 52. Webpage for public information on permit applications in the region of Berlin 53. Webpage for public information on permit applications in the region of Stuttgart 54. Webpage for public information on permit applications in the region of Karlsruhe 55. Webpage for public information on permit applications in the region of Freiburg 56. Webpage for public information on permit applications in the region of Tubingen 57. Webpage for public information on permit applications in the region of Hesse 58. A second webpage for public information on permit applications in the region of Hesse 59. Webpage for public information on permit applications in the region of Lower Saxony 60. Webpage for public information on permit applications in the region of Schleswig-Holstein 61. Webpage for public information on permit applications in the region of Saarland 62. Example of a local authority webpage for public information on permits in Saxony

MS	Link to information	Description of information contained in the link
		63. Homepage of the Land Administration Office for the region of Saxony-Anhalt 64. Webpage for public information on permit applications in the region of Saxony-Anhalt
DK	DK Link 1 DK Link 2 DK Link 3 DK Link 4 DK Link 5 DK Link 6 DK Link 7 DK Link 8 DK Link 9 DK Link 10 DK Link 11	1. Information on BAT and BREFs and how they are used in Danish legislation 2. Provides information on derogations from BAT 3. A tool for searching Danish regulation and legislation 4. Summary of BAT conclusions for each sector 5. The homepage of the Danish Ministry of Environment 6. Portal for public access to IED environmental information 7. Website containing links to EC guidance documents 8. Link to a guidance document on baseline reporting 9. Information on inspection plans for 2013 – 2017 10. Site where announcements of environmental permits and supervisions are posted 11. Webpage where environmental publications and press releases are shared
EE	EE Link 1 EE Link 2 EE Link 3 EE Link 4	1. Link to domestic legislation transposing IED, published 2014. 2. Website dedicated to IPPC, contains information on all BAT conclusions 3. Site containing links to guidance documents for inspections 4. Link to the publically accessible Estonian permitting information system.
EL	EL Link 1 EL Link 2	1. Website on IPPC including link toward BREF and BAT Conclusions 2. Homepage of the ministry for environment
ES	ES Link 1 ES Link 2 ES Link 3 ES Link 4 ES Link 5 ES Link 6 ES Link 7 ES Link 8 ES Link 9 ES Link 10 ES Link 11 ES Link 12 ES Link 13 ES Link 14 ES Link 15	1. Link to legislation transposing the IED, from 2002 and modified in 2013. 2. Link to a consolidated version of the transposing legislation 3. Link to the 2013 royal decree associated with the transposition. 4. Link to website listing BAT conclusions and information on BREFS 5. 2005 royal decree establishing standards for the declaration on contaminated soil 6. 2009 royal decree regulating the protection of groundwater 7. 2007 legislation on environmental responsibility for pollution

MS	Link to information	Description of information contained in the link
	ES Link 16 ES Link 17 ES Link 18 ES Link 19 ES Link 20 ES Link 21 ES Link 22 ES Link 23 ES Link 24 ES Link 25 ES Link 26 ES Link 27 ES Link 28 ES Link 29 ES Link 30 ES Link 31 ES Link 32 ES Link 33 ES Link 34 ES Link 35 ES Link 36 ES Link 37 ES Link 38	8. 2011 legislation on waste and contaminated soils. 9. Environmental inspection plans for the region of Andalusia 10. Environmental inspection plans for the region of Aragon 11. Environmental inspection plans for the region of Cantabria 12. Environmental inspection plans for the region of Castile-la Mancha 13. Environmental inspection plans for the region of Catalonia 14. Environmental inspection plans for the region of Extremadura 15. Environmental inspection plans for the region of Galicia 16. Environmental inspection plans for the region of the Basque Country 17. Environmental inspection plans for the region of Rioja 18. Environmental inspection plans for the region of Navarre 19. Environmental inspection plans for the region of Valencia 20. Environmental inspection plans for the region of Asturias 21. Additional information on inspection plans 22. Link containing information on permit applications for the region of Andalusia 23. Link containing information on permit applications for the region of Aragon 24. Link containing information on permit applications for the region of the Canary Islands 25. Link containing information on permit applications for the region of Cantabria 26. Link containing information on permit applications for the region of Castile-Leon 27. Link containing information on permit applications for the region of Castile-La Mancha 28. Link containing information on permit applications for the region of Catalonia 29. Link containing information on permit applications for the region of Extremadura 30. Link containing information on permit applications for the region of Galicia 31. Link containing information on permit applications for the region of the Basque Country 32. Link containing information on permit applications for the region of Rioja 33. Link containing information on permit applications for the region of Balearic Islands 34. Link containing information on permit applications for the region of Madrid

MS	Link to information	Description of information contained in the link	
		35.	Link containing information on permit applications for the region of Murcia
		36.	Link containing information on permit applications for the region of Navarre
		37.	Link containing information on permit applications for the region of Valencia
		38.	Link containing information on permit applications for the region of Asturias
FR	FR Link 1 FR Link 2 FR Link 3 FR Link 4 FR Link 5 FR Link 6 FR Link 7 FR Link 8 FR Link 9 FR Link 10 FR Link 11	1.	Link to legislation transposing the IED, last modified in 2013.
		2.	Information summarising how ELVs are established under the IED.
		3.	An article setting monitoring conditions for the legislation.
		4.	Legislation on the information that must be submitted for the reconsideration of the permit
		5.	Legislation on cases triggering permit reconsideration such as significant pollution.
		6.	Link to a site containing all BREFs and BAT conclusions
		7.	Link to guidance on management of contaminated soil in the IPPC background
		8.	A guidance document on establishing baseline reports
		9.	A full guidance document on compliance with IED legislation
		10.	Link to inspection plans for 2014-2017
		11.	Link to a dedicated website for inspections of IPPC installations
HR	HR Link 1	1.	The homepage for the Croatian ministry of environment.
HU	HU Link 2 HU Link 3 HU Link 4 HU Link 6 HU Link 7 HU Link 8 HU Link 9	2.	Link to a library of all legislation in Hungary
		3.	A Hungarian webpage dedicated to IPPC which include a link toward EC IPPC website
		4.	A website containing links to guidance on inspections in the county of Fejer.
		5.	A website containing guidance on inspections for the counties of Zala and Vas.
		6.	A regional presenting information and publication on on-going applications in Zala and Vas.
		7.	Link a page on news and announcements in the inspectorate website
		8.	Information on applications and inspections for the county of Borsod-Abauj-Zemplen
IE	IE Link 1 IE Link 2 IE Link 3	1.	Link toward legislation transposing IED, from 1992 but modified in 2013.
		2.	Webpage on BAT and the use of BAT in permitting

MS	Link to information	Description of information contained in the link
	IE Link 4 IE Link 5 IE Link 6 IE Link 7 IE Link 8 IE Link 9	3. Webpage containing links to BREFs 4. A full guidance document on contaminated land 5. Link containing guidance template reports for land and groundwater risk assessments. 6. Ministry for the environment page on inspections and guidance on inspection plans. 7. Explanation of legislation adopted for IED transposition 8. General page on licensing which allows to search information for specific installation 9. Link toward LIFE programme page in Ireland
IT	IT Link 1 IT Link 2	1. Webpage presenting link to all BAT conclusions 2. Homepage of the ministry for environment
LT	LT Link 1 LT Link 2 LT Link 3 LT Link 4 LT Link 5 LT Link 6 LT Link 7 LT Link 8 LT Link 9 LT Link 10 LT Link 11	1. Website gathering sector guidance from several MS and to BAT Conclusions and BREFs 2. Website detailing inspection plans for the region Alytus 3. Website detailing inspection plans for the region Kaunas 4. Website detailing inspection plans for the region Vilnius 5. Website detailing inspection plans for the region Panevezys 6. Website detailing inspection plans for the region Silauliai 7. Website detailing inspection plans for the region Marijampole 8. Website detailing inspection plans for the region Utena 9. Website detailing inspection plans for the region Klaipeda 10. Page containing guidance on assessing environmental risk 11. Site containing publically available information on permit applications
LV	LV Link 1 LV Link 2 LV Link 3 LV Link 4	1. Link to the GBR that has been adopted in Latvia for the glass sector. 2. Link to guidelines for BAT for all sectors. 3. 2013 – 2019 inspection plans 4. Link to reports on results for installations regulated by IPPC
MT	MT Link 1 MT Link 2	1. Link toward guidance and template for application for an integrated permit 2. Links to guidance in other MS and the EU website on BREFs and BAT Conclusions
NL	NL Link 1 NL Link 2 NL Link 3 NL Link 4	1. Link to a guide for determining BAT for all sectors. 2. Legislation transposing the IED, originally from 2010 and last modified 2013 3. General binding rules for ammonia emissions from

MS	Link to information	Description of information contained in the link
	NL Link 5 NL Link 6 NL Link 7 NL Link 8 NL Link 9 NL Link 10 NL Link 11 NL Link 13 NL Link 14 NL Link 15 NL Link 16 NL Link 17 NL Link 18 NL Link 19 NL Link 20 NL Link 21 NL Link 22 NL Link 23 NL Link 24	livestock farming and housing 4. Explains a methodology for calculating costs of compliance. 5. Link to guidance documents for monitoring requirements. 6. Page containing links to Dutch environmental legislation 7. Webpage containing information on soil contamination 8. The search page for Dutch legislation 9. The search page for Dutch official announcements 10. Information on recent updates to BAT and BREFs 11. Link to general website providing information on action from government 12. Webpage containing links to environmental legislation in Netherlands. 13. National inventory with information on emissions to air, water and soil 14. Link to articles on environmental information and emerging technologies 15. Link to information on enforcement for the region of Rijnmond 16. Link to environmental inspection plans for the region of North Holland 17. Link to environmental inspection plans for the region of North Brabant 18. Link to environmental inspection plans for the region of Limburg 19. Link to environmental inspection plans from the Brabantse Delta Water Authority 20. Link to environmental inspection plans for the region of Friesland 21. Details on investment rebates for environmental technologies in Netherlands. 22. Details on subsidy programmes for environmental technologies in Netherlands. 23. Website concerning the European Business Awards for the Environment
PL	PL Link 1 PL Link 2 PL Link 3 PL Link 4 PL Link 5 PL Link 6 PL Link 7 PL Link 8	1. Website of the IPPC in Poland, containing links to guidelines for BAT 2. Inspection plans for the region of Warsaw 3. Inspection plans for the region of Bialystock 4. Inspection plans for the region of Poznan 5. Inspection plans for the region of Kielce 6. Inspection plans for the region of Krakow 7. Inspection plans for the region of Rzeszow 8. Inspection plans for the region of Lublin
PT	PT Link 1	1. Link to legislation transposing the IED, from 2013

MS	Link to information	Description of information contained in the link
	PT Link 2 PT Link 3 PT Link 4 PT Link 5	2. the Ministry of the Environment's webpage for IPPC and BAT 3. Webpage containing guidance for IED and installation 4. Guidance for establishing a baseline report 5. Link to the national plan for inspections
RO	RO Link 1 RO Link 2 RO Link 3 RO Link 4 RO Link 5 RO Link 6 RO Link 7 RO Link 8 RO Link 9	1. Link to guidance from Romania on the use of BAT conclusions 2. Information on BREF and BAT conclusions for each sector 3. Guidelines for monitoring emissions from large combustion plants 4. General technical guidelines for environmental permitting 5. Guidelines for monitoring emissions of VOCs from organic solvents. 6. A website containing a list of adopted BREFs. 7. Information on Inspection plans, including an activities report 8. The official inspection report for Romania from 2014 9. The home page of the Romanian ministry of environment
SE	SE Link 1 SE Link 2 SE Link 3 SE Link 4 SE Link 5 SE Link 6 SE Link 7 SE Link 8 SE Link 9 SE Link 10 SE Link 11 SE Link 12 SE Link 13 SE Link 14 SE Link 15 SE Link 16 SE Link 17 SE Link 18 SE Link 19 SE Link 20 SE Link 21 SE Link 22	1. Legislation implementing the IED, from 2013. 2. Detailed information on legislation implementing the IED, from 2013. 3. Guidance on implementation of the industrial emissions legislation, from 2013. 4. link to the Government Bill that enabled the IED to be transposed into Swedish law 5. Self-monitoring guidelines for installations. Issued 1998, modified 2013. 6. Webpage providing information on the general binding rules of the IED 7. General binding rules for large combustion facilities 8. General binding rules on the combustion of waste 9. General binding rules on the use of organic solvents 10. General binding rules on the production of titanium dioxide 11. Page with links to BAT Conclusions for each sector 12. Guidance document on IPPC/IED, issued 2009, amended 2014. 13. The preamble of the legislation transposing the IED into Swedish law. 14. Link to the Swedish environment code, from 1998 15. Link to a guidance document on establishing a baseline report from 2013 16. Information on inspections and inspection programmes

MS	Link to information	Description of information contained in the link
		and guidelines 17. The Swedish EPA 2001 handbook, containing guidance on supervisions. 18. Guidance document for local supervision plans 19. Guidance document for regional supervision plans, from 2014. 20. Information on legislation enabling the freedom of environmental information to the public 21. Legislation on the freedom of the press 22. Website that publishes permits decision and court judgment related to IPPC installations
SI	SI Link 1 SI Link 2 SI Link 3 SI Link 4 SI Link 5 SI Link 6 SI Link 7 SI Link 8	1. Link to legislation implementing the IED, from 2006 last modified in 2015. 2. Legalisation on industrial emissions, published 2007 and amended 2013. 3. Legislation on releases of pollution to water, from 2012. 4. Page containing links for BAT conclusions for all sectors. 5. Link to guidance on inspections, updated 2015. 6. Online guidance tool for the assessment of environmental risk 7. Website where information on environmental reports are published 8. Database of administrative acts related to IPCC in the Slovenia.
SK	SK Link 1 SK Link 2 SK Link 3 SK Link 4 SK Link 5 SK Link 6 SK Link 7 SK Link 8	1. Legislation transposing the IED, from 2010 last updated in 2013. 2. Legislation enabling the transposition of the IED, from 2013. 3. Portal for searching for official environmental information. 4. Homepage of the ministry for environment 5. Data base for information on Slovakian environmental legislation 6. Search page for legal and regulatory information in Slovakia 7. The Slovakian IPPC Information Service website that includes links to BAT conclusions 8. A website that also present information on BAT conclusions
UK	UK Link 1 UK Link 2 UK Link 3 UK Link 4 UK Link 5 UK Link 6	1. Legislation implementing the IED in the UK (England and Wales) from 2013 2. Legislation implementing the IED in Scotland from 2013 3. Guidance on environmental quality standards in place in the UK 4. Link to guidance documents on IED derogations

MS	Link to information	Description of information contained in the link
	UK Link 7 UK Link 8 UK Link 9 UK Link 10 UK Link 11 UK Link 12 UK Link 13 UK Link 14 UK Link 15 UK Link 16 UK Link 17 UK Link 18 UK Link 19 UK Link 20 UK Link 21 UK Link 22	5. Guidance document from 2013 on how cost benefit analysis is used in IED derogations 6. Guidance on condition reporting for permitting, from 2013 7. Link to standard rules on permitting, updated 2014. 8. Guidance notes on hazardous waste, updated 2013. 9. Core guidance on environmental permitting in the UK 10. Guidance on IED annex A installations, updated 2013. 11. Guidance on reviewing permits from the Environment Agency in 2010. 12. Guidance on modelling for the management of contaminated land. 13. Link to information on inspection plans from 2014 14. Guidance on operational risk 15. Guidance on environmental permitting compliance, 2013 16. Guidance on enforcement, updated 2015 17. Enforcement policy for the offshore hydrocarbons sector 2014 18. Guidance involving sites of high public interest 19. Information in permitting determinations for sites of high public interest 20. Link providing access to IPPC information for Scotland 21. Register of applications made for permits under IED 22. Historic applications for IPPC permits

Appendix B
Member State Summaries

Austria

Analysis of the completeness of the report

Table A1: Completeness assessment of answers reported by Austria – IED

Question title	Question number(s)	Austria	Comments
Non-compliance (Article 8)	1		
Permit conditions (Article 14)	2.1		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	3.1		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	4.1		
	4.2		
	4.3		
General Binding Rules (Article 17)	5.1 (a) to (b)		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	6.1		
	6.2		
Reconsideration and updating of permits (Article 21)	7.1		
	7.2		
	7.3		
Site closure (Article 22)	8.1 (a) to (d)		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	9.1 (a) to (c)		No detail provided to outline key aspects of the inspection process in response to question 9.1a.
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		No internet link was provided in relation to question 10.3a) as there have been no permitting procedures to which the public participation procedures would apply, announced during the reporting period
Emerging techniques (Article 27)	11		

Austria submitted a largely complete answer to the IED questionnaire. One gap was identified in response to question 9.1(a) where no detail was provided to outline the key aspects of the inspection process.

Analysis of Austria's response

The table below contains the detailed analysis of the responses provided by Austria to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers provided.

Table A2: Austria – Response analysis table

AUSTRIA
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
This decision is taken on a case-by-case basis according to expert assessment. Depending on the type of emissions or safety deficiencies posing the hazard, the public health office decides how urgent measures need to be taken and what those measures should consist of with a mind to identifying the least intrusive measures needed to contain the danger. Measures may include the suspension of the permit or the limitation of operation for the installation. Relevant provisions are also set in Section 62(2b) of the 2002 Waste Management Act (AWG). Additionally, Article 8 of the IED is also transposed to the provisional law which may include certain provisions for measures that should be taken.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
In Austria, the requirement to use BAT conclusions as the basis for setting permit conditions is specifically included in several pieces of national legislation: For treatment plants regulated by the Waste Management Act (Section 43a AWG 2002). For emissions from boiler plant, along with specified emission limit values under the Boiler Plant Emissions Control Act (EG-K) 2013 (Section 10). For essential modifications to and adaptation of installations under the Industrial Code (Section 71c(1)). For setting emission values (limit values or mean values for concentrations or specific loads) under the Water Rights Act (WRG) 1959. Requirements to use BAT conclusions for setting permit conditions are also in place at provincial level when issuing permits for IPPC plant as well as during monitoring of permit procedures or inspections under Section 9(1) of the Vienna IPPC Plant Act (WIAG, 2013), and Section 6(5) of the Lower Austria IPPC Plant and Factories Act (NÖ IBG). The response includes links to sites where the BAT conclusions and reference documents are presented www.edm.gv.at and www.bmwfw.gov.at
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
The ability to impose stricter permit conditions has been included in several pieces of national legislation as outlined below: ▪ Section 47(3) of the Waste Management Act stipulates that where binding national provisions are set that are stricter than the BAT limit values, the national provisions take precedence (e.g. the Landfill Regulation). ▪ Section 5(2) of the Boiler Plant Emissions Control Act Section 5(2) stipulates the binding ELV to be set based on BAT conclusions for large combustion plants dating from 2006 – these entered into force in 2013, two years before the rest of the EU is required to apply them (2015). ▪ Section 33b(6) of the Water Rights Act includes provisions to apply stricter conditions, if necessary, due to previous water pollution, to restrict emissions, to protect a water supplies or to achieve environmental objectives. Austria also indicated that its Industrial Code stipulates that no conditions may be imposed on the plant

owner from the point of view of commercial plant legislation that go beyond what is necessary to safeguard legitimate interests.

QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

Emission levels associated with the best available techniques are taken into account in Austria. Emission limit values in permits are set by experts according to the relevant national standards or, where there are none, relevant documents (e.g. ÖNORM, BAT documents etc.). Legislation such as the Waste Management Act, the Boiler Plant Emissions Control Act, and the Industrial Code essentially duplicates the text in Article 15(3) requiring that emissions must not exceed under normal operating conditions the emission levels associated with the best available techniques included in BAT conclusions.

Emission limit values in relation to water law are currently set out under Austrian Waste Water Emissions Regulations. These Regulations have been updated for most BAT conclusions published in 2012 and 2013 – manufacture of glass, iron and steel production, tanning of hides and skins and production of chlor-alkali. The exception is for the BAT conclusions for the production of cement, lime and magnesium oxide that include no conclusions relevant to sewer discharge.

Austria stated that if a new set of BAT conclusions are published that contains stricter emission levels than exist in waste water emission regulations, a notice will be issued imposing stricter ELVs than those laid down in Austrian Waste Water Emission Regulations.

At a provincial level, provisions to set ELVs in relation to the relevant BAT conclusions are included under the Vienna IPPC Plant Act. No details for these provisions were provided.

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

The provisions for derogations are transposed in the Waste Management Act (Section 47a(3)), the Boiler Plant Emissions Control Act (Section 10(2-5)), the Industrial Code (Section 77b), and the Water Rights Act (Section 33b).

Only details for derogations under the Water Rights Act are provided in the Austrian response. It indicated that the basic preconditions for derogations under this Act are technical feasibility and local environmental conditions/ geographical location. The assessment required is generally based on a proportionality study. The cost/benefit assessment and the assessment as to whether costs are disproportionately higher compared to the environmental benefits are carried out on a case-by-case basis. Furthermore, derogations are generally to be limited in time.

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

The assessments are carried out on a case-by-case basis based on information obtained during the permit procedure.

Details for the process in relation to the Industrial Code and the Boiler Plant Emissions Control Act are included in the Austrian response which indicated that the principle of proportionality is set out under Section 71a of the Industrial Code and is based on the cost/ benefit analysis for the individual plant, taking into account their technical characteristics. The criteria for determining whether and to what extent 'less strict emission limit values' apply is also determined on a case by case basis according to the best available techniques (Section 77b(3) of the Industrial Code).

Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

Both the Waste Management Act and the Boiler Plant Emissions Control Act include limitations for the magnitude and duration of derogations. With respect to the latter, time limitations may apply following further development of best available techniques and the scope of derogations is prescribed by the specific technology of the plant. No further detail is provided for limitations under the Waste Management Act.

Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

The provisions for temporary derogations under these paragraphs are transposed in the Waste Management Act (Section 47a(4)), the Boiler Plant Emissions Control Act (Section 27(1)), and the Industrial Code (Section 77b(4)).

Derogations for testing of future techniques are not specified in the Water Rights Act.

At a provincial level, no strategies or guidelines have been adopted to date in relation to temporary

derogations and no derogations have been granted.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
BAT conclusions are used as guidelines for setting conditions in relation to monitoring and are adapted to the circumstances of the individual case (as stipulated in the relevant national legislation – Section 33 (1) of the Boiler Plant Emissions Control Act, and Section 77a(2) of the Industrial Code. The Boiler Plant Emissions Control Act specifies that BAT conclusions are also used for updating permit conditions during the annual monitoring checks. With regard to BAT conclusions that specify measures in relation to waste water, monitoring conditions are implemented through amendment to the relevant waste water regulation in order to ensure compliance with the BAT conclusions.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The frequency for periodic monitoring is determined by experts according to the level of danger posed by the activity, the relevant hazardous substances used and the measures taken to protect the soil and groundwater. Austria indicated that the provisions are transposed in the Boiler Plant Emissions Control Act (Section 24(2) and 33(10)) and the Industrial Code (Section 77a(2)).
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
In Austria, plant operators are required to contract experts to conduct systematic monitoring of groundwater every five years (unless specified otherwise by the competent authority) (the Water Rights Act, Section 134a(3)). Further, the authority may prescribe other appropriate intervals for the systematic monitoring of the risk of contamination of in connection with soil monitoring – no details were provided concerning the criteria applied. Austria indicated that the IED provisions are transposed in the Boiler Plant Emissions Control Act (Section 5(3) and 33(1)) and the Waste Management Act (Section 7(4-5)). At a provincial level, no strategies or guidelines have been adopted to date.
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
GBRs have been adopted as Regulations issued for various industries involved in activities listed in Annex I to the IED including 1.1; 2.1; 2.2; 2.4; 2.5; 3.1; 3.3; 3.5; 5.2. (a); 5.2. (b); 6.7. These Regulations mainly state limitations of certain industrial pollutants into the air and measurement and monitoring conditions. The pollutants covered include, inter alia: Sulphur dioxide, oxides of nitrogen, carbon monoxide, volatile organic compounds, metals, dust, chlorine, fluorine, arsenic, cyanides, substances and mixtures which have been proven to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air and polychlorinated dibenzodioxins and polychlorinated dibenzofurans.
Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?
GBRs are included under the Boiler Plant Emissions Control Act and the Industrial Code. The Boiler Plant Emissions Control Act (Sections 1(3) and 4(13-14) stipulates that emissions to air, water and soil should be avoided and, there this is not possible, must be reduced to ensure a high level of protections for humans and the environment. Further specifications are contained in measuring regulations (EMV-L) and Emission Control and Emission Recording Regulations (EEV). Austria indicated that the Industrial Code (Section 77a(2)), stipulates that permit notices must contain ELVs in keeping with the state of the art for the relevant pollutants (those listed in an annex to the Code along with any others that may be relevant) and that the possible transfer of pollution from one medium to another should be considered when setting such limits.
Question 5.3 - How is it ensured that general binding rules are 'based on the BAT' (Article 17(2))?
Requirements to use BAT conclusions for drawing up GBRs are set out in the relevant national legislation (Section 10 of the Boiler Plant Emissions Control Act and Section 82 of the Industrial Code).
Question 5.4 – How are general binding rules 'updated to take into account developments in BAT' (Article 17(3))?
The national regulations are based on the BAT conclusions and Austria indicated that where BAT conclusions are updated or amended, this will be reflected in changes to the national regulations

accordingly. One example of such legislation is given in the response in relation to the Boiler Plant Emissions Control Act which stipulates in Section 10(7) that updates are necessary when new/updated BAT conclusions are published in the Official Journal of the European Union. If the emission limit values (ELV) extrapolated from new/updated BAT conclusions are stricter than the ELV in a regulation currently in force, the stricter ELV must be applied.
Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of general binding rules (Article 17(4))?
Austria reported that the IED and respective BAT conclusions are always referred to in the explanatory notes for the relevant legislation.
Question 5.6 – If the general binding rules are published on the internet, provide a link to where they can be found.
The Austrian response included a link to the website where the Regulations and other laws are published online in the Federal Law Gazette: http://www.ris.bka.gv.at.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
There is a statutory obligation to apply BAT conclusions. Austria reported that authorities involve official technical experts when issuing permits for commercial plants. This ensures that official decisions are based on the latest information available on best available techniques and new/ updated BAT conclusions.
Question 6.2 – How do competent authorities make that information available to the public concerned?
The Federal Ministry for Agriculture, Forestry, Environment and Water Management (BMLFUW) is required to publish BAT conclusions on the EDM website which also includes links to the EIPPCB website. Sources for BAT conclusions and BAT documents are also published on the Federal Ministry of Science, Research and Economy website BMLFUW. The response from Austria included instructions on how to access the relevant pages. Furthermore, the Federal Ministry of Agriculture, Forestry, Environment and Water Management advises servants of the provincial governments when new/updated BAT conclusions are published in the Official Journal of the European Union. The Ministry also organises an annual conference of official technical experts involved in the procedure for granting permits for commercial plants, to which technical experts from all the provinces are invited in order to discuss topical questions and problems, including new developments in connection with Directive 2010/75/EU or new/updated BAT conclusions.
Question 6.3 – Links to where the information can be found
The response from Austria included the following links: ▪ www.edm.gv.at ▪ http://eippcb.jrc.ec.europa.eu/reference/ ▪ http://www.bmwfw.gv.at
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Austria indicated that the information requested includes evidence of completion and of the results of the checks and (emission) measurements prescribed in the permit or regulations, along with any in-house checks that must be provided. Austria's monitoring system relies on two main aspects: the automatic and periodic monitoring conducted by the operator which is reported annually to the competent authorities and the critical review of this information by the competent authorities. In case of uncertainties, site inspection can be requested. The records from these activities are used during the process of reviewing and updating the permits.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
The main activity of an installation is determined according to the main purpose of the plant or based on the principle of predominance. Austria added that, often there is only one IED activity. If a factory comprises several plants on separate premises, each of these activities is classed as a main activity. Dividing lines are drawn between main activities based on Annex I to Directive 2010/75/EU. If one plant has several IED activities (e.g. cement works with waste co-incineration), the main activity is generally

based on the primary economic activity.

Quantity thresholds are specified to identify which 'main activity' predominates in the waste management sector (under the Waste Management Law) and Austria reported having adopted rules in that regard. For example, waste processing typically involves more activities than waste collection or storage and that preliminary processing prior to treatment in the same installation cannot, as a consequence, be classified as the main activity.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

Permits may be called under review in the following cases:

- Observations by the authorities or their delegated experts during on-the-spot checks.
- Entry into force of new/revised environmental quality standards.
- Information from the plant operator.
- Information or complaints from neighbouring residents.

Provisions for permit reconsideration are included in the relevant legislation (namely the Waste Management Law, Section 57(3), and the Boiler Plant Emissions Control Act, Section 43(7)) as well as in certain provincial legislation (those cited in the questionnaire response include the Vienna IPPC Plant Act (Section 10), the Carinthia IPPC Plant Act (Section 7), the Lower Austria IPPC Plant and Factories Act (Section 6(6))).

QUESTION 8 – Site closure (Article 22)

Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

In Austria, the need for a baseline report for waste treatment plants (activities 5.1(b), 5.2 and 5.3(a)(ii)) is decided on a case-by-case basis. Under the Water Rights Act, all operators carrying out Annex I activities and using relevant hazardous substances are required to carry out a baseline report to assess the potential contamination of groundwater on the plant site. The baseline report must be done by an expert and submitted (generally electronically).

The activities which are typically found to involve the use, production or release of hazardous substances include:

- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k)
- 5.2. (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour
- 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v)

Austria added that national guidelines are to be adopted describing a conceptual model (planning tool) which can be used to obtain and compile the information needed for the baseline report.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

Austria indicated that the information to include in the reports is based on the draft European Commission guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions and draft guidelines from Germany which were available to the public concerned at the end of 2013, as were draft Austrian guidelines, which were to be completed in 2014. The Austrian guidelines deal inter alia, with the content and scope of information on use of the plant site, existing/new (groundwater) measurements and other groundwater contamination investigations as well as consideration as to the possibility of contamination from relevant hazardous substances.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

The European Commission's guidance was brought to the attention of the technical community in draft form at the end of 2013 and was taken into account in individual procedures. However, the final adopted guidance took place after the relevant reporting period for this questionnaire.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
In Austria, operators are required to carry out one final assessment of the level of groundwater contamination with relevant hazardous substances used, produced or released by the plant when the site is closed (according to Section 29a of the Water Rights Act). The results of this assessment are compared to the baseline assessment in order to identify the level of soil and groundwater contamination. The method used for this assessment varies on a case-by-case basis.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Austria indicated that the decision as to whether an installation has caused 'significant soil or groundwater pollution' is to be taken on a case-by-case basis.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
The decision as to whether contamination of soil or groundwater 'poses a significant risk to human health or the environment' must be taken on a case-by-case basis. Austrian's explanatory memorandum to the Water Rights Amending Act 2013 states that there is always a significant risk to the environment in relation to water if the condition of the groundwater deteriorates. It is considered that there is a serious risk to the groundwater if an environmental standard (QZV Chemie GW threshold) is exceeded. It can be assumed that there is a significant risk to human health if the limit values of the Drinking Water Regulations are exceeded.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Austria indicated that a federal/ provincial baseline report working party set up by the BMLFUW is currently preparing baseline report guidelines to help identify what measures or actions are necessary. Section 29a(3) of the Water Rights Act requires plant operators to indicate all measures needed based on the final assessment to the competent authority immediately after the site closure and to file the corresponding documents. The specific removal, control, containment or reduction measures needed in a particular case must be evaluated by the competent authority – guidance is available to inform such decisions. Austria referred to the existence of numerous publications and standards in the field of environmental remediation that could be used to derive appropriate measures, albeit that no specific links to such publications were provided. Provisions are also included in certain provincial legislation (those cited in the questionnaire response include the Vienna IPPC Plant Act (Sections 2(14) and 12), the Carinthia IPPC Plant Act (Section 6b(2)), the Lower Austria IPPC Plant and Factories Act (Section 6(10))). No further details for these provisions are included in the questionnaire response.
QUESTION 9 – Environmental inspections (Article 23)
Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
A National Environmental Inspection Plan has been drawn up by the Federal Ministry for Agriculture, Forestry, Environment and Water Management (BMLFUW) in cooperation with the Federal Ministry for Science, Research and Economy (BMWFW), which covers all IED installations and which contains all of the information set out in Article 23(3) IED. Austria indicated that the plan is publicly available on the website of the EDM and provided a link to access it. Since 2014, provincial governors are required to regularly prepare programmes for routine environmental inspections, which list the frequency of site visits for IED installations based on the national plan. These set out the legal basis for inspections, the scope, area of competence and period of validity, the basis for routine environmental inspections and an annex containing a list of all plants and the inspection frequency for each. The programmes are published on the EDM website (see link provided for the national plan). It should also be noted that a programme was prepared for Salzburg for 2013, though as this was published in advance of the implementation date under the IED, this was not published.

Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of environmental risks is carried out in accordance with the methodology set out in Annex 2 of the National Environmental Inspection Plan, which was drawn up based on the work of the IMPEL (IRAM) tool. The methodology uses impact criteria (these include the level of emissions, sensitivity of the local environment and risk of accidents) and operational criteria (compliance with the permit and use of EMAS) and, therefore, applies the criteria set out in Article 23(4) IED. The methodology is publicly available (see link provided for the national plan).
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED which includes: ▪ Serious environmental complaints, ▪ Serious environmental accidents, incidents ▪ Occurrence of non-compliance
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain information on the findings of the inspection concerning compliance with the permits conditions, details of the plant and their components which are relevant in terms of emissions or emission containment, as well as the results of checks of measurements and emissions, and conclusions in terms of the need for further measures. Inspection reports are to be transmitted (the method for this is stipulated by the supervisory body) to the operator within three weeks of the inspection, and a summary of the report is made publicly available on the website of the EDM. Members of the public can request additional information on the inspection from the authority. Where further measures require to be taken following an inspection, deadlines are set for implementation of the necessary actions and compliance with them is verified by the authorities. Further enforcement action (including criminal proceedings) can be taken in the event of an infringement. No circumstances of reports not being made publicly available were reported.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Deadlines are set for taking the necessary actions and compliance with them is verified. The questionnaire response outlines provisions included in the Waste Management Law (Section 62(2)), and the Boiler Plant Emissions Control Act (Section 33(5, 6)). Under the Waste Management Law, the authority can initiate criminal proceedings in the event of an infringement, and order the plant owner to comply with the relevant laws by a reasonable deadline. It is ultimately for the authority to order appropriate measures, such as decommissioning of machinery or partial or complete closure of the site. Under the Boiler Plant Emissions Control Act, the authority may take enforcement measures against the operator to bring the plant back into line with the permit conditions. Enforcement measures include fines of up to €40,000 and restrictions on or closure of the plant. Provisions are also set out in certain provincial legislation (those cited in the response include the Vienna IPPC Plant Act (Section 16(23)), the Carinthia IPPC Plant Act (Section 7), and the Lower Austria IPPC Plant and Factories Act (Section 6b)). No further details for these provisions are included in the questionnaire response.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Austrian response refers to the provisions of the EG-K 2013, which has brought the existing national provisions on public participation in line with the IED and, therefore, provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. The public has early access to information (the application for granting an authorisation and draft notices must be published in two newspapers, one of which is a daily newspaper with broad circulation, and online) and can participate

in the permitting procedure. Thereafter, the public have the right to file objections during a six week period and challenge the decision of the authority, be provided with information, and be heard during oral proceedings. Relevant information is made available on the internet and is published on the EDM website. A link to the EDM website was included in the Austrian response[54].
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is to be made available to the public through newspapers and online. All relevant information is made available on the internet and is published on the EDM website[55].
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
There is no systematic process for assessing emerging techniques in Austria. Emerging techniques are developed and applied on a case-by-case basis and are based on the experience and evaluations of technical experts, research institutions, economic operators, working parties etc. To date, no action has been taken in this respect of this IED provision at provincial level.

[54] https://secure.umweltbundesamt.at/edm_portal/cms.do?get=/portal/
[55] https://secure.umweltbundesamt.at/edm_portal/cms.do?get=/portal/

Belgium

Analysis of the completeness of the report

Table A3: Completeness assessment of answers reported by Belgium – IED

Question title	Question number(s)	Flanders region	Wallonia region	Brussels region	Comments
Non-compliance (Article 8)	**1**				
Permit conditions (Article 14)	**2.1**				
	2.2				
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**				
	3.2				
	3.3				
	3.4				
	3.5				
Monitoring requirements (Article 16)	**4.1**				
	4.2				
	4.3				
General Binding Rules (Article 17)	**5.1**				
	5.2				
	5.3				
	5.4				
	5.5				
	5.6				
Developments in BAT (Article 19)	**6.1**				
	6.2				
Site closure (Article 22)	**8.1 (a) to (d)**				
	8.2 (a) to (d)				
Environmental inspections (Article 23)	**9.1 (a) to (c)**				
	9.2 (a) to (c)				
	9.3 (a) to (b)				
	9.4				
	9.5 (a) to (c)				
	9.6				
Access to information and public participation (Article 24)	**10.1**				
	10.2				
	10.3				
Emerging techniques (Article 27)	**11**				

Belgium has provided one implementation report in which the responses are provided for each region separately. As a result the responses for each region are summarised separately.

All regions have submitted a complete response questionnaire with no gaps identified.

Analysis of Belgium responses

The table below contains the detailed analysis of the responses provided by the three regions of Belgium to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers provided.

Table A4: Belgium – Response analysis table

BELGIUM
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Flanders region In Flanders, the starting point is that the breach must relate to an emission into an environment that contains or may contain relevant receptors. The response indicated that the following aspects are taken into consideration when assessing a breach: ▪ the nature of the emitted substances (e.g. acutely toxic or not); ▪ the magnitude of the emission and the extent to which it exceeded the emission limit values; ▪ the sensitivity of the environment (presence of people, schools, sensitive areas under the Birds and Habitats Directives). Flanders region also added that each case is assessed individually, in keeping with the principles of sound administration (including the obligation to state reasons, principles of due diligence, proportionality and reasonableness). Wallonia region The response provided by the Wallonia region indicated that the criteria to take into account for breaches of permit are included in article 72 of the Decree of 11 March 1999 on environmental permit. However, the article seems to be dealing with possible actions for the competent authority in case of breach of permit conditions. The article states that the competent authority is entitled to suspend the permit of an installation in order to reduce threats to the environment. The response included a link to the relevant legislation[56]. Brussels Capital region Brussels Capital region indicated that the criteria used for the assessment are those recommended by IMPEL in its guidance document entitled 'IED inspections, guidance for the implementation of the IED in planning and execution of inspections', and in particular chapter 5 on implementation issues.
QUESTION 2 – Permit conditions
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Flanders region In the Flanders region, the legislation (article 20 of the Environmental Permit Decree) requires the government adopt sector-specific environmental conditions which are to be based on best available techniques. VLAREM I, the Flemish Environmental Permit Regulations, requires that BAT conclusions are the reference for setting the permit conditions. This legislation lays down the General Binding Rules for installations. Additional special conditions can also be imposed in the individual environmental permits. In addition VLAREM III was adopted in 2013 in order to centralise additional environmental permit conditions for IED installations. Wallonia region Wallonia indicated that its legislation (article 56b of Decree of 1999) ensures that BAT conclusions are used as reference for setting permit conditions. When the relevant BAT conclusions do not contain emission levels associated with BAT, the competent authority is required to verify that the techniques prescribed in the permit ensure a level of environmental protection equivalent to best available techniques.

[56] http://environnement.wallonie.be/legis/pe/PE001.htm

Brussels Capital region

Brussels region indicated that use of BAT conclusions in all aspects of IED permitting and compliance assessment is guaranteed given that it is one department that has responsibility for all of these measures and that is aware of the contents of the BAT conclusions.[57]

Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?

Flanders region

The legislation foresees that the competent authority can impose special environmental conditions in order to protect human health and the environment including stricter permit conditions than those achievable by the use of BAT. The circumstances under which these stricter conditions may be set are:

- where needed for the protection of human health and the environment in cases where no environmental quality standard exists for the emissions in question; in this event, the conditions must take into account factors including the toxicity, persistence and bioaccumulation of the relevant substances in the environment into which they are being emitted;
- where needed to prevent damage, nuisance, incidents or accidents that would significantly affect human health or the environment;
- in view of the specific local situation, to guarantee a high level of protection for human health and the environment;
- in view of the specific local situation, to limit the nuisance caused to human health and the environment to an acceptable level;
- where needed to achieve compliance with European regulations in relation to environmental quality management;
- where needed to achieve the objectives laid down in policy plans, action plans and reduction schemes adopted by the Flemish Government; and
- where needed to achieve the objectives laid down in ratified international conventions.

When setting stricter permit conditions, the competent authority is required to take into account the following conditions: the location of the undertaking and the designated use of that location and the local environment, the technical feasibility of the proposed measures, the economic feasibility of the proposed measures, the practical feasibility of the proposed measures, the efficiency and effectiveness of the proposed measures and the enforceability of the proposed measures.

Wallonia region

This possibility is set in the legislation (article 56bis) which states that the competent authority is entitled to set more stringent conditions than those obtained through the use of BAT if it is necessary, for example to meet an environmental quality standard. The response included a link toward the relevant legislation.[58]

Brussels Capital region

The legislation (article 55) states that the issuing authority shall change an environmental permit if it is found that the permit conditions are inadequate or no longer appropriate. The response included a link toward the legislation.[59]

QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

Flanders region

In Flanders, the general principle is that the upper limits of the BAT-AELs are adopted as the minimum ELVs in the legislation (VLAREM III) to be set as permit conditions for installations. The ELVs stated in the legislation are, in principle, expressed for periods of equal or shorter duration and for the same reference conditions as those stated in the BAT-AELs in all cases. A stricter ELV than BAT-AELs may be adopted when the legislation already states a stricter ELV, if necessary as a result of approved Flemish policy plans or if it emerges that a stricter emission limit value is feasible while screening the special conditions of active environmental permits.

[57] http://impel.eu/projects/environmental-inspections-of-industrial-installations-in-accordance-with-the-industrial-emissions-directive-ied/
[58] http://environnement.wallonie.be/legis/pe/PE001.htm
[59] http://www.ejustice.just.fgov.be/loi/loi2.htm

Wallonia region The legislation (article 7 bis) describes how ELVs are set. It states that ELVs are to be based on best available techniques and are set for the same reference conditions and for similar period as those stated in the BAT-AELs of the BAT conclusions. Brussels Capital region Brussels indicated that the ELVs included in the environmental permits are either set on the basis of BAT or at a stricter level.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Flanders region Derogations can be granted by the competent authority. The applicable legislation in VLAREM II on applying for derogations was valid until 01 October 2014. Following the expiry of these provisions they have been included in articles 1.4 and 1.5 of VLAREM III. The procedure to follow is the same as described in VLAREM II. The competent authority added that no derogation has been granted yet. Wallonia region The legislation foresees that in circumstances identical to those described in the IED, derogations can be granted to installations. Derogations may apply where an assessment shows that the achievement of emissions levels associated with the best available techniques as described in BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits, considering the geographical location of the establishment or its technical characteristics. Brussels Capital region Brussels indicated that no derogation request has been received during the reporting period. No additional information was included in the response on the procedure that will be applied to grant derogations.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
Flanders region Applications for derogations are assessed in accordance with the provisions of the IED. In addition, the competent authority requires that operators include a report with the derogation application that demonstrate that the proposed measures are equivalent to the BATs and paying particular attention to the criteria specified in Appendix 18 of VLAREM I which are transpose the criteria of Annex III of the IED[60]. On the basis of this information, the competent authority decides whether the derogation can be granted or not. Wallonia region Wallonia's response refers to the relevant legislation article (article 7bis(2) of Decree of 11 March 1999) which transposes the requirements of article 15(4) of the IED. The article indicates that in specific circumstances, the competent authorities can apply less strict ELVs if the application of BAT would lead to disproportionate costs. The cost benefit assessment to be performed takes into account the geographic location of the installation, the local conditions and the relevant technical specification of the installation. Brussels Capital region Brussels' region indicated that while the derogations have been transposed in its legislation, it has not received any application for a derogation yet.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Flanders region In Flanders, derogations are limited in magnitude and duration. The Flemish Minister responsible for the environment and water policy determines the magnitude of the derogation. The duration of the derogations is permitted until one of the following cases arise: the environmental permit to which the derogation relates expires, the period specified in the derogation decision has elapsed or after reconsideration of the permit which includes a decision to amend or add to the special conditions that are inconsistent with the ELVs. Wallonia region Wallonia's response refers to the relevant legislation article (article 7bis(2) of Decree of 11 March 1999) which transposes the requirements of article 15(4) of the IED. It indicates that derogations are limited

[60] Note that the Member State's response referred to Annex II of the IED but this is considered to be a typo

insofar as they cannot exceed the minimum ELV set in legislation, In addition, the competent authority must monitor the situations in order to make sure that the installation does not create major pollution and that a high level of protection of the environment is guaranteed.

Brussels Capital region

Brussels' region indicated that while the derogations have been transposed in its legislation, it has not received any application for a derogation yet.

Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

Flanders region

Installations can be granted a temporary derogation for a total period of no more than nine months for the purpose of testing and using emerging techniques provided that, at the end of the specified period, the installation stops testing or using the technique(s) or complies with BAT-AELs for the activity in question. In addition, Flanders indicated that no temporary derogations had been granted during the reporting period. The application procedure for temporary derogation is included in VLAREM I.

Wallonia region

The legislation foresees that temporary derogations can be granted for the testing and use of emerging techniques (article 7bis(3). The legislation applies the conditions of the IED, derogated ELVs can be granted for the testing of emerging techniques, however the derogation cannot be more than 9 months after which the technique must be stopped if it cannot meet the BAT-AELs in the relevant BAT conclusions.

Brussels Capital region

The competent authority indicated that the need for this has not arisen thus far. However, if necessary, the legislation foresees that derogations can be granted. This would follow an assessment for nuisance and impacts based on the characteristics of the installation and would be granted for a fixed term.

QUESTION 4 – Monitoring requirements (Article 16)

Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?

Flanders region

All installations in Flanders have to meet the monitoring requirements laid down in VLAREM II. Furthermore, the general provisions with regard to 'monitoring and reporting obligations' from the BAT conclusions for each sector have been consolidated in VLAREM III. Flanders indicated that during the transposition process, checks were carried out to determine whether the monitoring requirements laid down in VLAREM II were sufficient, or whether additional provisions need to be laid down in VLAREM III and necessary amendments made in the legislation.

In addition to the requirements included in VLAREM II and III, each installation is assessed individually by the Environmental Permits Division to ensure that the environmental permit conditions are based on the BAT conclusions.

Wallonia region

Legislation establishes procedures and measures related to the environmental permit that states that BAT conclusions are the basis for defining monitoring requirements in permits. It requires that maintenance and regular surveillance of measures mechanisms are included in the permit in order to prevent emissions to soil and groundwater. It also requires periodic monitoring of soil and groundwater for relevant hazardous substances likely to be found on site and the frequency of such monitoring.

Brussels Capital region

Brussels indicated that the BAT requirements are included in the environmental permits and their application is monitored by inspection officers.

Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?

Flanders region

Flanders indicated that relevant hazardous substances are defined as substances with the potential to cause soil or groundwater pollution. Periodic monitoring is therefore limited to those activities listed in

Annex I of the IED that present a high risk of soil contamination.

Flanders added that no amendments to its Soil Decree were needed for the purposes of transposing the IED, because the obligation to carry out monitoring in the form of a periodic soil survey was already included in its legislation. The response included a link toward the relevant General Binding Rules[61].

In addition, article 33 of the Soil Decree allows the Flemish Government to lay down a general rule, stipulating that operators of certain categories of high-risk establishment must carry out periodic preliminary soil surveys on their own initiative and at their own expense, at intervals specified by the Flemish Government, and that the results of such investigations must be submitted to the Public Waste Agency of Flanders. High risks establishment includes factories, workplaces, storage facilities, machines, installations, appliances and operations that present an increased risk of soil contamination and which appear on a list drawn up by the Flemish Government. Installations listed in Annex 1 of the IED, which use, produce or release relevant hazardous substances, are already subject to the obligation to conduct periodic soil surveys in accordance with column 8 of Appendix 1 of VLAREM I.

The frequency for monitoring ranges between 10 and 20 years depending on the risk of soil contamination presented by the installation. There is no difference of frequency for soil and groundwater monitoring, and Flanders indicated that a soil survey would always include groundwater sampling.

With the transposition of the IED some changes were made as follows: when assigning a frequency to new sections related to production or processing, it was assumed that the other sections of the environmental permit (e.g. storage of hazardous substances) would determine the frequency with which periodic soil surveys had to be conducted for those new sections.

Wallonia region

The legislation on procedure and measure for implementing the environmental permit decree states the monitoring frequencies for soil and groundwater which are set in accordance with timelines included in the IED.

Brussels Capital region

In Brussels region, the frequency for monitoring is every 5 years. Considering that according to Brussels law IED permits are valid for 15 years, this means that within its lifetime, an IED installation will monitor soil and groundwater twice. The response added that a soil study is required at the start and end of an activity.

The frequency of monitoring is set in accordance to the nature of the pollution that can be generated, for example movable hydrocarbons and solvents require more regular monitoring.

Furthermore, the fact that most soil in the region is sandy is also taken into account in decisions as it allows for the possibility of a greater dispersion of pollutants.

Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?

Flanders region

The response indicated that in some instances monitoring soil and groundwater are set at a lower frequency than stipulated in the IED. Flanders added that monitoring frequency are based on a systematic appraisal of the risk of contamination which rely on the one hand, on the knowledge and experience that OVAM has acquired in the field of soil regulations and, on the other hand, on the Land Information Register database maintained by OVAM.

Flanders reported that in t early 2014 the results of 55,851 preliminary soil surveys that had been declared compliant were included in this database, which collects information regarding the quality of the soil on plots of land. These preliminary soil surveys were carried out by an accredited soil remediation specialist and according to a standard procedure for preliminary soil surveys.

The current monitoring frequency is usually set lower than stipulated in the IED. The response added that OVAM is ensuring compliance with the periodic monitoring obligation through inspection and enforcement.

When assessing the risk of soil contamination, the competent authority verifies that it is minimised by means of the general, sector-specific and individual environmental conditions that are intended to protect the soil. Flanders' response added that OVAM is expected to be more involved in this area in the coming years.

Finally, in the event of incidents, a specific incident management plan is developed to reduce further contamination risks.

Wallonia region

In Wallonia, the option of setting monitoring of soil and groundwater at less than the stipulated frequency

[61] http://navigator.emis.vito.be/milnav-consult/consultatieLink?wettekstId=304&date=31-12-2013&appLang=nl&wettekstLang=nl

is possible and is included in the legislation (article 19(5)(5) and 46(5)(5) of Decree of 4 July 2002). The legislation requires that regular monitoring is conducted to verify that there is no emissions to the soil or into groundwater. The frequency for periodic monitoring is at least once every 5 years for groundwater and once every 10 years for soil.

Brussels Capital region

Brussels indicated that systematic appraisal of risk of contamination is not applied. Installations are not required to monitor at a lesser frequency than 5 years. The response also indicated that in some instances, annual monitoring can be required from an installation when pollution is already present in the soil or the groundwater.

QUESTION 5 – General Binding Rules (Article 17)

Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?

Flanders region

Flanders has adopted General Binding Rules for the implementation of the IED which are part of VLAREM II legislation. These GBR were originally adopted for the implementation of the IPPC Directive. They are focusing on specific environmental conditions, e.g. water pollution, soil pollution, air pollution.

The list of pollutants that are covered by the GBRs are included as an appendix of VLAREM II. VLAREM III includes additional general and sector-specific environmental conditions for installations.

Wallonia region

Wallonia has adopted General Binding Rules for the implementation of the IED for landfills installations. The response provided does not list the pollutants covered by the GBRs.

Brussels Capital Region

General binding rules have been adopted for all IED sectors. The response provided does not list the pollutants covered by the GBRs.

Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?

Flanders region

In Flanders, general or sector-specific environmental conditions are included in GBRs. The legislation requires that an integrated approach shall be ensured when laying down these general or sector-specific environmental conditions and a high level of protection for human health and the environment must be guaranteed.

Wallonia region

According to the l legislation in force, GBRs have been set to ensure an integrated approach and a high level of environmental protection which is at least equivalent to that achievable with individual permit conditions.

Brussels Capital Region

The competent authority indicated that GBRs are integrated into the environmental permit and analysed individually to ensure the requirement of a high level of protection from the IED is met.

Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?

Flanders region

In Flanders, GBRs in VLAREM III are offset according to the adopted BAT conclusions and as a result they are based on BAT.

Wallonia region

According to the legislation in force (article 8 of Decree of 1999), the GBRs are based on BAT.

Brussels Capital Region

In Brussels capital region, the GBRs are drafted on the basis of BAT.

Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?

Flanders region

Flanders indicated that following the publication of new BAT conclusions, new chapters would be added in VLAREM III setting additional sector-specific permit conditions. The competent authority (i.e. the Environmental Permits Division of the Environment, Nature and Energy Department) is responsible for updating the legislation in line with the latest best available techniques. This requires monitoring of development of BAT, BAT conclusions, Flanders BAT studies and other relevant information. Proposed

changes to the VLAREM are combined into a 'package' which is an amendment decree produced, on average, once a year.

Flanders added that its BAT Knowledge Centre (VITO) established in 1995, makes recommendations to the competent authority regarding permitting and grants. They are also involved when VLAREM packages are prepared.

Wallonia region

In Wallonia, the legislation in force (article 8 of Decree of 1999) requires GBRs to be based on BAT, without prescribing the use of any technique or specific technology and taking into account the characteristics of the installation concerned, its geographical location and the local environmental conditions. The legislation requires the competent authority to keep itself informed and up to date with the progress made in relation to BAT.

Brussels Capital Region

In Brussels capital region, GBRs and corresponding permits are updated following the revision of BATs in accordance with the deadlines included in the IED.

Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?

Flanders region

Flanders indicated that the GBRs make reference to BAT conclusions and the IED.

Wallonia region

Reference to the IED is required by the legislative drafting manual that has been issued by the Council of State.

Brussels Capital Region

The response indicated that reference to the IED being the legal basis of their content will be included in the GBRs.

Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.

Flanders region

The legislation of the Flemish Region is published in the Belgian Official Journal, which can be found at the following link: http://justitie.belgium.be/nl/.

Furthermore, an unofficial, consolidated summary of the Flemish environmental legislation currently in force can be found at: http://navigator.emis.vito.be/.

Wallonia region

Information on GBRs, can be accessed through the competent authority website: http://environnement.wallonie.be/

Brussels Capital Region

Brussels region indicated that no link is available.

QUESTION 6 – Developments in BAT (Article 19)

Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?

Flanders region

The competent authority (i.e. the Environmental Permits Division of the Environment, Nature and Energy Department) is responsible for updating the legislation in line with the latest best available techniques. It also notifies other competent authorities when new or updated BAT conclusions are published.

VITO, the BAT knowledge centre acting under the authority of the Flemish Government, coordinates the publication and distribution of the BREFs in book form and via the website (http://www.emis.vito.be) to all stakeholders (e.g. licensing authorities, inspectors, companies, etc.) and, draws up checklists to assist with the implementation of the BAT conclusions. These checklists are available through a website whose link was included in the Flanders' response[62].

Wallonia region

The legislation requires that competent authorities are kept informed with developments in BAT and of the publication of any new BREF or BAT conclusion.

[62] http://www.lne.be/themas/vergunningen/bbt/bbt-conclusies

Brussels Capital region

In Brussels region, it is the same authority that issues the environmental permit, monitors the implementation of the IED and the developments in the BREFs and so is always aware of developments in BAT.

Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Flanders region Flanders indicated that EMIS (the energy and environment information system) administers newsletters to which interested stakeholders can sign up to, one of which is the BAT newsletter focusing on new developments in BAT. Furthermore, Flanders reported that for each update of VLAREM III, an information session is held for the public concerned, including the competent authorities. This session explains not only VLAREM III, but also the actual BAT conclusions. Wallonia region Updated information on BAT conclusions is available to the public. The response provided a link to the legislation requiring that information on BAT is made publicly available[63]. Brussels Capital region The decrees are published in the Belgian Official Journal. In addition the website of the competent authority includes a link to access the BREFs.
Question 6.3 – Links to where the information can be found
Flanders region Flanders reported that information is available at the following website: http://www.lne.be/themas/vergunningen/bbt/bbt-conclusies. A link was also included to the BAT Knowledge Centre: http://emis.vito.be/bbt-conclusies. Wallonia region A link was included in Wallonia's response on where this information is available to the public: http://environnement.wallonie.be. Brussels Capital region The information is available at the following link: http://www.environnement.brussels/le-permis-denvironnement/le-guide-administratif/formulaires-permis-denvironnement
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Flanders region In Flanders, permits are reconsidered either as part of an interim reconsideration or as part of an application to change or renew a permit. Prior to the reconsideration, the competent authority review the information available within its organisations. When necessary, additional information is requested from operators. The Environmental Permit Division is responsible for the reconsideration process, it relies on a model report which ensures that all the basic principles of the IED are assessed. The report covers, inter alia, air and odour, noise, water, energy, soil, contamination and cessation of activities. The reconsideration process also takes into account local conditions. Flanders indicated that information gathered during inspections of the installations is used during the reconsideration. The response included a list of information typically requested, which includes: ▪ a copy of the checklist completed by the operator; and ▪ measurement data for emissions of all relevant pollutants into the water and air for at least the last two years. The response indicated that the checklist for information have been used until 31 December 2013. However, Flanders indicated that these checklist have now been integrated into a new tool tailored for each sector and the response included a link toward the tool[64]. Wallonia region

63 http://environnement.wallonie.be/legis/Codeenvironnement/codeLIEnvDispcommunesgenerales.htm

64 http://emis.vito.be/databank-bbt

The content of the information to submit is listed in the legislation (article 97 bis and 97 ter of Decree of 4 July 2002). The re-examination of the permit take into account any new BAT development that may be relevant for the installation. The operator must provide all necessary information allowing the competent authority to compare the installation's performances to BAT. This includes pollution generated by the installation, whether a new environmental quality standard has been introduced, whether new legislation that need to be complied with has been introduced or if the safety of the installation requires a change in the operating conditions. Information generated during inspections is used as part of this assessment.

Brussels Capital region

The content of the information to submit is listed in the legislation (article 17 of the Decree of 21 November 2013). The response included a list of some of the information typically requested which includes all the information necessary for the purpose of reconsidering the environmental permit conditions, including, in particular, results of emission monitoring and other data, that enables a comparison of the operation of the installation with the best available techniques described in the applicable BAT conclusions and with the emission levels associated with the best available techniques. Information generated during inspections is used as part of this assessment.

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

Flanders region

The main activity of an installation is defined in relation to the E-PRTR Regulation, and more specifically section 1.1.7 of the E-PRTR guidance on identifying the main activity of an installation.

If just one of the activities listed in Annex I of the E-PRTR Regulation is carried out at an installation, that activity is automatically the main activity of the installation. In the case of installations where more than one of the activities listed in Annex I of E-PRTR is carried out, the main Annex I activity of the installation is generally considered to be its main economic activity. If, in exceptional cases, the main economic activity is not representative of the processes undertaken at the facility, the main Annex I activity could be associated with the most polluting activity of the facility.

Wallonia region

The activities are defined in Annex XXIII of the Decree of 4 July 2002.

Brussels Capital region

Similarly to the Flanders region, in the Brussels Capital region the main activity of an installation is defined in relation to the E-PRTR Regulation, and more specifically section 1.1.7 of the E-PRTR guidance on identifying the main activity of an installation.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

Flanders region

The reconsideration of permits is conducted in accordance with the IPPC action plan for 2009-2015. Under this action plan, an annual schedule is established which details the installations whose permits are to be reconsidered during the year. Different factors are taken into account to draft the annual schedule which include specific environmental quality issues identified during inspections, and other issues reported to the competent authority.

In addition, in cases of significant pollution, the government develops action plans which include checking the permits of the IPPC installations as one of the steps. The response included a reference to recent cadmium and particulate matter action plans as examples[65] .

Wallonia region

In Wallonia, permit reconsideration and update is triggered in the following circumstances:

- the pollution caused by the installation is such that new emission limit values need to be set;
- an environmental quality standards need to be met;
- the safety of the installation or the operation requires a change;
- new legislation requires the revision of existing permits.

Brussels Capital region

According to the legislation (article 64 of the OPE), the issuing authority must modify an environmental permit if it finds that the permit conditions are inadequate or no longer appropriate, including with regard to the use of the best available techniques, in order to prevent, reduce or remedy risks, nuisances or harm to the environment or public health.

65 http://www.lne.be/themas/milieu-en-gezondheid/acties/cadmiumproblematiek/actieplan%20cadmium.pdf
http://www.lne.be/themas/luchtverontreiniging/actieplan-fijn-stof-in-industriele-hotspot-zones

In addition, permits are reconsidered in the following cases

- the pollution caused by the installation is of such significance that the existing emission limit values of the environmental permit need to be revised or new emission limit values need to be included in the permit;
- the operational safety requires other techniques to be used;
- where it is necessary to comply with a new or revised environmental quality standard.

QUESTION 8 – Site closure (Article 22)

Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

Flanders region

While under the IED installations can be assessed on a case-by-case basis for the requirement to submit a baseline report, this is not the case under Flemish legislation. In Flanders, the baseline report is used for the comparison with the contamination status upon definitive cessation of activities and, as a result, a list of activities has been drafted for which the production of a baseline report is mandatory. The report must be produced by an accredited soil remediation specialist and in accordance with the fixed guidelines laid down in the standard procedure for preliminary soil surveys.

The obligation to produce a report applies to annex 1 activities that could potentially cause soil or groundwater contamination through the use, production or release of hazardous substances. These installations conducting the following activities: 1.1, 1.2, 1.3, 1.4, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2.a), 5.2.b), 5.3.a), 5.3.b), 5.4, 5.5, 5.6, 6.1.a), 6.2, 6.3, 6.5, 6.7, 6.10, 6.11.

The possibility of soil and groundwater contamination is considered as follows: during a preliminary soil survey a standard, mandatory package of common parameters are tested to identify the presence of contamination; this is known as the standard analysis package and exists for both soil and groundwater. The testing area extends to the boundaries of the plot of land and includes unsuspected sites.

During the assessment several factors are taken into account such as the quantities of hazardous substances used, produced or released and the soil and groundwater characteristics (geology, direction of groundwater flow, site surfacing, etc.). The results of a preliminary study are used to develop a targeted sampling strategy, detailing which substances the soil/groundwater must be tested for and where the samples must be collected.

Guidance has been prepared to support specialists which includes an online tool listing hazardous substances that can be emitted by activity. This is used as a guideline for which substances to test for.

Finally, for operators of existing installations that, under the new legislation, are required to carry out a one-time-only soil survey, there is a logical exemption from the survey obligation. These installations are exempt from the requirement to carry out this survey if they still have a report from a previous baseline report for the operation of the installation in question.

Wallonia region

The third part of the application document for an IED permit requires operators to prepare and provide a baseline report for new installations that produce or emit hazardous substances that present a risk of contamination to soil or groundwater. The report must be produced by an accredited expert and include necessary information for the competent authority to determine the level of soil and groundwater contamination. The report is to be used for comparison purposes upon definitive cessation of activities.

The minimum content of the report is described in the application form and it must include the objectives and requirements for the characterisation study. It also includes the recommendations from the accredited expert on measures to protect soil and groundwater, monitoring measures and frequency of monitoring.

The installations for which a baseline report is required are those conducting the following activities: 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2.a), 5.2.b), 5.3.a), 5.3.b), 5.4, 5.5, 5.6, 6.1.a), 6.1.b), 6.2, 6.3, 6.4.a), 6.4.b), 6.5, 6.6, 6.7, 6.8, 6.9, 6.10 and 6.11.

Brussels Capital region

All activities with potential for pollution have been listed in a ministerial decree. The response from Brussels region included a link toward the relevant legislation[66]. This includes, the following Annex I activities: 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.2, 3.3, 3.4, 4.1, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2.a), 5.2.b), 5.3.a), 5.3.b), 5.4, 5.5, 5.6, 6.1.a), 6.1.b), 6.2, 6.3, 6.7, 6.8, 6.9, 6.10 and 6.11.

[66] http://www.environnement.brussels/thematiques/sols/activites-risque

The Brussels capital region considers that the presence of an activity listed in Annex I is sufficient to trigger the possibility of soil and groundwater contamination.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

Flanders region

The Flanders' region adopted a new soil survey obligation when transposing the IED which introduced the requirement for a baseline report to be produced which modified the pre-existing required preliminary soil survey.

The purpose of a preliminary soil survey is to determine whether there are any clear indications of the presence of soil contamination and, as such, the survey satisfies the requirements laid down for baseline reports in terms of the content. The survey involves also a background site assessment and collection of a limited number of samples. Because a preliminary soil survey/baseline report involves taking a sample, this report permits a quantified comparison between the state of the site described in the report and the state of the site upon definitive cessation of activities, in order to ascertain whether a significant increase in pollution of soil or groundwater has taken place. If the baseline report reveals contamination, further investigation is required in the form of a detailed soil survey.

Wallonia region

The baseline report contains the information necessary to determine the state of soil and groundwater contamination, so as to make a quantified comparison with the state upon definitive cessation of activities.

The report typically includes:

- expert proposals for appropriate requirements that would ensure the protection of the soil and groundwater and for measures concerning their monitoring;
- expert proposals for appropriate requirements for the regular maintenance and surveillance of measures taken to prevent emissions to soil and groundwater, the periodic monitoring of soil and groundwater in relation to relevant hazardous substances likely to be found on site and having regard to the possibility of soil and groundwater contamination at the site of the installation and the frequency of this periodic monitoring, unless the frequency is specified in the sector-specific conditions.

Brussels Capital region

The response from Brussels included a link to the competent authority's website which presents information on the baseline report[67]. The website explains that the baseline report looks at soil contamination status by conducting sampling near potential pollution sources and other areas. The samples are then analysed and used as a basis for experts' conclusion on the extent and potential for pollution, the need for further detailed analysis and the need to adopt preventative measures.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

Flanders region

In Flanders, the preliminary site survey (PSS) is used to determine whether there are any clear indications of the presence of soil contamination. A PSS is carried out in accordance with a standard procedure for preliminary soil surveys (hereinafter referred to as 'SPPSS'). This procedure was developed with the intention of ensuring that a PSS is thorough, comprehensive and conforms to high quality standards. The fact that every PSS is carried out according to the same procedure guarantees protection for land buyers and makes it easier to make a quantified comparison of the state of the soil and groundwater at various moments in time. The response included a link toward the procedure for the SPPSS[68].

With the implementation of the IED, the existing SPPSS has been amended and further conditions were drawn up for the PSS that can serve as a baseline report (Article 33bis of the Soil Decree and Article 21 of the VLAREBO) to ensure compliance with the guidelines laid down by the European Commission with regard to the baseline report. For example, Flanders indicated that a number of provisions were included with regard to the sampling strategy, to ensure that the baseline report is as comprehensive as possible.

In comparison with the descriptions of stages 1-3 of the Commission guidelines, in Flanders a baseline report has to be produced in all cases. The response indicated that stages 1-3 are implemented more rigorously in Flanders than required by the Commission guidance. When conducting a PSS, one cannot conclude, based on theory alone, that certain hazardous substances will not cause soil or groundwater pollution in certain high-risk locations. Groundwork is still needed, even if, theoretically speaking,

[67] http://www.environnement.brussels/thematiques/sols/identifier-et-traiter-la-pollution-des-sols/reconnaissance-de-letat-du-sol?view_pro=1

[68] http://www.ovam.be/standaardprocedures

contamination should not have occurred in these locations.

The response provided by Flanders include a detailed description of how the stages defined in the Commission guidance are included in its regions processes.

- Stages 2 and 3, i.e. 'identifying the relevant hazardous substances' and 'assessment of the site-specific pollution possibility', are included in the standard procedure as part of conducting a preliminary study and formulating the contamination hypothesis (comparable to stage 6). These provisions can only be implemented effectively, however, if they are based on a sound preliminary study that comprises an administrative investigation, a background site assessment and a (hydro) geological survey.
- In Flanders, stages 4-5 coincide with the investigation into the (relevant) hazardous substances (stages 1-3) during the 'Preliminary study'.
- Stage 6 encompasses the site characterisation. The provisions in this regard in the SPPSS are included in section '4.1.2 Formulating the contamination hypothesis'.
- Stage 7 provides a number of guidelines relating to site investigation, e.g. with regard to the use of existing information, sampling strategies, uncertainty associated with soil and groundwater data, analysis of samples, etc.

The scope of a PSS should not be limited to investigating relevant hazardous substances that have been and will be used in specific high-risk locations. The survey should also take into consideration the possibility of soil and groundwater contamination in 'unsuspected' locations and with hazardous substances considered to be 'not relevant'. Both the soil and groundwater must, therefore, be tested for the substances listed in the standard analysis package in all suspected and unsuspected locations. As a result of this, a preliminary soil survey that is intended to serve as a baseline report relies much more heavily on fieldwork than is required under the European Commission guidelines for producing a baseline report.

Wallonia region

Wallonia indicated that the guidance was published on 6 May 2014 which is after the period considered for this implementation report. During the 2013 period, the Walloon Code of Good Practice has been used, the response included a link to the code[69].

Brussels Capital region

The response provided by Brussels region indicated that the content of the baseline report is set in its legislation. However it did not indicate if or how the EC's guidance was taken into account.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Flanders region

In Flanders, the state of soil and groundwater contamination is assessed by an accredited soil remediation specialist (appointed by the operator) in accordance with the standard procedure for preliminary soil surveys.

Upon closure of a high-risk installation, the operator has a duty to conduct a preliminary soil survey. Depending on the extent of any soil contamination identified, the operator can also be required to carry out more intrusive soil surveys (detailed soil survey), as well as soil remediation (soil remediation project strategy, soil remediation works and final assessment/survey). The operator is required to submit the results of the soil survey to the competent authority (OVAM). OVAM conducts an assessment of the soil surveys and soil remediation carried out in the context of the closure and records the information in the Land Information Register.

Wallonia region

The assessment of the state of soil and groundwater contamination is described in the regions legislation, in particular article 19 of the Decree of 16 January 2014. It includes a description of the process to follow for the assessment and identification of the measures to be taken upon cessation of activities.

Brussels Capital region

The state of soil and groundwater contamination is determined through comparison to the baseline report conducted by an accredited expert.

[69] http://dps.environnement.wallonie.be/home.html and http://environnement.wallonie.be/legis/Codeenvironnement/codeLIEnvDispcommunesgenerales.htm

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Flanders region The response indicated that pollution is defined as the presence of a specific substance in elevated concentrations. As a general rule, 'significant pollution' is deemed to have occurred if the preliminary soil survey/operation soil survey carried out upon closure reveals evidence of a substance at the survey site which is present in such a high concentration that further investigation is needed in the form of a detailed soil survey. Contamination that occurred before the Soil Remediation Decree came into operation is referred to as 'historical'. While the IED defines one decision criterion for 'significant pollution', OVAM included a second decision criterion in the Soil Decree in order to address uncertainties relating to soil and groundwater sampling and analysis. The first one follows the preliminary soil survey and the second one follows the detailed soil survey. In cases of new contamination, the following rules apply: ▪ a detailed soil survey will be carried out following a preliminary soil survey if the levels exceed 80% of the remediation standard and in all cases where no standard has yet been set. This is equivalent to 'significant pollution'. ▪ remediation must be carried out following a detailed soil survey if the levels are found to exceed the remediation standard, and in all cases where no standard has yet been established for the parameters in question. This is equivalent to a 'significant risk'. The response from Flanders included a link toward guidance for risk assessment[70]. Wallonia region The response to this question is the same as given for 8.2.a and no additional information is provided. Brussels Capital region In Brussels Capital region, the pollution is considered significant if the measured concentrations exceed the intervention standards defined in legislation. A link was included toward more information on the intervention standards[71].
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
Flanders region Flanders indicated that this is decided by using a 'detailed soil survey' (DSS). If, during a preliminary soil survey, it is established that an installation has caused significant new pollution, the party responsible for remediation must immediately carry out a detailed soil survey to determine the extent of the soil contamination. The response included a link toward the relevant procedure and guidance on sampling and interpreting scientific results[72] [73]. When assessing the risks presented by the contamination, the specialist calculates the risk of dispersion (into the soil, air or water), the risks posed to human health (by exposure to the contamination) and those posed to animals, plants and the ecosystem. If a detailed soil survey reveals that a substance is present at the survey site in such a high concentration that remediation is required, this is referred to as a 'significant risk'. In cases of new contamination involving standard pollution parameters, remediation must be carried out if the remediation standards are exceeded. The operator is required to submit the results of the detailed soil survey to OVAM. Wallonia region The response to this question is the same as provided in 8.2.a and no additional information is provided. Brussels Capital region The Brussels Capital region has a technical protocol to evaluate the risks to human health or the environment. The risk study must be performed by a certified expert and sent to the administration for review and approval. The response included a link to the competent authority website where more information on this topic is available[74].

[70] http://www.ovam.be/basisinformatie-voor-risico-evaluaties

[71] http://www.environnement.brussels/thematiques/sols/les-normes/normes-ordonnances-sols?view_pro=1

[72] http://www.ovam.be/standaardprocedures

[73] http://www.ovam.be/webloket/milieuprofessionals/loket-bodemsaneringsdeskundigen/bodemsaneringsdeskundigen/technisch-wetenschappelijke-info

[74] http://www.environnement.brussels/thematiques/sols/identifier-et-traiter-la-pollution-des-sols/etude-de-risque

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Flanders region The IED requires that the necessary measures must be taken to avoid any risk of pollution and to return the site of operation to a satisfactory state upon cessation of activities. In Flanders, operators are required to report to the competent authority upon definitive cessation of their high risk activities, this must include a Preliminary Soil Survey (PSS). Depending on the results of the PSS, operators may be required to conduct further survey and to draw up a remediation project strategy. Flanders indicated that when new contamination is identified, the first objective of remediation is to achieve the soil quality target values stated in the legislation (i.e. VLAREBO). This ensures that the soil can be used for other purposes in future, with no restrictions. If it is not possible to attain the target values for the soil quality using the best available techniques not entailing excessive costs (BATNEEC), the remediation shall at least aim to achieve a better level of soil quality than stipulated in the relevant soil remediation standards. If that is not possible, the remediation should aim to ensure that the soil quality does not and cannot pose a risk to human health or the environment. If even that objective is unattainable, zoning and land use restrictions will be placed on the site where necessary. In certain cases, measures can/must be taken before the soil remediation project strategy is drawn up: if the detailed soil survey identifies the contamination as being very urgent, measures must be taken immediately to eliminate or reduce the threat. The soil remediation specialist must notify the competent authority (i.e. OVAM) if, during the course of the detailed soil survey, it is established that measures need to be taken while awaiting the soil remediation to provide temporary protection for human health or the environment from the dangers presented by the contamination. OVAM can also require that precautionary measures be taken while the site is awaiting remediation works with the aim of protecting humans or the environment from the risks of soil contamination. The obligation to clean up contaminated soil is already included in the Soil Decree, which specifies who is responsible for carrying out remediation work when land is found to be contaminated. Finally, the Soil Decree provides that, in cases of site closure, OVAM can request a financial guarantee to ensure that the site is left in a satisfactory state. The response from Flanders included a link toward the standard procedures[75] and the codes of good practice for soil remediation process[76]. Wallonia region Wallonia indicated that measures to take upon cessation of activities are included in its legislation. Brussels Capital region Legislation on the content of the remediation report defines how and what are the required measures or actions in order to clean a polluted site. The certified expert follows this content to perform his or her remediation report. The response included a link toward the relevant pages of the competent authority's website[77].
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
Flanders region All installations are covered by a regional environmental inspection plan, which is regularly reviewed and, where appropriate, updated. In each case, the plan contains all of the information set out in Article 23(3) IED. The regional environmental inspection plans are publicly available on request but are not published on the internet. Wallonia region The response provided by Wallonia region was the same than Flanders region. It stated that all installations are covered by a regional environmental inspection plan, which is regularly reviewed and,

[75] http://www.ovam.be/standaardprocedures
[76] http://www.ovam.be/code-van-goede-praktijk
[77] http://www.environnement.brussels/thematiques/sols/identifier-et-traiter-la-pollution-des-sols, http://www.environnement.brussels/thematiques/sols/identifier-et-traiter-la-pollution-des-sols/projet-de-gestion-du-risque and http://www.environnement.brussels/thematiques/sols/identifier-et-traiter-la-pollution-des-sols/projet-dassainissement

where appropriate, updated. In each case, the plan contains all of the information set out in Article 23(3) IED. The regional environmental inspection plans are publicly available on request but are not published on the internet.

Brussels Capital region

All installations are covered by a regional environmental inspection plan, which is regularly reviewed and, where appropriate, updated. In each case, the plan contains all of the information set out in Article 23(3) IED. Brussels region indicated that the plan includes a general assessment of relevant significant environmental issues, information on the geographical area covered by the inspection plan, a register of the installations covered by the plan, procedures for drawing up programmes for routine environmental inspections and non-routine environmental inspections and where necessary, provisions on the cooperation between different inspection authorities.

The regional environmental inspection plans are publicly available on request but are not published on the internet.

Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

Flanders region

The systematic appraisal of the environmental risks of installations is based on the IMPEL (IRAM) methodology, with adjustments for the Belgian context. A distinction is made between impact criteria (impact of the installation on its environment, emissions into air, soil and water, quality of reported data, waste output and input, the quality of the local environment, risks of incidents and noise pollution) and operator performance criteria (compliance behaviour, handling of identified environmental issues and application of the environmental care principles). A risk category is assigned based on the score of the highest scoring impact criteria, while the risk score in the case of operator performance criteria reflects the probability that problem emissions will occur. The total risk score is then used to determine the frequency of site visits, with those in the highest category requiring annual inspections, those in the middle category every 2 years, and those in the lowest category, every 3 years. In Flanders, an internal manual has been prepared to aid interpretation and uniform assessment of the criteria, but this is not published on the internet. Otherwise, the 'IED Inspections: Guidance for the implementation of the IED in planning and execution of inspections', June 2013 is used (available at www.impel.eu).

Wallonia region

Wallonia region reported that the systematic appraisal of environmental risks of installations is based on the IRAM tool developed by the IMPEL together with the guidance document 'IED Inspections: Guidance for the implementation of the IED in planning and execution of inspections from June 2013.

Brussels Capital region

Similarly to Wallonia region, Brussels region reported using the IRAM tool for the systematic appraisal of environmental risks of installations together with the guidance document 'IED Inspections: Guidance for the implementation of the IED in planning and execution of inspections from June 2013.

Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

In the three regions, non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.

Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?

Flanders region

In Flanders, site visit reports include details of the date, purpose and type of inspection, those carrying out the inspection, the findings of the inspection and conclusions, amongst other information. In each case, therefore, the observations made during an inspection, the relevant findings with regard to the installation's compliance with the permit conditions and the conclusions with regard to whether further measures are necessary are included in the site visit report. Site visit reports are notified to the operator either by providing the operator with a copy of the report, or a letter summarising the findings of the inspection and what measures are to be taken within a specified time. Site visit reports are made publicly available on request. Confidential or commercially sensitive information etc. will not be made publicly available in accordance with Directive 2003/4/EC. Where further measures require to be taken following an inspection, a deadline will be set for compliance with these.

Wallonia region

Wallonia reported the same response than the Flanders region in relation to site visits reports.

Brussels Capital region

Brussels reported that the site visit reports include details of the date, purpose and type of inspection, those carrying out the inspection, the findings of the inspection including infraction and conclusions, amongst other information. After the inspection, the operator is notified of the findings by letter summarising the findings of the installation and what measures are to be taken within a specified time. Brussels added that site visit reports could be made available with the exception of matters which are, or have been, subject to justice, or under enquiry (including disciplinary enquiries), or which are the subject of preliminary investigation proceedings and commercial and industrial confidentiality, including intellectual property.

Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?

Flanders region

The Flemish legislation provide the Inspectorate, in charge of the inspection, a range of actions to ensure compliance where breaches have been identified. The response included reference to an internal guidance entitled 'Environmental Enforcement Instruments' which streamlines the use of these instruments within Flemish territory by the compliance officers. Flanders added that a thorough case-by-case assessment is required for any enforcement action, in keeping with the principles of sound administration. This includes the obligation to take into account principles of due diligence, proportionality and reasonableness. Enforcement actions available include notice and remediation orders in the first instance.

If the notices do not lead to the intended result, administrative action can be taken. This includes imposing administrative measures such as a regulation order (= an order for the alleged offender to take measures to put an end to the non-compliance, to fully or partially remedy the effects of the infringement or to prevent a repeat occurrence), a cease and desist order (= an order for the alleged offender to stop activities, work, or using equipment), an administrative order (= actual action on the part of the compliance officer to put an end to the infringement to fully or partially remedy the effects thereof or to prevent a repeat occurrence) or a combination of these three types of measure.

The compliance officers of the Flemish Environmental Inspectorate can also request that the permit conditions be amended or supplemented, or that the permit be suspended or withdrawn.

Wallonia region

Wallonia indicated that a range of actions are available to ensure compliance with the permit conditions and the actions identified in the site visit report. These actions are described in Part VIII of Book I of the Environmental Code regarding the investigation, identification, prosecution and enforcement of environmental crimes and remedial measures for such crimes[78].

The response also included examples of fines that can be imposed on the operator, €500 in case of lack of declaration concerning environmental permits, €1,000 in case of lack of environmental permit and in the event of non-compliance with the operating conditions.

Brussels Capital region

There are a number of enforcement measures that can be used to secure compliance, include the service of notices/warnings, imposing administrative measures or sanctions, report for prosecution and the partial/total cessation of activity.

QUESTION 10 – Access to information and public participation (Article 24)

Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?

Flanders region

The Flemish response refers to the legislative provisions which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. In addition, where a permit application is made, a public inquiry will be held, and comments and objections may be made throughout the course of the public inquiry, prior to any decision being made.

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http://environnement.wallonie.be/legis/Codeenvironnement/codeLIEnvDispcommunesgenerales.htm

Wallonia region

Wallonia indicated that its legislation includes provision to ensure early and effective public participation although further details of the content of the legislation were not provided.

Brussels Capital region

Brussels indicated that its legislation reflects the obligation to provide the public with an early and effective opportunity to participate in decision making. The public is involved in the decision-making process granting environmental permit applications. A 15 days public inquiry would also be held in the event of an installation which has caused pollution of such significance that the existing emission limit values of the environmental permit need to be revised or new emission limit values need to be included in the permit, and the licensing authority is considering imposing new operating conditions as a result.

More generally, public is consulted when granting/updating an environmental permit for new installations and granting an environmental permit for any substantial change.

Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?

Information is to be made available to the public through public notices, at the offices of the municipal authorities, through publication in daily or weekly newspapers, one of which must be regional, on the website of the municipality and via the internet.

All relevant information is made available on the internet in:

Flanders (http://www.lne.be/themas/vergunningen/gpbv-ippc/lijsten-van-gpbv-installaties) and in Wallonia (http://environnement.wallonie.be/emissions-industrielles/). The online publishing tool for the Brussels Capital Region is currently under development and, therefore, documents are sent by email upon request.

QUESTION 11 – Emerging techniques (Article 27)

Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?

Flanders region

The Flemish Region has various programmes and knowledge and competence centres to encourage the development and application of emerging techniques. Emerging techniques can also be encouraged by organisations that provide support through research and development (R&D). Lastly, the legislation that is currently in place can also offer support for the development and application of these emerging techniques.

The response provided by Flanders includes details description of all these elements.

Relevant programmes are:

- EMIS: The Energy and Environment Information System (EMIS) provides easy access to information regarding BAT and emerging techniques.

- Various networking associations exist between the industry and universities, such FISCH vzw and i-Cleantech Vlaanderen.

- IWT assists with coordination and networking. IWT is the government agency for Innovation by Science and Technology. Amongst other things, it stimulates collaboration by bringing innovative companies and research centres into contact with organisations that encourage innovation. It does this via the Flemish Innovation Network (VIN).

Knowledge centres and centres of expertise:

- The BAT Knowledge Centre is an initiative of the Flemish Government and VITO. The BAT Knowledge Centre collects and distributes information relating to environmentally and energy-friendly techniques for industrial processes and selects the best available techniques for various sectors. This makes information on BAT and emerging techniques more accessible.

- The Flanders Knowledge Centre for Water [Vlaams Kenniscentrum Water] (Vlakwa) is an independent intermediary in the integrated water cycle. It initiates, coordinates and facilitates using an integrated approach that encompasses maximum international connectivity, knowledge acquisition, mutual cooperation and sharing of knowledge and experiences. Given the major strategic, industrial and social importance of water in Flanders, and to prevent the management of water from becoming overly fragmented, all of the members of Vlakwa work together (businesses, research institutes, government agencies and the water sector).

- Collective research centres such as Centexbel (textiles) and Sirris (technology industry) conduct research with support from the regional, federal and European authorities.

Organisations that provide support through research and development:

- IWT supports Flemish businesses and research centres. It helps them during their applications and provides technological advice during their innovation projects. IWT is also the national contact point for European funding. In addition, it finances innovative projects devised by businesses, research centres and organisations.

- The SBO programme (Strategic Basic Research) developed by IWT focuses on emerging techniques. The VIS (Flemish Cooperative Innovation Networks) and TETRA (Technology Transfer) programmes encourage the industry to adopt cutting-edge technologies.
- The Hercules Foundation [Herculesstichting] was set up by the Flemish Government as an agency for the funding of research infrastructure. This agency primarily awards subsidies to universities and colleges for investment in medium to large-scale research infrastructure.
- The Strategic Research Centres (SOC) have been entrusted with the task of conducting demand-driven strategic research that is in keeping with the innovation policy of the Flemish Government. The research they conduct should have an added economic and social value. The Strategic Research Centres in Flanders are VITO, SIM, IMEC, VIB, iMinds and CMI.
- Innovation Mezzanine is a service provided by investment company and is intended for start-up businesses that have received a subsidy from IWT (for an SME innovation project or an R&D industrial project). It consists of a subordinated loan up to a maximum of EUR 500 000. The loan can be converted into shares if the company increases its capital during the term of the loan.

Legislation encouraging development of emerging techniques:

- Enterprise Flanders [Agentschap Ondernemen] (AO) is an agency of the Flemish Government, which functions as a point of contact for entrepreneurs. Entrepreneurs can, for example, approach AO with queries if they wish to start a business venture with the support of the Flemish Government or if they wish to invest in environmentally or energy-friendly technology. Enterprise Flanders also maintains a subsidy database, which contains basic information about the main forms of aid provided by the provincial, Flemish, federal and European governments. A number of examples are as follows:
  - Exemption from payment of payroll tax in the context of scientific research: the salaries of research assistants in businesses and knowledge institutes qualify for an exemption that allows for an 80% reduction in the amount of payroll tax payable.
  - The innovation premium enables employers to pay employees a bonus for proposing an innovation that creates real added value for the company. This bonus is exempt from payment of social security contributions and is non-taxable if the conditions are met.
  - Ecology premium Plus: this ecology premium is a financial contribution for businesses located in the Flemish region that wish to make ecological investments. The term ecological investments is understood to refer to environmentally and energy-friendly techniques that go beyond BAT.

<u>Wallonia region</u>

The response included a description of the steps adopted by the region to encourage the development of emerging techniques:

- GreenWin: a competition cluster for environmental technologies which is governed by three strategic priorities: the production of sustainable products and materials, the sustainable integration and use of materials and the treatment and reclamation of waste and effluents.
- Specific aid measures for environmental investment, such as support provided by decree of 11 March 2004 on incentives targeting environmental protection and sustainable use of energy and the implementation Decree of 2 December 2004
- investment programmes that allow a company to surpass Community standards, or that increase the level of environmental protection in the absence of Community standards
- investments by an SME allowing an early response to future Community standards

<u>Brussels Capital region</u>

Brussels region's response provided links to public interest organisations that provide support for businesses. These are:

- http://www.abe-bao.be ; and
- http://www.citydev.be.

Bulgaria

Analysis of the completeness of the report

Table A5: Completeness assessment of answers reported by Bulgaria – IED

Question title	Question number(s)	Bulgaria	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2	**N/A**	
	5.3	**N/A**	
	5.4	**N/A**	
	5.5	**N/A**	
	5.6	**N/A**	
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Bulgaria submitted a complete response to the IED questionnaire.

Analysis of the Bulgaria's responses

The table below contains the detailed analysis of the responses provided by the Bulgaria to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A6: Bulgaria – Response analysis table

BULGARIA
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Bulgaria reported that the following are considered as breach posing an immediate danger to human health or threatening to cause an immediate significant adverse effect upon the environment: ▪ Breaches of emission limit values specified for the installation concerned; ▪ Breaches relating to the use, storage and transport of hazardous chemical substances and compounds; ▪ Any incidents leading to a discharge of dangerous substances exceeding the relevant emission limits.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Bulgaria indicated that Article 123(2) of the Environment Protection Act specifies that the BAT conclusions must be used as a reference for setting permit conditions. Bulgaria Also has developed a specific methodology for determining the best available techniques for installations covered by the integrated permit. A link to the methodology was provided[79].
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
According to the information reported by Bulgaria, the possibility to set stricter permit conditions is allowed by Article 123(11) of the Environment Protection Act. According to the article, in the cases that the selected BAT cannot satisfy the environment quality requirements for the area surrounding the installation, the authorities can set stricter permit conditions.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Bulgaria reported that emission limit values set out in integrated permits are pursuant to Article 123a (1) of the Environment Protection Act. More specifically the Article ensures that the ELVs: ▪ Do not exceed the emission limit values set out in the BAT conclusions. ▪ May be set higher than the BAT-AEL's whilst ensuring that actual emissions still comply with the BAT-AELs. This requirement does not apply where the cost of implementation cannot be justified by environmental benefits due to the geographical location, local environmental conditions or the technical characteristics of the installation concerned. ▪ In any case emissions must not cause significant pollution and must ensure a high level of environmental protection.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Bulgaria reported that when an operator is proposing emission limit values other than those described in the BAT conclusions, then the operator must demonstrate the application of BAT. The specific technique must be evaluated in accordance with the criteria set out in Annex III of the Directive. The competent authority confirms or rejects the existence of such circumstances. If the operator's justification is rejected, the emission values set in the integrated permit will correspond to the emission limit values set

79 http://www3.moew.government.bg/files/file/Industry/KR/Metodiki/Metodika_NDNT_2012.pdf

out in the applicable BAT conclusion. This appears to suggest that Annex III is allowed to be used to justify application of different BAT to that included in the conclusions, and, therefore, to set emission limits that allow emissions higher than the BAT-AELs in the BAT conclusions.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
The response provide by Bulgaria indicates that the cost-benefit assessment is based on information relating to the capital and operational costs of implementing a given technique and an assessment of the difference in the environmental impacts of one technique compared with another. Disproportionate costs are those which make production uneconomical but in any case, the operation of the installation must not breach any environmental quality standards.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Bulgaria indicates that the circumstances referred to in Article 15(4) of the Directive are re-assessed as part of any procedure that alters the permit conditions. However the Bulgarian response does not mention whether there are limitations on the magnitude or duration of derogations.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Bulgaria reported that up to now they have not encountered any such cases. According to Bulgarian law, the competent authority issuing the permit can grant derogations by including specific conditions in the permit, for not more than 9 months.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Article 123(1)(4) of the Environment Protection Act ensures that monitoring requirements in integrated permits are to be based on BAT conclusions.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The frequency of periodic monitoring of soil and groundwater is determined for each specific site. Where an operator proposes that tests be carried out less frequently than once every five years for groundwater and once every ten years for soil, he must justify the proposal using the results of a systematic appraisal of risk of contamination. The results are submitted with the application for an integrated permit and are then assessed by the competent authority. On the basis of the assessment, the proposed frequency of monitoring is approved or a different frequency - with shorter intervals - is set in the permit conditions.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Bulgaria reported that to date no monitoring has been carried out at a frequency lower than that stipulated in Article 16(2) of the Directive.
QUESTION 5 – General Binding Rules (Article 17)
Bulgaria does not use General Binding Rules for implementing the Directive.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Bulgaria reported that following actions are taken in order to ensure that competent authorities follow the publication of new or updated BAT conclusions:
Question 6.2 – How do competent authorities make that information available to the public concerned?
The following actions are reported by Bulgaria in order to make the information available to the public: ▪ Information on the publication of new BAT conclusions is published on the website of the Ministry of Environment and Water; ▪ After a new BAT conclusion is issued, operators in the relevant industry are informed by letter and are requested to assess (within a specified period) the compliance of their installations with

the new conclusion and, where appropriate, to submit information regarding the review of their integrated permit.
Question 6.3 – Links to where the information can be found
Information can be found in the following link:
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Bulgaria reported that information requested is typically the following: ▪ Evidence of use of best available techniques in accordance with the Methodology for determining BAT published by the Ministry. ▪ Information in accordance with Annex 6 of the Bulgarian Regulation concerning the conditions and procedures for the granting of integrated permits including: - Environmental impact assessments of investment plans; - On-the-spot checks; - Emission monitoring; - Information from the operator's annual report concerning the implementation of activities for which the permit has been granted.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
Bulgaria reported that in order to determine the main activity the following information is taken into account: ▪ Descriptions of the technological processes and type of products manufactured; ▪ The national classification of economic activities is used (in accordance with the NACE codes). When the abovementioned information is insufficient to determine whether the operation of the installation falls under the scope of the activities for which an integrated permit is required, the need for an integrated approach to pollution prevention and control must be assessed.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
Bulgaria reported that permit reconsideration/update commences as soon as certain circumstances including those listed in Article 21(5) of the IED (significant pollution, operational safety or new/revised EQS) are established. Otherwise, depending on the particular case, the competent authority must notify the operator of the existence of the circumstances and request that the operator schedule modifications to plant operation in order to comply with the new external constraints. Where an operator has independently established such circumstances (for example, upon updating the operational safety plan), he must himself schedule relevant compliance measures.
QUESTION 8 – Site closure (Article 22)
Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
Bulgaria indicated that the Commission guidance concerning the baseline reports under Article 22(2) of the Directive will be used. According to that guidance, the mere presence of certain hazardous substances is not sufficient to warrant the drawing up of a baseline report. The risk of discharge and the possibilities of infiltrating soil and/or groundwater are assessed in relation to the volume, method of storage, transport and use of these substances. The following activities have been reported by Bulgaria to involve the use, production or release of relevant hazardous substances: ▪ 1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more; ▪ 1.2. Refining of mineral oil and gas; ▪ 2.1. Metal ore (including sulphide ore) roasting or sintering; ▪ 2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting,

with a capacity exceeding 2.5 tonnes per hour;

- 2.3. Processing of ferrous metals as defined under (a) to (c);
- 2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day;
- 2.5. Processing of non-ferrous metals as defined under (a) or (b);
- 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3;
- 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day;
- 4.1. Production of organic chemicals as defined under (a) to (k);
- 4.2. Production of inorganic chemicals as defined under (a) to (e);
- 4.4. Production of plant protection products or of biocides;
- 4.5. Production of pharmaceutical products including intermediates;
- 4.6. Production of explosives;
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k);
- 5.2. (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour;
- 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day;
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v);
- 5.3. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of activities (i) to (iv);
- 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste;
- 5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated;
- 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day;
- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

Bulgaria indicated that the information included in the baseline reports should be according to the Commission guidance concerning baseline reports.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

Bulgaria reported that the Commission guidance has been provided to operators so that they can use it in determining the necessity and content of the baseline report.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Bulgaria reported that the state of soil and groundwater contamination is assessed by comparing the concentrations of relevant dangerous substances after the plant has shut down and the sources of pollution have been removed, with the concentrations reported in the baseline report.

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

It is considered that an installation has caused significant pollution of soil or groundwater when the contents of harmful substances exceed the specific quality standards. However it is not mentioned if the quality standards refer to national or EU standards.

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
Bulgaria reported that it is considered that soil and groundwater pollution pose a significant risk to human health or the environment when the relevant soil and groundwater quality standards are breached. However it is not mentioned if the quality standards refer to national or EU standards.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Bulgaria reported that the following actions are taken:
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
Environmental inspection plans are prepared annually by each Regional Environment Inspectorate (RIOSV), in accordance with the "Instructions for planning and reporting of inspections". The environmental inspection plans contain details of the territory covered and the activities carried out by each Regional Inspectorate, an assessment of the environmental conditions and potential environmental issues, the installations and activities covered by the plan, reference data, the objectives and monitoring priorities and routine environmental inspections planned for the period covered by the plan. While the Bulgarian response does not specifically refer to the plan including the procedures for non-routine environmental inspections, these are annexed to the plan. As such, the environmental inspection plans appear to contain all of the information set out in Article 23(3) of the Directive. Each of the environmental inspection plans are published on the website of the RIOSV. The response included a link to an example plan for Plovdiv[80]. Programmes for routine environmental inspections are drawn up in tabular form in accordance with the approved format for planned checks on environmental components and factors, and are annexed to each of the regional environmental inspection plans. These contain the names of the operators and installations to be checked, and the type and date of inspection. As the programmes include details of unannounced inspections, these programmes are not made publicly available.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The frequency of planned inspections is based on the risk classification of installations (high, medium, low) according to certain criteria set out in the "Instructions for planning and reporting of inspections". Installations are classified on the basis of the following two risk criteria: impact on environmental components and factors, and measures taken and activities implemented by operators as regards the reduction of adverse effects on human health and the environment (regulatory conformity). Risk assessment is carried out on the basis of an analysis of impact indicators given a specific weighting, taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents, compliance with the permit conditions and whether a valid registration is held by the operator as per the Community eco-management and audit scheme (EMAS). The systematic appraisal of the environmental risks is, therefore, based on the criteria set out in Article 23(4) IED. The frequency of inspections is determined based on the risk classification, with the inspection of 'high risk', "medium risk', and 'low risk' occurring once a year, once every two years, and once every two or three years respectively. A link was included in the response to the website where the Instructions for planning and reporting of inspections can be found[81].
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?

[80] http://plovdiv.riosv.com/files/file/plan/PLAN_PLOVDIV_2014.pdf
[81] http://www3.moew.government.bg/files/file/KKD/Normativni%20aktove/Instrukcia.doc

Site visit reports describe the findings of the inspection, irregularities/discrepancies identified, recommendations given for eliminating any infringements established, results of ex-post checks, and administrative measures taken by the RIOSV. While the operator is to have access to the site visit reports within 2 months of the inspection, the Bulgarian response does not state how the report is notified to the operator. Within 4 months of the inspection, the reports are made publicly available by publishing them on the website of the RIOS, though any information that is commercially sensitive or which affects national security or third parties is withheld from publication.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
In order to ensure that operators complete the 'necessary actions' identified in the site visit report, the RIOSV maintains a register of recommendations given to operators and controls/monitors the actions taken by operators to implement those, including through the verification of monitoring data submitted by operators. Additional on-the-spot checks can be carried out and enforcement measures taken, including the suspension of activities or the imposition of fines.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The public is provided with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED as in each case the application or draft decision for modifying or updating a permit are made available to the public for comment for a period of one month. Any representations received are taken into account in the course of the procedures and information on how this is done is provided in the technical assessment accompanying the permit issued.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public through newspaper announcements and on the website of the Ministry of Environment and Water. All relevant information is made available on the internet. The response included a link[82].
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Bulgaria reported that to date, no Bulgarian operator has requested application of emerging techniques. Possible State encouragement measures include: ▪ Provision of access to funding sources; and ▪ Reduced administrative deadlines for issuing an integrated permit.

[82] http://registers.moew.government.bg/kr/

Croatia

Analysis of the completeness of the report

Table A7: Completeness assessment of answers reported by Croatia – IED

Question title	Question number(s)	Croatia	Comments
Non-compliance (Article 8)	**1**		
Emission limit values, equivalent parameters and technical measures (Article 15)	**2.1**		
	2.2		
	3.1		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		**No response to question 8.2 (d), concerning decisions on necessary measures and actions required of operators.**
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Croatia provided a complete response to the questionnaire.

In addition while the responses provided to the following questions are considered complete, it would be useful to have the following additional information:

- In response to question 3.4 Croatia indicated that no derogations as foreseen by Article 15(4) were processed but the response does not include information on potential limitations on the magnitude or duration of derogations if those were to be granted.

The links included in the response of Croatia were checked and found to not work in most of the cases. The link to the general competent authority website was working (i.e. http://www.mzoip.hr/) however links toward specific pages on this website were not working (e.g. http://www.mzoip.hr/default.aspx?id=8288). Croatian authorities

did not provide fully functional links in the additional clarifications provided to their response.

Analysis of Croatia's responses

The table below contains the detailed analysis of the responses provided by Croatia to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A8: Croatia – Response analysis table

CROATIA
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Croatia reported that obligation to identify an immediate danger to human health and the environment is regulated, for the period when the conditions laid down in the permit are being verified, by the Environmental Protection Act of 28 June 2013 (referred further in the report as the Act). However criteria to decide whether a breach of permit conditions poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment have not yet been drawn up and are not set out in the permit. To date such decisions have been taken by the inspectorate at its own discretion. Croatia is in the process of amending the Act. These changes will state the main criteria relevant for making such decisions. This was not applied in the period covered by this report.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Provisions of the Act ensure that the BAT conclusions are the reference for setting permit conditions. Croatia provided the two links in their report but neither link worked[83].
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
Croatia's response did not provide information on the method for setting stricter permit conditions.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
All permit applications made after 6 July 2013 are subject to the requirement that limit values have to be associated with BAT.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
No derogation from Article 15(3) of the Directive has yet been applied. In case such derogation was to be granted, it would be treated according to the provisions of Article 34 of the regulations on environmental permitting. Environmental permits for such plants may contain emission limit values set as follows: ▪ ELVs are set so that they do not exceed BAT-AELs and are expressed in the same or shorter period for the same reference conditions as BAT-AELs ▪ Different ELVs are set with different periods and reference conditions than BAT-AELs but with prescribed procedures to verify that this value corresponds to the BAT-AELs or where a derogation is applied exceeds the BAT-AELs
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article

[83] http://www.mzoip.hr/default.aspx?id=8140 and http://www.mzoip.hr/default.aspx?id=8288

15(4))?
No cost-benefit analysis under Article 15(4) of the Directive has yet been conducted. Croatia reported that for cost-benefit assessment, the cost-effectiveness analysis will be undertaken by: a) calculating the ratio between the costs of undertaking adjustments / modifications and the amount of reduced emissions needed to achieve the emission limit values; b) comparing the resulting ratio with the values from BREF document on Economics and cross media effects. If the resulting cost ratio is greater than the reference values, granting of a derogation would be considered justified. Derogations might be limited in time. Documents on how to implement cost-benefit analysis, as well as values for some substances are most commonly published on website of Ministry of Environmental Protection (a link was provided by Croatia [84]but did not function). Croatia also reported that it supports EU efforts in establishing cost-efficiency benchmarks, in addition to those already determined.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
In response to this question Croatia repeated that no request was made for a derogation from Article 15(4) of the Directive. However under question 3.3 Croatia mentioned that derogations might be limited in time.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Croatia confirmed that no restrictions to derogations under Articles 11(a) and (b) and 15(2), (3) and (5) of the Directive with regard to emerging techniques have yet been applied. Granting of the derogation would be made according to Article 35(7) of the regulations on environmental permitting. This regulation allows application for the 9-month derogation if the ELVs are higher than BAT-AELs. The use of the technique needs to stop after that 9-month period, if the BAT-AELs are not attained.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Croatia reported that the requirements to use BAT conclusions for defining monitoring requirements in permits is set out in the national legislation. Consequently, the Environmental Protection Act ensures conformity of the monitoring requirements in the permit with BAT.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
A minimum monitoring frequency is once every 5 years for groundwater and once every 10 years for soil. The Act gives the competent authority the option of laying down special provisions for more frequent monitoring of groundwater and soil in order to meet environmental quality requirements (environmental quality standards).
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
The main criterion for making a systematic appraisal of the risk of contamination of soil and groundwater is the sensitivity of the areas where activities are carried out. These areas are covered by separate legislation or determined subsequently in the environmental permit procedure on the basis of the opinions of competent authorities for specific environmental departments with responsibility for contamination.

[84] www.nizoip.hr

QUESTION 5 – General Binding Rules (Article 17)

Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?

Application of General Binding Rules in Croatia are provided for in the Environmental Protection Act.

Croatia reported that the Decree on the environmental permit (NN No 08/14), which was adopted outside the reporting period covered by this questionnaire, provides options to apply General Binding Rules for the following activities:

- 3.1(b) and 3.5 Manufacture of lime and of ceramic products (not including the disposal of hazardous waste or the co-incineration of waste).
- 4.1(a) Manufacture of technical gases, i.e. acetylene (in the IED this activity number corresponds to production of organic chemicals, such as simple hydrocarbons).
- 5 Management of non-hazardous waste (in the IED activity 5 corresponds to waste management including hazardous waste).
- 6.6 Intensive rearing of poultry or pigs; and
- 6.6(a), (b), (c) and (d) – Croatia did not provide description of these activities. In the IED these correspond to the intensive rearing of poultry or pigs, (although the IED does not include point 6.6 (d)).

General Binding Rules currently only exist for activities under point 6.6 but these were not applied in the period covered by this report.

Croatia reported that the following substances are covered by the GBRs on the intensive rearing of pigs:

- Ammoniacal nitrogen and nitrogen
- Ammonia
- Nitrites
- Phosphorus (total)
- Phosphorus (phosphates)
- Dust
- Pesticides
- Fuels
- Oils
- Chemicals
- Odour

The following substances are covered by the GBRs on the intensive rearing of poultry:

- Nitrogen (total)
- Phosphorus (total)
- Ammonia
- Dust
- Noise
- Odour

Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?

A permit application (i.e. before the permit is issued) will be followed by a mandatory inspection during which permit conditions based on General Binding Rules will be compared with individual permit conditions.

Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?

General binding rules are adopted in the form of a regulation which states that they are based on BAT.

Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?

According to the Act implementing the IED, the Ministry of Environmental Protection and Nature Conservation ('the Ministry') is responsible for amending General Binding Rules. In case of changes to the BAT, the GBRs can be changed through a simple procedure and in line with the opinion of other authorities responsible for specific environmental matters.

Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?
Provision on General Binding Rules include a reference to Directive No 2010/75/EU.
Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.
The (draft) General Binding Rules on activities relating to the rearing of poultry or pigs have been published on the Ministry of Environmental Protection and Nature Conservation website. Links were provided but were found to be non-functional[85].
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
In Croatia, developments in BAT are monitored using the official website of the European Commission, as is the procedure for issuing conclusions on BATs. Information on developments in BAT is compiled electronically.
Question 6.2 – How do competent authorities make that information available to the public concerned?
The Ministry publishes all relevant information on developments in BAT on its website, along with the requisite links to news and announcements.
Question 6.3 – Links to where the information can be found
Croatia provided a link to information that was found to be non-functional[86].
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
When an application is made to reconsider and update permit conditions, a detailed description of the installation is requested. This covers all planned changes which may affect the environment and relate to: ▪ nature, ▪ functioning, or ▪ scale of the installation. These provisions have been included in the implementing regulation (Article 23 of the Decree on the environmental permit, NN No 08/14), but were only included after the reporting period covered by this questionnaire. During the period covered by this report, the previous version of the Decree was the one in force at that time. Croatia provided a link to the relevant legislation but this was found to be non-functional[87].
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
Croatia reported that the main activity is defined by the operator according to Annex I to the Directive. Operators must provide justification for the choice of activity. The Ministry may agree with it or reject the operator's request. During the period covered by this report, the applicable version of the Decree was the one in force at that time.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
In cases of significant pollution, occupational safety or the need for alignment with new environmental quality standards, the Ministry examines the permit conditions as provided for in Article 114(1) of the Croatian Act.

[85] http://www.mzoip.hr/default.aspx?id=17074; http://www.mzoip.hr/default.aspx?id=17073
[86] http://www.mzoip.hr/default.aspx?id=8288
[87] http://www.mzoip.hr/default.aspx?id=10258

QUESTION 8 – Site closure (Article 22)
Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
Croatia reported that according to Article 111(8) of the Act, the activities or installations subject to a baseline report are: ▪ those involving hazardous substances - for which a report must be drawn up, or ▪ those which are potentially hazardous. Requirement for baseline reports is also included in other separate regulations permitting the use, production or discharge of hazardous substances. Up until now such activities have not been provided for in the procedures for issuing environmental permits as laid down in the Act. It is expected that these could be activities from category 5 of Annex I to the Directive, which covers hazardous waste processing activities, and activities under point 1.2 of that same Annex (according to the text of the IED, this corresponds to refining of mineral oil and gas). The Ministry determines whether soil and water contamination is possible. This is done in the following steps: ▪ The Ministry assesses whether an installation is covered by provisions requiring drawing up of a security report or other separate regulations permitting the use, production or discharge of hazardous substances. ▪ Should either of these cases apply, the Ministry requires the operator to present documentation which could contain relevant information and notifies and seeks evidence from the authorities competent for the relevant environmental compartments. This was not yet applicable in the period covered by this report.
Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?
Croatia reported the following information to be included in the baseline reports: ▪ data on the current and previous use of the locations (where possible), ▪ data on investigations into the state of the soil and groundwater which show the situation at the time the report was drawn up (where available), ▪ data on more recent investigations of the state of the soil and groundwater, taking into account the possibility of soil and groundwater contamination by hazardous substances used, produced or discharged by the installation concerned or which it will use, produce or discharge in future. This was not yet applicable in the period covered by this report.
Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?
Application of the Commission's guidance on drawing up the baseline report is provided for in subsequent rules, i.e. under Article 38 of the Decree on the environmental permit. Croatia explained that these guidelines are considered ministerial instructions and do not have the force of rules. This was not yet applicable in the period covered by this report.
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
In their request for an environmental permit, operators propose the means for assessing the state of the soil and groundwater. The following method is usually followed: ▪ Taking samples from piezometric wells (in the case of waste management centres); ▪ Checking the samples against water quality regulations. Soil analyses are conducted less frequently, one of the reasons for this being that there are no national norms for comparison. In the procedure conducted under the Industrial Emissions Directive, no such installations have been encountered so far.

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Competent authorities participating in the procedure of issuing environmental permits and with responsibility for specific environmental compartments have the most important role in deciding on the state of contamination of soil and water. These authorities can require that an environmental impact assessment is carried out to ascertain the situation, and can determine how this is to be done. Croatia notes that these assessments are not the same as the institutional assessment carried out in accordance with the rules on environmental impact assessment.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
As for question 8.2.b Croatia reports that the most important role in determining the significance of a risk is played by the competent authorities that participate in the procedure for issuing environmental permits. No further information is provided on the process applied to determine the whether the risks posed.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Croatia has not provided an answer to this question.
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
The Environmental Protection Inspectorate's Annual Work Plan and Annual Work Programme have been drawn up for 2013, which sets out the basis for environmental inspections and the programmes for routine environmental inspections. The plan and work programme set priorities for planning inspections, taking account of the risks and environmental impact of the operators activities with regard to air pollution and generation of waste, production capacity, the complexity of the technological process, potential risk from the use or storage of hazardous substances, the operators previous compliance with regulations and the need to apply new rules. The Annual Work Plan and Annual Work Programme set out the thematic inspections which are planned, including the inspection of IED installations. The Annual Work Plan is published on the Ministry website (a link was provided that was non-functional[88]). Coordination of inspection is covered by a June 2008 Agreement on coordination among environmental inspection services (a link was provided that was non-functional[89]).
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of the environmental risks of installations is currently being carried out in order to determine the frequency of inspections. The appraisal is being conducted using the IMPEL IRAM tool. Installations posing the greatest risk to the environment are to be inspected annually, while those presenting the least risk are to be inspected once every 3 years.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out where serious environmental complaints are received. The Croatian response does not refer to the other circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain information on the operator, the activity, documentation relating to the permit, decisions and concessions, a description of the technological process and means of handling waste generated, starting substances, energy products, monitoring of emissions, the maximum storage capacity for hazardous substances, risks owing to the quantity and use of hazardous substances, data on

[88] http://www.mzoip.hr/default.aspx?id=13531
[89] http://www.mzoip.hr/default.aspx?id=8913

the actions taken by the inspection services as regards the initiation of administrative procedures, the bringing of charges and checks of compliance with decisions and further obligations/measures. Minutes of the inspection are handed to the operator at the end of the inspection and once completed, the site visit report is sent to the operator within 2 months of the inspection. All reports are fully accessible to the public and, therefore, there have not been any circumstances under which such reports have not been made publicly available during the reporting period. It should also be noted that each quarter, details of coordinated inspections are made publicly available on the website of the Ministry, and an annual report is published on the activities of the Environmental Protection Inspectorate (a link was provided that was non-functional[90]).
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where measures are required to be taken by the operator following the inspection to address any irregularities, a deadline will be set for compliance with these. The inspector may also issue a decision and recommendation that penalties be applied.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The public are provided with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED and are informed at the earliest possible stage in each procedure, in order that they can participate in it. Where a request is made for a public debate, this will be held usually within 1 month of the request and the public have the opportunity to present their views at the debate.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to be public via the media (daily newspapers), on information boards of local government, and via the internet, including the website of the Ministry, counties, cities and municipalities. Information is made available on request at the local government offices in the area of the application. All relevant information is made available on the internet (a link was provided that was non-functional[91]).
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Croatia reported that emerging techniques are monitored by the Croatian IPPC Forum, established by decision of the Ministry. The work of the Forum is coordinated by the Croatian Chamber of Commerce. The business community also participates in this Forum. No further details of the Forum were provided.

[90] http://www.mzoip.hr/doc/Inspekcija/Izvjesce_IZO_2013.pdf
[91] http://www.mzoip.hr/default.aspx?id=15861

Cyprus

Analysis of the completeness of the report

Table A9: Completeness assessment of answers reported by Cyprus – IED

Question title	Question number(s)	Cyprus	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2	**N/A**	
	5.3	**N/A**	
	5.4	**N/A**	
	5.5	**N/A**	
	5.6	**N/A**	
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		**Document for question 9.2c is not published on the internet**
	9.3 (a) to (b)		**Document for question 9.3b is not published on the internet**
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Cyprus submitted a complete set of answers to the IED questionnaire.

Analysis of Cyprus's response

The table below contains the detailed analysis of the responses provided by Cyprus to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers provided.

Table A10: Cyprus – Response analysis table

CYPRUS
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Cyprus indicated that the following factors are considered when assessing a breach of permit conditions: ▪ the type and nature of hazardous substances that have been released into the environment; ▪ the total quantity of hazardous substances that have been released into the environment; ▪ the vulnerability of the local and neighbouring environment; ▪ the presence of workers on site at the installation and the nature of their work; and ▪ the presence of susceptible population groups in the vicinity of the installation, such as schools and hospitals.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Requirements to use BAT conclusions for setting permit conditions for installations are set out in the national legislation: the Law on Industrial Emissions (Article 26(4)(a)). This legislation also specifies that competent authorities are required to monitor updates to BAT conclusions and ensure that these changes are considered when setting permit conditions (Article 31). Information about the use of BAT conclusions for setting permit conditions is publically available in the Government Gazette and online. The response from Cyprus included a link to the relevant website[92].
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
The Law on Industrial Emissions includes provisions allowing competent authorities to set stricter operating conditions (Article 26(4)(b). The response does not include further details on how this has been done in practice.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Article 27(3) of the Law on Industrial Emissions stipulates that ELVs should be set on the basis that they do not exceed the emission levels associated with the BAT (such emission limit values are determined for the same or a shorter period of time, based on the same operating conditions as emission levels associated with best available techniques). ELVs may be set differently to those emission levels associated with the BAT with respect to time periods and operating conditions – in such cases, the competent authorities must review the results of emission monitoring at least once a year in order to ensure that emissions under normal operating conditions have not exceeded the emission levels associated with the best available techniques.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Provisions allowing competent authorities to set less strict ELVs are set out in Article 27(5)(a) of the Law on Industrial Emissions. Before granting a derogation it must be shown by the operator that achieving the emission levels associated with the BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to the geographical location/ local environmental conditions, or the technical characteristics of the installation.

[92] www.moa.gov.cy/environment

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
Cyprus indicated that it is the responsibility of the operator to develop a cost-benefit assessment based on appropriately detailed and relevant documentation. The assessment is then submitted to the Technical Committee for Environmental Protection for review. This committee is chaired by a representative from the Ministry of Labour, Welfare and Social Security and comprises representatives from six government departments, one representative from the Scientific and Technical Chamber of Cyprus (ETEK) and one from the Cyprus Federation of Environmental Organisations. The review is then sent to the competent authorities to inform their decision.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Emission limit values set in cases of derogations must not exceed the values set out in the annexes to the Law on Industrial Emissions, or those in the Directive 2010/75/EU (as stated in Article 27(5)(c) of the Law on Industrial Emissions). It is also stipulated that evidence to justify the derogation must accompany the permit, including the conclusions of the assessment and justification of the operating conditions imposed.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Provisions allowing competent authorities to grant temporary exemptions from the requirements of the Law on Industrial Emissions are set out in Article 27(6) of the legislation. Cyprus added that a temporary derogation may be granted for the testing and use of emerging techniques for a total period not exceeding nine months if, after the specified period, use of the technique is either halted or the activity achieves at least the emission levels associated with best available techniques.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
In Cyprus, BAT conclusions are used to inform the monitoring requirements, this is stipulated in Article 28(1) of the Industrial Emissions Law.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
According to Article 28(2) of the Industrial Emissions Law, the frequency of periodic monitoring is determined on a case-by-case basis for each installation, or in the general operating conditions.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
In accordance with the IED, periodic testing must be carried out at least once every five years on the groundwater and every ten years on the soil, unless such monitoring activity is part of a systematic appraisal of pollution risk. Cyprus included in its response the legislative reference (Article 28(3) of the Industrial Emissions Law).
QUESTION 5 – General Binding Rules (Article 17)
GBRs are not used for implementing Directive 2010/75/EU in Cyprus.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The competent authorities monitor and are required to keep up-to-date on the developments in best available techniques and the publication of new or updated BAT conclusions. This obligation is contained in Article 31 of the Industrial Emissions Law.
Question 6.2 – How do competent authorities make that information available to the public concerned?
Cyprus indicated that information on BAT developments, including the publication of new or updated BAT conclusions is made available to the public via reports published in the Government Gazette and posted on the Internet.

Question 6.3 – Links to where the information can be found
The response from Cyprus included a link toward the website where BAT development related information is available[93].
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Articles 33(1) and 33(2) of the Industrial Emissions Law stipulate that the competent authorities should periodically review all the terms of the permit and may request the operator to submit information including monitoring results of emissions along with other data. This information is used to compare the operation of the installation with regard to the BAT conclusions, and the BAT associated emission levels. Cyprus added that when reconsidering the terms of the permit, the competent authorities will use all the information arising from the monitoring of emissions and/or inspections.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
The 'main activity' of an installation is defined as the one that reaches the capacity thresholds as set out in Annex IV of the Law on Industrial Emissions and Annex I to Directive 2010/75/EU. Cyprus refers to this legislation when determining the main activity of an installation.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
Provisions are included in the Law on Industrial Emissions to review, and where necessary amend, permits (Article 33(5)). Permits may be amended in the following circumstances: ▪ where the pollution caused by the installation is such that the existing emission limit values of the permit need to be revised, or new values need to be incorporated in the permit in question; ▪ when, for the safe operation of the installation, other technical measures are required; ▪ where necessary, to ensure compliance with new or revised environmental quality standards (as stipulated in Article 30 of the Industrial Emissions Law or, respectively, Article 18 of Directive 2010/75/EU); or ▪ when their period of validity of the permit expires.
QUESTION 8 – Site closure (Article 22)
Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
Cyprus competent authorities have not completed the procedures to categorise activities that require a baseline report. At present, each case is examined individually on the occasion of its first application for a permit under the Industrial Emissions Law. Baseline report guidance document has been developed by the competent authorities which specifies that operators will examine the possibility of soil and groundwater contamination at the site from the relevant hazardous substances used, produced or released in the installation, according to the following procedures: a) Examination of any relevant hazardous substance, from the prepared list of hazardous substances that are present inside the boundaries of the installation, (associated with activities carried on at the installation including raw materials, products, intermediate products, by-products, emissions or waste) that might cause pollution of soil and groundwater on site, including the following: i. characteristics of the installation including infrastructure and/or containment mechanisms to prevent emissions, the nature and condition of insulation in the area, location of drains or other possible pathways permitting migration of hazardous substances; ii. methods of handling of raw materials or products containing hazardous substances including packaging, transportation, use, storage areas, pollution prevention measures; iii. methods of waste management for materials containing relevant hazardous substances and any pollution prevention measures, especially in relation to site and waste storage tank characteristics, including capacity, type (over ground/underground, construction

93 http://www.moa.gov.cy/moa/environment/environment.nsf/All/707384A9F2B09E1DC2257E61002F5453?OpenDocument

material/water proofing, closed/open type) and location of the holding tanks;

iv. the circumstances under which emissions may arise e.g. accidents/unforeseen incidents, routine operations, expected emissions; and

v. correlation between the quantities of hazardous substances and environmental impact.

a) description of the installation area, including topographical, geological/hydro-geological and hydrological features and the meteorological data of the region, in order to identify the characteristics of soil and groundwater in the specific part of the site where hazardous substances are delivered, stored, used, transferred and discharged within the installation.

b) Based on the information collected as per paragraphs (a) and (b) above, operators are able to determine whether there is a possibility of soil and groundwater contamination at the installation site.

c) If the findings prove negative, they must be duly justified, and if the finding is positive (i.e. there is a possibility of pollution) the procedure described below in paragraph (c) should be followed.

d) For each hazardous substance likely to cause pollution of the soil and groundwater at the installation site, operators must prepare a table containing the following information:

i. the manner and location where the substance is stored, used and transported within the installation,

ii. the quantity/concentration,

iii. the list of possible sources of pollution associated with the substance in question,

iv. the conditions that can lead to the release of sufficient quantities posing a risk of pollution in the specific area,

v. the location at risk if emission occurs,

vi. the impacts on water and soil in the event of emission.

Question 8.1 (c) – What information are operators required to include in baseline reports (Article 22(2))?

The baseline report must contain, as a minimum:

a) information on the present use and, where available, past uses of the site, and

b) where available:

i. details of soil and groundwater test measurements reflecting the current situation when the baseline report was prepared, or

ii. new measurement data, taking into account the likelihood of contamination of soil and groundwater by the dangerous substances to be used, produced or released by the specific installation.

iii. Taking into consideration the minimum requirements laid down by the Law as well as the 'European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions', the competent authorities have prepared a 'Baseline Report Guide' to assist operators with regard to actions to be taken and the information that must be included in the baseline report.

In this context, the baseline report should include a series of tests which can be fully reproduced when the installation is no longer in active operation, together with the test results, to facilitate a quantitative comparison.

The baseline report should also provide a clear and precise description of the following:

a) Information on the present use and the activities of the facility, and where available, for uses of the site in the past.

b) The site and the characteristics of ground and surface waters.

c) A list of the hazardous substances to be used, produced or released by the installation and included or not included in the baseline report, making clear which substances are excluded or included and why.

d) Report on groundwater associated with the hazardous substances and the concentration, nature and extent.

e) The data used to determine the state of soil and groundwater. The methods used to sample substrates and map sampling points, justification of frequency, selected methods and chosen sampling points.

f) The analytical techniques used for the determination of concentrations of the relevant hazardous substances in soil and groundwater with reference, where appropriate, to national or international standards used and any existing guidelines by Member States at the time of the survey.

g) The methods used to assess the state of pollution of the area and the location of all intervention

works, drains, drilling and other sampling points. To this end, the following should be provided:

i. summary tables of chemical analyses and monitoring of the area (concentrations, dates, sampling/monitoring points)

ii. evaluation of the results of research in the field based on the design of a theoretical model, for assessment of potential future sources of pollution.

iii. Results obtained from pollution situation reports on the area, including:

a. description of the type, nature and spatial distribution of pollution,

b. an indication as to where they could reach any relevant hazardous substances released.

h) The manner in which the results are verified and their statistical or methodological certainty/uncertainty.

i) All relevant technical data (measurements, calibration certificates, analytical standards, certifications, maps, recording sampling, etc.), so as to ensure that, given permanent shut-down, a valid quantitative comparison can be made.

The guide produced by Cyprus to assist competent authorities and operators emphasises that it is in the interests of the operator to ensure that quantification is sufficiently accurate as to permit meaningful comparison when activities are permanently shut down.

Question 8.1 (d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

The Commission guidance formed the basis the baseline report guidance document referred to above.

Question 8.2 (a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

To assess the state of soil and groundwater when activities are permanently shut down, operators will be expected to repeat the steps and procedures they followed during preparation of the baseline report, as described in the answers to questions 8.1 (b) and 8.1 (c) as well as the requirement to conduct chemical soil and groundwater analyses in order to permit a quantitative comparison of the situation.

Question 8.2 (b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

Cyprus indicated that the competent authorities have not yet completed the procedures for this.

Question 8.2 (c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

Cyprus indicated that the competent authorities have not yet completed the procedures for this.

Question 8.2 (d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

Similarly, Cyprus indicated that the procedures for this have not yet been completed.

QUESTION 9 – Environmental inspections (Article 23)

Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?

An environmental inspection plan has been drawn up for the whole of Cyprus, for 2014. The plan contains all of the information set out in Article 23(3) IED. The plan is publicly available on the website of the Department of Environment though a specific web-link to the plan was not provided.

A programme for routine environmental inspections has been drawn up for the period 1 July 2014 to 31 December 2014, which sets out the dates for inspections at each installation, and the details of the inspectors carrying out the inspections. The programme of environmental inspections is not published and, therefore, is not publicly available.

Questions 9.3 to 9.3 (b)– Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

The systematic appraisal of environmental risks is based on the criteria set out in Article 23(4) IED, which is transposed by Law 184(I)/2013. The IMPEL IRAM risk assessment tool is used, which uses a number of criteria such as the environmental impacts from the operation, emission levels, and the sensitivity of the

local environment, and weights are assigned to each criterion. It also takes into account the complexity of inspections at each facility, the behaviour of operators and the environmental management methods applied. The tool is used to classify installations into categories depending on the degree of environmental risk and calculate the frequency of inspections, as well as time required and difficulty of each inspection. For the highest risk installations, inspections are to be carried out annually, whereas for those with a lower risk, this may be carried out every three years.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED. The timing of these will be determined following an assessment of the seriousness and urgency of the case, and the estimated risk of any adverse impacts on the environment and human health.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain background information on the installation and the reasons for carrying out the inspection, details of the inspector, information on the current operating conditions, findings of the inspection and any breaches of the permit conditions or legislation, compliance measures, timescales for compliance with the inspectors recommendations and conclusions and details of any further measures required. The competent authority is required to notify the operator of the site visit report within 2 months of completion of the inspection, though the Cypriot response does not state how this is done. The report is also made publicly available on request at the offices of the competent authority. Confidential information or data in the site visit reports are not made available to the public, in accordance with the provisions of Directive 2003/4/EC.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Cyprus indicated that in order to ensure compliance with any 'necessary actions' a further site inspection is carried out within 6 months of the first.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Cypriot response refers to the provisions of Law 184(I)/2013, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. An announcement is to be published in the Official Gazette of Cyprus within 2 weeks of receipt of an application, informing the public that it is available for inspection at the offices of the competent authority, and that any interested person may submit comments within 35 days from publication of the announcement. For certain IED installations the public announcement must also be made in 2 widely circulated newspapers, and on the internet. The competent authority is to evaluate and take account of any comments received, and will decide whether to hold a public hearing.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public through announcements in the Official Gazette of Cyprus and 2 daily newspapers (informing the public that information is available for inspection at the offices of the competent authority) and via the internet. All relevant information is made available on the internet at the following links: ▪ http://www.mlsi.gov.cy/mlsi/dli/dliup.nsf/dmlnews_gr/dmlnews_gr?OpenDocument ▪ http://www.moa.gov.cy/moa/environment/environment.nsf/de24_gr/de24_gr?OpenDocument ▪ http://www.moa.gov.cy/moa/environment/environment.nsf/All/1B06F04E32B0005AC2257E61002F65AA?OpenDocument
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
The competent authorities encourage, as appropriate, the development and application of emerging

techniques, in particular those identified in BAT reference documents in accordance with Article 44 of the Law on Industrial Emissions.

Czech Republic

Analysis of the completeness of the report

Table A11: Completeness assessment of answers reported by Czech Republic – IED

Question title	Question number(s)	Czech Republic	Comments
Non-compliance (Article 8)	1		
Permit conditions (Article 14)	2.1		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	3.1		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	4.1		
	4.2		
	4.3		
General Binding Rules (Article 17)	5.1 (a) to (b)		
	5.2	N/A	
	5.3	N/A	
	5.4	N/A	
	5.5	N/A	
	5.6	N/A	
Developments in BAT (Article 19)	6.1		
	6.2		
Reconsideration and updating of permits (Article 21)	7.1		
	7.2		
	7.3		
Site closure (Article 22)	8.1 (a) to (d)		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	9.1 (a) to (c)		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.49.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		
Emerging techniques (Article 27)	11		

Czech Republic has provided a complete response to the questionnaire and one gap was identified related to an unclear response to question 7.1.

Analysis of the Czech Republic's responses

The table below contains the detailed analysis of the responses provided by the Czech Republic to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A12: Czech Republic – Response analysis table

CZECH REPUBLIC
QUESTION 1 – Non-Compliance (Article 8)

Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Competent entities, which are entitled to impose sanctions or restrict and/or close down operations on the basis that the above-mentioned danger exists, do so by means of a decision. Pursuant to the requirements generally in force resulting from Act No 500/2004, a decision must be accompanied by a justification – reasons for the verdict or verdicts in a decision must be presented, including supporting documents used for returning the verdict, considerations taken by the administrative body during evaluation of the supporting documents and during the interpretation of legislation, and information as to how the administrative body has dealt with suggestions and objections from participants and with their opinions on the supporting documents on the basis of which the decision has been taken. The entities may use internal documents, previous decisions, etc. as supporting documents. Considering the wide range of possible situations, there is no specific legislation regulating this area – the competent entity must assess the particular situation in relation to the general requirements and describe its procedure in the justification.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Section 13(5) of Act No 76/2002 ensures that the permitting authority uses BAT as reference for setting conditions. According to the above-mentioned provision the permitting authority shall state in the justification of its decision (i.e. in the integrated permit or the amendment thereof) what BAT conclusions and reference documents have been used as a basis for imposing the binding conditions for operation of the installation. Furthermore, pursuant to Section 4(1) of Act No 76/2002 the operator has, within the framework of a request for the integrated permit, to compare the proposed binding conditions for operation with the BAT conclusions. An independent evaluation may then be prepared by a competent person on the basis of a request submitted by the permitting authority.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
The Czech Republic reported that the permitting authority may set stricter permit conditions according to Section 15(1) of Act No 76/2002. Requirements regarding the justification for such a decision are covered under question 2.1.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
The procedure is described in Section 14 of Act No 76/2002. According to that section, authorities shall set emission limits that ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in the decisions of the conclusions on best available techniques, in one of these ways: a) setting emission limit values that do not exceed the emission levels associated with the best available techniques; These emission limits are expressed in the same period as those emission levels associated with the best available techniques, or for a shorter period and under the same reference conditions, or b) setting different emission limits than those specified in subparagraph a), in terms of values, periods of time and reference conditions. Where the procedure referred to in point b) is followed, authorities shall at least once a year, assess the results of emission monitoring in order to ensure that emissions under normal operating conditions have not exceeded the emission levels associated with BAT. The Czech Republic reported that they did not have adequate experience with setting ELVs as required by the IED during the reporting period and for that reason only a reference to the transposition of Art.15 of the IED was provided in the reply.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
The Czech Republic reported that the procedure for granting derogations is described in Section 14 of Act No 76/2002. An expert opinion is drafted and is used as a supporting document for the derogation. The Czech Republic has setup a procedure for assessing and granting derogations. A guidance document has been issued related to the derogation procedure and, more specifically, regarding the issue of economic

evaluation of the achievement of emission levels associated with the best available techniques and of competent assessment. Calculation tables in Microsoft Excel format accompany the guidance document to facilitate economic calculations for potential applicants. The above-mentioned documents are available online (www.mzp.cz/ippc). The Czech Republic indicated that at the time of preparing the response to the IED questionnaire they did not have practical experience in authorising any derogations. The Czech Republic also reported that permits concerned are under review.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
As stated under Question 3.2, the Czech Republic has designed a procedure for assessing and granting derogations. A guidance document has been issued related to the derogation procedure and, more specifically, regarding the issue of economic evaluation of the achievement of emission levels associated with the best available techniques and of competent assessment. Calculation tables in Microsoft Excel format accompany the guidance document to facilitate economic calculations for potential applicants. The above-mentioned documents are available online (www.mzp.cz/ippc).
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
The procedure established by Czech Republic favours time-limited derogations compared to derogations without any time limitation. Furthermore, it is mentioned that the operating conditions of an installation under derogation cannot be less strict than the operating conditions laid down by special environmental legislation (e.g. related to air pollution).
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
The Czech Republic indicated that Section 14(9)(3) of Act No 76/2002 enables the granting of a temporary derogation for the testing and use of emerging techniques. At the time of preparing the response to the IED questionnaire there was no practical experience with granting a temporary derogation for testing and use of emerging techniques.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Article 14(8) of Act No 76/2002 on integrated prevention ensures that the BAT conclusions are used for defining the monitoring requirements. The article states that in determining requirements for emissions monitoring, authorities must use the monitoring requirements that are described in the conclusions on best available techniques, if any.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The frequency of monitoring is defined according to the provisions Article 14(8) of Act No 76/2002 on integrated prevention. The article mentions that authorities set the minimum frequency of monitoring in order to ensure regular monitoring of soil at least once every 10 years, and regular monitoring of the groundwater once every five years, unless such monitoring is based on a systematic appraisal of the risk of contamination.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
The Czech Republic reported that the procedure for systematic appraisal of risk of contamination follows the preparation of the baseline report according to the guidance document concerning the issue of the baseline report (chapter 4.5.). This is based on existing legislation in the field of geology, in particular Implementing Decree No 369/2004 (Annex 11).
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
The Czech Republic does not use General Binding Rules for implementing the Directive.
Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection

equivalent to that achievable with individual permit conditions' (Article 17(1))?
-
Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?
-
Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?
-
Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?
-
Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.
-
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The actions taken to ensure that competent authorities follow the publications of any new or updated BAT conclusions are: ▪ Information is published in the integrated prevention information system of the Ministry of the Environment (www.mzp.cz/ippc) and in the IPPC portal of the Ministry of Industry and Trade (www.ippc.cz); ▪ Information is provided during the regular meetings of the working group of authorising and supervisory bodies of the Ministry of the Environment (approximately every six months); ▪ Information is also shared during the national Forum for exchange of information on BAT (once a year).
Question 6.2 – How do competent authorities make that information available to the public concerned?
Information is published in the integrated prevention information system of the Ministry of the Environment (www.mzp.cz/ippc) and in the IPPC portal of the Ministry of Industry and Trade (www.ippc.cz).
Question 6.3 – Links to where the information can be found
Information can be found in the following web page: www.mzp.cz/ippc
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
The Czech Republic reported that the information requested includes: ▪ Information required for comparison with the BAT conclusions as described in the guidance document concerning the issue of economic evaluation of the achievement of emission levels associated with the best available techniques and of competent assessment. ▪ Information about other operating conditions when this information is not available to the authority from the application or other documents. ▪ Further reference was made to a 'tabular comparison' in the Czech response. However, this reference was unclear and so is not specifically included in the analysis above.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
The guidance document concerning the issue of economic evaluation of the achievement of emission levels associated with the best available techniques and of competent assessment describes, in Section 2.2, how the main activity of an installation is to be determined. This section mentions that in the determination of the main activities the following aspects should be taken into account: ▪ The purpose of industrial activity which is carried out in the installation;

- The major products produced;
- The impact of the activity on the environment (sources of significant pollution).

The main activity can also be determined based on the alternative definition of the main activity for the purpose of reporting to the European Pollutant Release and Transfer Register.

The link for the guidance document is: http://www.mzp.cz/www/ippc4.nsf/b77a7a146f29c439c1256cda0034ce22/ff25a67616f160acc1257d5d00435eb4?OpenDocument

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

The Czech Republic reported that in such cases the permitting authority is obliged to commence the review itself (pursuant to Section 18(2)(b)(c) and (d) of Act No 76/2002). The incentive for permit reconsideration/update can then be:

- The legislation which sets out the environmental quality standards;
- Findings from other monitoring or review activities;
- A notification submitted by an operator, etc.

QUESTION 8 – Site closure (Article 22)

Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

The decision to require a baseline report is made in relation to the dangerous substances of relevance to a particular installation on a case-by-case basis. However, the following activities are likely to involve the use of hazardous substances and require a baseline report to be made:

- 1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more
- 1.2. Refining of mineral oil and gas
- 1.3. Production of coke
- 1.4. Gasification or liquefaction of (a) coal or (b) other fuels in installations with a total rated thermal input of 20 MW or more
- 2.1. Metal ore (including sulphide ore) roasting or sintering
- 2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour
- 2.3. Processing of ferrous metals as defined under (a) to (c)
- 2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day
- 2.5. Processing of non-ferrous metals as defined under (a) or (b)
- 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3
- 3.1. Production of cement, lime and magnesium oxide as defined under (a) to (c)
- 3.2. Production of asbestos or the manufacture of asbestos-based products
- 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day
- 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day
- 3.5. Manufacture of ceramic products by firing with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m3 and with a setting density per kiln exceeding 300 kg/m3
- 4.1. Production of organic chemicals as defined under (a) to (k)
- 4.2. Production of inorganic chemicals as defined under (a) to (e)
- 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers)
- 4.4. Production of plant protection products or of biocides
- 4.5. Production of pharmaceutical products including intermediates
- 4.6. Production of explosives
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k)

- 5.2. (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour
- 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v)
- 5.3. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of activities (i) to (iv)
- 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste
- 5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated
- 5.6. Underground storage of hazardous waste with a total capacity exceeding 50 tonnes
- 6.1. (a) Production in industrial installations of (a) pulp from timber or other fibrous materials or (b) paper or card board with a production capacity exceeding 20 tonnes per day
- 6.1. (b) Production in industrial installations of (c) one or more of the following wood-based panels: oriented strand board, particleboard or fibreboard with a production capacity exceeding 600 m3 per day
- 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day
- 6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day
- 6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day
- 6.4. (b) Treatment and processing, other than exclusively packaging, of raw materials as defined under (i), (ii) or (iii)
- 6.5. Disposal or recycling of animal carcases or animal waste with a treatment capacity exceeding 10 tonnes per day
- 6.6. Intensive rearing of poultry or pigs as defined under (a), (b) or (c)
- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year
- 6.8. Production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitization
- 6.9. Capture of CO2 streams from installations covered by this Directive for the purposes of geological storage pursuant to Directive 2009/31/EC
- 6.10. Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m3 per day other than exclusively treating against sapstain
- 6.11. Independently operated treatment of waste water not covered by Directive 91/271/EEC and discharged by an installation covered by Chapter II

The possibility of soil and groundwater contamination is evaluated based on the criteria derived from legislation in the field of chemicals and of soil and water protection. More details can be found in Annex No 2 to Implementing Decree No 288/2013 (chapter 5) and in the guidance document concerning the issue of the baseline report (chapter 2).

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

The Czech Republic reported that the requirements for the baseline report are set out in Annex No 2 to Implementing Decree No 288/2013. Required information relates especially to:

- Identification of the installation;
- Delimitation of the area concerned and dangerous substances;
- Geological analysis ('supporting report');and
- State of pollution (parameters and how to verify them).

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

The Czech Republic mentioned that the preparation of the guidance by the Commission on baseline reports was delayed in comparison with transposition and implementation deadlines of the IED. However, the draft Commission report had been taken into consideration. The Czech Republic reported that the primary basis for the content of the baseline reports was the Directive itself and an effort had been made to make as much use as possible of the existing legislation and methodology in this field, as previously introduced at national level (e.g. in the field of geology, protection of water, chemicals, etc.).
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
The Czech Republic reported that Annex No 2 to Implementing Decree No 288/2013 – chapter 7.2 specifies the verification method to be used to assess the state of soil and groundwater contamination. This Decree is applied directly in the baseline report in relation to a specific installation and specific indicators.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
The Czech Republic reported that decisions are taken within the framework of the integrated permit or, as the case may be, the amended permit, after the values of indicators stated in the baseline report have been verified. The integrated permit expires only once the conditions laid down have been met, including those concerning soil and groundwater remediation. Pursuant to the requirements in force under Act No 500/2004 a decision to allow a permit to expire (and consequently for significant pollution of soil and groundwater to be determined to no longer exist) must be accompanied by a justification including the supporting documents used for taking that decision, the considerations guiding the administrative body during evaluation of those documents and when interpreting the legislation, and information as to how the administrative body has dealt with suggestions and objections from participants and with their opinions on the documents supporting the decision. The Czech Republic reported that the particular procedure has not yet been fully set up and that, at the time of submission of the questionnaire response, the competent authority must assess the particular situation in relation to general requirements and describe its procedure in the justification.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
The Czech Republic reported that they follow the same procedure as described in question 8.2.b.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
The Czech Republic reported that they follow the same procedure as described in question 8.2.b.
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
Environmental inspection plans have been drawn up for IED installations, and are to be updated annually. These are required to contain all of the information set out in Article 23(3) IED and set out an evaluation of the degree of risk associated with the installation and the frequency of inspections. The Plan of Action for 2013 is publicly available on the website of the Czech Environmental Inspectorate (http://www.cizp.cz/O-nas/Plany-cinnosti). Programmes for routine environmental inspections have been drawn up by individual Area Inspectorates of the Czech Environmental Inspectorate for individual installations for each quarter and are available to the regional authorities. The programmes contain details of the operators and installations, the type and scope of inspections and the appointment of an inspection administrator. As the programmes include details of the planned inspections, these are not publicly available.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The environmental risks of installations are 'systematically appraised' based on the criteria set out in Article 23(4) IED: the potential and actual impact of the installation on human health and the environment, the level and type of emissions, the sensitivity of the local environment and risk of accidents, the history of compliance with the permit conditions and participation of the operator in an environmental management scheme. In addition to the risk assessment based on the IMPEL IRAM tool, use has also been made of supporting criteria such as those used in SEVESO II, the environmental approach and the operators conduct over the last 5 years. The criteria for determining the frequency of site inspections are set out in the Plan of

Action for 2013 (see link above) and the IMPEL IRAM tool.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED. The Czech response also refers to 'other' circumstances, but does not elaborate on what these are.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports are based on an approved template prepared by the Czech Environmental Inspectorate and the Regional Public Health States and contain details of the installation, the scope of the inspection and time period covered, the date of the inspection, and the findings and conclusions. The Czech response states that the operator is notified of the site visit report by means of data boxes, though it is not clear what this entails. The site visit reports are made publicly available by means of the integrated prevention information system (www.mzp.cz/ippc). There have been no cases in which the reports have not been made publicly available during the reporting period.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where further measures are required to be taken by an operator following an inspection, this is enforced by means of sanctions or imposing remedial actions. The competent authority also has the power to review the conditions of the permit, and in exceptional cases may shut down or suspend operations.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Czech response refers to the provisions of Act No 76/2002, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. The public may either register as a participant in the procedure or is able to submit comments during a period of 30 days following publication. Details of the application and where it can be inspected and copies made are provided as part of this process.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is to be made available to the public through the integrated prevention information system (www.mzp.cz/ippc). All relevant information is, therefore, made available on the internet.
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
The Czech Republic reported very limited experience with support for emerging techniques due to the fact that the process of IED transposition was finished in 2013The Czech response mentions that emerging techniques should be incorporated into documents related to the preparation of the Operational Programme Environment for the period 2014–2020 (in the area of waste management, air and water protection) and also in the strategic document on waste (the documents are currently in preparation). The Ministry of the Environment of the Czech Republic is not currently planning a specific tool to support Emerging Techniques and is planning, instead, to alter existing/traditional instruments which supporting environmental innovations in industry.

Denmark

Analysis of the completeness of the report

Table A13: Completeness assessment of answers reported by Denmark – IED

Question title	Question number(s)	Denmark	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Denmark provided a complete response to the questionnaire.

Analysis of Member State responses

The table below contains the detailed analysis of the responses provided by Denmark to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A14: Denmark – Response analysis table

DENMARK
QUESTION 1 – Non-Compliance
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Denmark reported that this issue is regulated by the Order of Environmental Permits. The conditions laid down in the environmental permit must ensure that the requirements of § 18 of the Order are met (this paragraph states that permits cannot be issued unless the competent authority establishes that the installation has taken the necessary measures to prevent and control pollution by the use of BAT and that the activity can be operated without causing environmental pollution). When relevant, the operator is required to immediately report to the approval authority when permit conditions are not complied with. The operator is required to suspend operations (or the relevant part of it) if the breach of the permit conditions poses an immediate danger to human health or significantly threatens to adversely affect the environment (until the conditions are assured). It also establishes a requirement that the operator should immediately take the necessary measures to ensure that the conditions are assured.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Denmark reported that according to §24 and §26 and Annex 3 of the Order of Environmental Permits the approval authority must base the approval of environmental permits and reconsideration or updating of permit conditions on relevant BAT conclusions. In this context the authority must apply all relevant BAT conclusions. Furthermore, it should be clear from the decision accompanying the permit how each relevant BAT conclusion has been translated into the permit. The authority must reconsider and update a permit when the Commission has published BAT conclusions relating to the company's main activity (§ 35). Once the BAT-conclusions are published at the EU level, BAT conclusions are added to Danish Law through Annex 7 of the Order of Environmental Permits. Denmark provided the following links to further information: ▪ http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/ - is a website containing general information on the principles of BAT. ▪ http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/bat-i-godkendelsessager/ - provides information on application of BAT conclusions for both companies undertaking IED Annex I activities as well as competent authorities. ▪ http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/bat-i-revurderingssager/ - provides details on applying BAT conclusions when reviewing the permit. It states that the permits must be re-considered within four years of the publication of the relevant BAT document. ▪ http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/brug-af-bref-dokumenter/ - provides information on the use of BREFs when deciding on permit applications. ▪ http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/bat-og-afgoerelser/ - provides further information on BAT conclusions and the difference between BAT conclusions and BREF. ▪ https://www.retsinformation.dk – provides a searchable database of Danish legislation.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
The approval authority may set stricter conditions than those achievable by the use of BAT as described in BAT conclusions if the BAT in the approved permit, order or in standard terms, is stricter than BAT conclusions. Denmark reports that another possibility to set stricter conditions is if § 18 paragraph. 1, pt. 2 of the Order of Environmental permits applies. However, the response did not provide further information on what these conditions are. Furthermore, the authority should assess whether the areas affected by the activity are in such a condition that there is a need to impose stricter requirements than would be achieved through the application of BAT. This may be the case, for example, when an activity impacts upon a Natura 2000 site. Guidance and information on derogations from BAT is publicly available using the following link: http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/fravigelser-fra-bat/
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article

15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

The main criteria for authorities when establishing emission limits are included in the following documents:

- Air pollution - DEPA Guideline 2/2001 on restricting airborne pollution from activities: Vejledning fra Miljøstyrelsen nr. 2 2001: "Luftvejledning, Begrænsning af luftforurening fra virksomheder"
- Air pollution - DEPA Guideline 2/2002 B-value guidance, summarising B values (emended in 2008): Vejledning fra Miljøstyrelsen nr. 2 2002:"B-værdivejledningen, Oversigt over B-værdier"
- Noise – DEPA Guideline nr. 5/1985 on external noise fra industries: Vejledning nr. 5/1984:"Ekstern støj fra virksomheder"
- Odour – DEPA Guideline nr. 4/1985 on restricting odour nuisance from industries: Vejledning fra Miljøstyrelsen: "Begrænsning af lugtgener fra virksomheder
- Waste water - Guidance on the Order on waste water permits, etc., under Chapters 3 and 4(5) of the EP Act of 1999 (waste water guidance) from December 2007, amended in 2010 and 2011: Bekendtgørelse om spildevandstilladelser mv. Efter miljøbeskyttelseslovens kapitel 3 og 4 (BEK nr 1448 af 11/12/2007).

The application of the contents of these documents ensure that the emission levels set in the permit conditions are associated with the BAT.

Regarding BAT tools, the following guidelines are available in Denmark to assist in setting appropriate ELVs:

- Livestock/Intensive rearing of poultry or pigs – DEPA introduction to setting the ELV by using BAT ("Introduktion til Miljøstyrelsens vejledende emissionsgrænseværdier opnåelige ved anvendelse af den bedste tilgængelige teknik (BAT) for husdyrbrug omfattet af husdyrgodkendelsesloven § 11 og § 12", Miljøministeriet – Miljøstyrelsen 2010).

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

Denmark reported that no derogations as set out in article 15(4) have been granted to date, and thus the authorities do not have experience in this area yet. They report that a limited and general guidance is provided at: http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/fravigelser-fra-bat/

§ 27 of the Order of Environmental Permits states that the approval authority in specific cases can allow derogations from emission levels set out in BAT conclusions if the authority assesses that:

1) compliance with the emission levels would entail disproportionate costs compared to the environmental benefits due to the plant's geographical location, local environmental conditions or plant technical characteristics,

2) the derogation would not cause significant pollution in violation of § 18 paragraph. 1, pt. 2, and

3) a high level of protection of the environment as a whole will be ensured.

The approval authority's assessment and justification for the derogation must be indicated in the authorisation or decision of reassessment. The Environmental Protection Agency must be informed on any derogations granted. If the authority in a particular case estimates that BAT conclusions can be derogated from, the reasons must be stated in the decision. Derogations can only be granted in exceptional cases (no further details provided on this by Denmark).

When derogations start to be granted and Denmark starts to gain some experience in handling assessments for derogations cases of derogations the Environmental Protection Agency will advise the European Commission accordingly. Denmark provided a link where further information on how to apply for a BAT derogation and the legal basis for such derogations to be granted is available[94].

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

Denmark reported that if an operator/company wishes to derogate from the BAT conclusions, the operator/company must argue why such a derogation is warranted in its application. The operator/company must explain the reason for the need for derogation, including the financial implications. The approval authority must determine whether the BAT conclusions can be derogated from on a case-by-case basis, and state the reasons for their decision. Whether a derogation is granted depends on the individual assessment of the approval authority for each application.

The Danish approval authorities have not yet granted derogations as set out in article 15(4), and thus the

[94] http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/fravigelser-fra-bat/

authorities do not have experience in that area yet. The Danish Environmental Protection Agency has, thus far, provided general guidance regarding the subject[95]. Denmark reported that it is planning to expand this guidance, inspired by the Impel project "Sharing of draft proposals between Member States for implementing derogations from BAT-AELs under Article 15 paragraphs (4) and (5) of the industrial emissions Directive 2010/75/EU" managed by the Scottish Environment Protection Agency in partnership with the Department of the Environment Northern Ireland. This will include examples and experience concerning when derogations can be used and how. Denmark reported that they require further experience on determining the "benefit" in cost-benefit analysis. The mentioned Impel project gave some examples, but also pointed to a lack of information on this subject. Denmark was planning to start working on the guide in the summer 2015 and would be happy to contribute and learn from common EU guidelines if such are produced by the Commission.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
In its response Denmark referred to its response to question 3.2 concerning the process of assessing and granting derogations. However, no details on magnitude and duration of derogations has been presented in response to either of these questions. The information presented on the relevant website[96] states that the four-year period from the publication of the BAT conclusions cannot be postponed or extended in order to allow more time for the companies to comply. Derogations can be granted on the basis of permanent exemptions in certain areas or from certain limits only.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
In its response, Denmark referred to the response provided to question 3.2. However, the matter of temporary derogations under Article 15(5) is not presented in response to either of these questions.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
The monitoring requirements included in permits are based on BAT. If the facility is required to draw up a baseline report, the permit must provide conditions/terms regarding regular maintenance of the measures taken to prevent emissions to soil and groundwater, and conditions/terms regarding monitoring of soil and groundwater at the site in relation to the relevant hazardous substances (according to § 21, paragraph 2, pt. 1 of the Order of Environmental Permits).
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
As a general rule the monitoring of groundwater is to occur once every five years, whereas monitoring of soil is to occur every ten years. However, this frequency can be reduced by the approval authority if it is based on a systematic assessment of the risk of contamination (according to § 21, paragraph 2, pt. 2 of the Order of Environmental Permits).
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Denmark reported that they have yet not gained any experiences of setting lower frequency of monitoring of groundwater and soil than is required by the IED. Denmark will rely on EU guidance for monitoring of soil and groundwater and, on a case-by-case basis, will set the frequency of monitoring in line with the stated frequency in the Directive.
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
Denmark has implemented General Binding Rules in the following legislation: ▪ The Statutory Order of Large Combustion Plants (Bekendtgørelse nr. 1453 af 20. december 2012 om begrænsning af visse luftforurenende emissioner fra store fyringsanlæg). ▪ The Order of Waste Combustion (Bekendtgørelse nr. 1451 af 20. december 2012om anlæg, der forbrænder affald). ▪ The Order of Landfills (Bekendtgørelse nr. 719 af 24. juni 2011 om deponeringsanlæg)..

[95] Available at http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/fravigelser-fra-bat /

[96] http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/fravigelser-fra-bat/

- The Statutory Order of Environmental Approval of Animal husbandry (Bekendtgørelse af lov om miljøgodkendelse mv. af husdyrbrug nr. 1486 af 4. december 2009).
- The Order of use of Volatile Organic Compounds (Bekendtgørelse nr. 295 af 20. marts 2013 om anlæg og aktiviteter, hvor der bruges organiske opløsningsmidler (VOC-bekendtgørelsen)) and associated guidelines (please see 3.1) include the pollutants mentioned in the General Binding Rules.

The following pollutants are covered by the General Binding Rules:

- Sulphur dioxide and other sulphur compounds
- Oxides of nitrogen and other nitrogen compounds
- Carbon monoxide
- Volatile organic compounds
- Metals and their compounds
- Dust, including fine particulate matter
- Chlorine and its compounds
- Fluorine and its compounds
- Arsenic and its compounds
- Cyanides
- Substances and mixtures which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air
- Polychlorinated dibenzodioxins and polychlorinated dibenzofurans
- Organohalogen compounds and substances which may form such compounds in the aquatic environment
- Metals and their compounds
- Arsenic and its compounds
- Materials in suspension
- Substances listed in Annex X to Directive 2000/60/EC

GBRs cover the following activities:

- 1.1 Combustion of fuels in installations with a total rated thermal input of 50 MW or more
- 5.2. (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour
- 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste
- 6.6 Intensive rearing of pigs or poultry
- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.

Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?

An environmental permit takes a holistic approach to the assessment of the facility, in terms of the description, analysis, evaluation, setting the conditions etc. (all these are incorporated in the application and approval process). The holistic/integrated approach is a prerequisite for setting permit conditions and BAT is used to specify the conditions in the permit. The emission limit values in the statutory orders are considered minimum requirements.

Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?

The General Binding Rules are implemented in national Orders (see 5.1). According to § 18 and § 24 of the Order of Environmental Permits the approval authority cannot grant a permit unless the activity/facility has taken the necessary measures to prevent and restrict pollution by:

1) applying the BAT, and
2) ensuring that the activity can be performed at the location without causing pollution of the surroundings (i.e. pollution which would negatively impact vulnerable receptors and quality of the surroundings).

Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?
General Binding Rules are implemented in national Orders (see 5.1). According to § 19 of the Order of Environmental Permits (Bekendtgørelse nr. 669 af 18/06/2014 om Godkendelse af listevirksomhed), the approval authority shall consider and reflect the development of BAT, whenever developments in BAT are made available. Denmark reported that it will rely on the EU updates of BAT conclusions in order to inform the updating of its General Binding Rules (these will also be updated as a result of changes to the IED itself).
Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?
The General Binding Rules are implemented in national Orders (see response to question 5.1) that make explicit reference to the directive.
Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.
Denmark provided the following link to further information https://www.retsinformation.dk This is a link to the searchable Danish legislative database.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
When BAT-conclusions are made publicly available by the EU, they are added to Annex 7 of the Order of Environmental Permits in order for the public and the relevant authorities to be informed. The order can be viewed online and a link was included in the Danish response[97]. Furthermore, information is published and updated on the homepage of the Environmental Protection Agency[98]. Direct mails to competent authorities making them aware of the publication of BAT conclusions have also been used.
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Information on BAT is made available to the public at: http://miljogodkendelsesvejledningen.dk/opslag/princippet-om-bat/ - the website provides the information on how to find out what is considered the BAT for a given activity, and www.mst.dk – the website of the Ministry of Environment.
Question 6.3 – Links to where the information can be found
In addition the links provided above the following link was provided http://mst.dk/virksomhed-myndighed/industri/batbref/ albeit the link appears to be broken.
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
In Denmark the authority responsible for reconsideration of the permit will establish an overview of the current environmental permits, guidance documents for the sector, BAT conclusions/BREF documents, inspection reports and monitoring reports. The approval authority will inform the facility that a reconsideration process has been initiated and ask for additional information in relation to: ▪ An updated environmental technical description, information on new technologies (BAT), substitution of substances, possibilities for more flexibility in terms of production capacity etc, ▪ A request for additional measurements as part of the self-control monitoring programmes (egenkontrol). Such self-control monitoring could be a result of an Order (Påbud) in relation to a site inspection. The objective is to give the approval authority a better foundation for a future-proof permit (for example to unite a permit and associated addendums into one).
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

[97] https://www.retsinformation.dk/Forms/R0710.aspx?id=163512#Bil7
[98] http://mst.dk/virksomhed-myndighed/industri/batbref/

The "main activity" of an installation is defined and determined by the approval authority. This is determined by establishing which main activity under Annex I is the environmentally most significant for the specific installation.

Furthermore, information on the definition/term "main activity" is made available to the public via a Danish EPA website[99].

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

A permit is normally updated 8 years after the installation has been given the first permit or whenever a BAT-conclusion has been published and becomes legally binding. The approval authority can always reconsider relevant permit conditions in case of significant pollution, operational safety or significant changes in the best available techniques. The reconsidered permit conditions are issued as orders (Orders after the Environmental protection Act - påbud efter miljøbeskyttelseslovens § 41a).

QUESTION 8 – Site closure (Article 22)

Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

The supervisory authority makes an individual judgement/estimate of the activities undertaken, combined with the knowledge of the facility's history, the vulnerability of the area, inspection reports etc. This leads to a decision as to whether a baseline report is required or not.

Denmark has found the following activities involve the use, production or release of relevant hazardous substances:

- 1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more
- 1.2. Refining of mineral oil and gas
- 2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour
- 2.3. Processing of ferrous metals as defined under (a) to (c)
- 2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day
- 2.5. Processing of non-ferrous metals as defined under (a) or (b)
- 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3
- 3.1. Production of cement, lime and magnesium oxide as defined under (a) to (c)
- 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day
- 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day
- 3.5. Manufacture of ceramic products by firing with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m3 and with a setting density per kiln exceeding 300 kg/m3
- 4.1. Production of organic chemicals as defined under (a) to (k)
- 4.2. Production of inorganic chemicals as defined under (a) to (e)
- 4.4. Production of plant protection products or of biocides
- 4.5. Production of pharmaceutical products including intermediates
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k)
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v)
- 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day
- 6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day
- 6.4. (b) Treatment and processing, other than exclusively packaging, of raw materials as defined

[99] http://miljogodkendelsesvejledningen.dk/

under (i), (ii) or (iii)

- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year
- 6.10. Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m3 per day other than exclusively treating against sapstain

Denmark has not yet identified any soil and groundwater contamination at sites according to Art. 22(2). Upcoming possibilities of soil and groundwater contamination will be determined using EU guideline.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

A baseline report must include the information listed in Annex 6 of the Order of Environmental Permits. The following link was provided but does not appear to link to any specific information https://www.retsinformation.dk/Forms/R0710.aspx?id=163512#Bil6

Furthermore, information on baseline reports is available via the following websites:

http://mst.dk/virksomhed-myndighed/jord/ied-jordforurening/eu-kommissionens-vejledning/ - that includes a link to Commission guidance on the preparation of baseline reports.

http://miljogodkendelsesvejledningen.dk/opslag/saerlige-problemstillinger/basistilstandsrapport/ - that presents basic information on the requirements of baseline reports. According to the information published the baseline report should contain information on, inter alia, the current use of the land as well as information about the previous use of the land, if such information exists. Information on soil and groundwater measurements that reflect the state at the time of preparation, or new soil and groundwater measurements of substances that will be used, produced or released by the activity is also required to be submitted.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

The Commission's guidance has been the reference of the national guidance on the subject. Denmark provided the following link http://mst.dk/virksomhed-myndighed/jord/ied-jordforurening/eu-kommissionens-vejledning/, however this is the link to the Commission's guidance rather than to the national guidance.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Upon the definitive cessation of activities the Regulation of Soil Contamination Act, section 4 b ("Jordforureningsloven") can be applied. No further information has been reported by Denmark as to what this means in practice.

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

The decision on significance is based on the following guidance:

http://miljogodkendelsesvejledningen.dk/opslag/saerlige-problemstillinger/basistilstandsrapport

The information published on the website does not provide information on how the significance of pollution of soil or groundwater is determined.

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

Denmark reported that the Commission's guidance has been the reference for the national guidance on the subject, which is available at: http://mst.dk/virksomhed-myndighed/jord/ied-jordforurening/eu-kommissionens-vejledning/ However the link provided opens a website with the Commission's guidelines, not the national guidelines.

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

Similarly to question 8.2.c Denmark reported that the Commission's guidance has been the reference for the national guidance on the subject. The following link was provided: http://mst.dk/virksomhed-myndighed/jord/ied-jordforurening/eu-kommissionens-vejledning/

QUESTION 9 – Environmental inspections (Article 23)

Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))?

What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
Each of the supervisory authorities has drawn up environmental inspection plans, which are required to contain all of the information set out in Article 23(3) IED as set out in the Order of Environmental Inspections. The environmental inspection plans are publicly available on the websites of the 98 local municipalities or on the website of the Danish EPA[100]. Programmes for routine environmental inspections are drawn up by the local supervisory authorities according to the Order of Environmental Inspections. These set out the work programme for inspections. The programmes for routine environmental inspections are not publicly available as they are internal tools for use by the supervisory authority.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The environmental risks of installations are 'systematically appraised' based on the probability of an effect occurring and the impact of the effect on people and the environment. Five parameters are taken into account (environmental management system and environmental improvements, compliance with legislation, handling and storage of chemicals and hazardous liquid waste, emissions to air, soil and water, and the proximity to sensitive areas). These, therefore, reflect the criteria set out in Article 23(4) IED. By weighting these factors, an overall risk score is determined for each installation, which is used to establish the frequency of inspections of between 1 and 3 years. An IT system is used to support the routine planning of inspections based on the systematic appraisal of the environmental risks. Guidance on the environmental risk assessment was provided through the following link: http://www2.mst.dk/Wiki/Tilsyn.Risikovurdering.ashx#Tilsyn.Risikovurdering-Myndighed_bSådan_foretager_du_miljørisikovurdering_efter_modellen_i_miljøtilsynsbekendtgørelsenb_18
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports describe whether the installation complies with the Order of Environmental Inspection and as a minimum contain the name, address and company registration number of the activity/facility, the date and time of the inspection, the context and main issue for the site inspection, information on soil contamination, whether any injunctions, prohibitions or order have been given by the competent authority or further recommendations made, and the conclusions following inspection. The site visit report will be emailed to the operator within 2 months of the inspection and made publicly available on the website of the local municipalities and the Danish EPA. There have been no cases in which the reports have not been made publicly available during the reporting period, although any sensitive information will not be published as part of the report.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where further measures are required to be taken following an inspection, the supervisory authority will follow up on these and publish the conclusions of such actions on its website.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Danish response refers to the provisions of the Order on Environmental Permits which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. Upon receipt of an application, the approval authority is required to publish on its website information on the application, informing the public that they have the right to view the dossier and comment on the

[100] http://mst.dk/service/annoncering/annoncearkiv/2013/jul/hoering-af-miljoestyrelsens-miljoetilsynsplan-for-2013-2017

application within a period of 3 to 6 weeks from the publication. An indication should also be given of when, where and how the application documents will be made available.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
The approval authority must inform the public how information will be made available. All relevant information is made available on the internet on the websites of the local municipalities or the website of the Danish EPA[101].
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Denmark has established the Environmental Technological Development and Demonstration Programme (Miljøteknologiske Udviklings- og Demonstrations program - MUDP) with 70 million Danish Kroner in 2014 with the objective to develop new technologies and solutions. To date the following projects have been launched under the programme: 1) Better utilisation of water in dairy industry, and 2) Circular Asphalt Production in Denmark. More information is available at:http://mst.dk/service/nyheder/nyhedsarkiv/2014/mar/mudp-ansoegningsrunde-2014/ According to the website, the focus of the programme has been on water and climate change adaptation, circular economy and waste management (recycling), cleaner air and lower noise pollution, the modernisation of industry environmental performance and elimination of problematic chemicals.

[101] http://mst.dk/virksomhed-myndighed/industri/miljoestyrelsen-virksomheder/annoncering-af-miljoetilladelser-og-tilsyn/

Estonia

Analysis of the completeness of the report

Table A15: Completeness assessment of answers reported by Estonia – IED

Question title	Question number(s)	Estonia	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Estonia submitted a largely complete answer to the IED questionnaire. While no detail was provided in response to question 10.1 to outline key aspects of the legislative requirements for public participation requirements this gap was filled by internal research.

Analysis of Estonia's response

The table below contains the detailed analysis of the responses provided by Estonia to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers provided.

Table A16: Estonia – Response analysis table

ESTONIA
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The criteria to determine a breach of permit conditions is set out in Section 27(1) of the Industrial Emissions Act[102] (hereafter the IEA) (Tööstusheite Seadus) and is as follows: ▪ it is not in compliance with an environmental standard or with the volume of emissions permitted by an integrated environmental permit; ▪ it takes place on the basis of an integrated environmental permit but endangers the environment or the life, health or property of persons and such danger cannot be immediately eliminated; ▪ it is permitted only on the basis of an integrated environmental permit, but there is no such permit or it has not been submitted, or it has been issued by a person who has no authority to do so or without considering the environmental protection requirements established by law; ▪ it is permitted to operate only during a certain period of time or under certain conditions but it takes place outside that time or those conditions.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Provisions set out in section 41(2)(5) of the IEA stipulate that an integrated environmental permit must be supported by proof that the equipment and technology used in an installation are in compliance with the best available techniques along with a reference to applicable BAT conclusions or measures and techniques used for prevention or reduction of emissions.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
Estonia reported that where the environmental quality standards provided for in the IEA or other legislation prescribe more stringent requirements than those achievable with BAT, the operator is obliged to apply additional measures which guarantee compliance with the standards under the integrated environmental permit conditions – as stipulated in Section 41(4) of the IEA.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Estonia reported that if a decision on BAT conclusions has been published on an activity or a type of production process carried out within an installation, the issuer of permits shall determine ELVs to ensure that under normal operating conditions emissions of the installation do not exceed the emission level achievable with the best available techniques described in the relevant BAT conclusions (section 44(3) of

[102] For English translation of this legislation please see Estonian State Gazette website: https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/525062014009/consolide

the IEA). The ELVs shall be determined in the integrated environmental permit requirements for the same or shorter periods and under the same reference conditions as those used in the case of the techniques described in the BAT conclusions (section 44(4) of the IEA). By way of derogation, the issuer of permits may determine emission limit values that differ in terms of the values, periods of time or reference conditions. In such cases, the permitting authority shall assess at least once a year the results of emission monitoring and check whether the emissions of polluting substances under normal operating conditions remain in the limits of the emission levels associated with the best available techniques (Section 44(5) of IEA).
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Provisions to grant derogations are set out in section 44(6) of the IEA. The competent authority issuing the permit may determine less strict emission limit values where it is considered that the emission levels associated with the best available techniques would lead to disproportionately higher costs compared to the environmental benefits and such costs relate to the specific character of the installation arising from its: geographical location; local environmental conditions; or technical characteristics.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
In Estonia, the costs incurred and benefit obtained will be assessed using the criterion of 'available techniques'. Available techniques mean advanced techniques reasonably accessible to the operator, and the implementation of which in the area of activity is economically and technically viable, taking into consideration the costs and advantages, and which ensures the best compliance with the environmental requirements (Section 8(8)(2) of the IEA).
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Estonia indicated that limitations apply to the magnitude and duration of derogations; these are set out under Section 44(8) of the IEA.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Temporary derogations from the application of the best available techniques and the emission levels associated with the best available techniques may be granted in the case of testing and using emerging techniques. Equivalent parameters or technical measures determined on the basis of temporary derogation are applicable for the term of up to nine months, if the use of the emerging technique is stopped thereafter or at least the emission level associated with the best available techniques is achieved (Section 44(8) of IEA).
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Estonia confirmed that monitoring requirements are determined on the basis of the requirements for self-monitoring contained in the relevant BAT conclusions (Section 47(1) of IEA).
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
In accordance with the IED, the monitoring of groundwater contamination should be carried out at least once every five years (Section 41(2)(11) of the IEA). Monitoring of soil contamination should be carried out at least once every ten years (Section 47(3)(4) of the IEA).

Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Provisions for the systematic appraisal of risk of contamination are set out in the Environmental Monitoring Act (Riigi Teataja [State Gazette] I 1999, 10, 154, hereafter the EMA). The systematic assessment of the danger of contamination of the environment or its individual components (ambient air, surface/ground water and soil) is carried out in the framework of the environmental monitoring performed by national or local government bodies. Environmental monitoring is the continuous observation of the state of the environment and the factors affecting it, including environmental observations and analyses and the processing of data from observations (Section 2(1) of EMA). The purposes of environmental monitoring are to: ▪ assess and analyse factors affecting the environment; ▪ monitor, assess and predict the meteorological and hydrological factors and the changes therein; ▪ assess the state of the environment and forecast the changes therein; ▪ determine the state and amount of renewable natural resources; ▪ ascertain changes in the environment which require measures to be implemented or further investigation to be conducted; ▪ observe long-range transboundary pollution and conduct comparative investigations on the basis of international agreements; ▪ develop and supplement a system of indicators characterising the state of the environment; and ▪ obtain source information for the preparation of programmes, plans and development plans. (Section 2(2) of EMA).
QUESTION 5 – General Binding Rules (Article 17)
Estonia indicated that GBRs have not been adopted within the context of the implementation of the IED.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The publication of new or updated BAT conclusions is followed by the competent authority.
Question 6.2 – How do competent authorities make that information available to the public concerned?
Estonia made BAT conclusions accessible through the website of the Ministry of the Environment (section 60(5) of the IEA).
Question 6.3 – Links to where the information can be found
The response from Estonia included a link of where to find information on the development of BAT: www.ippc.envir.ee
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
The information listed in clauses 41 (2) 1) - 16) of the IEA are to be annexed to a permit application (as stipulated in section 28(3) of the IEA). Permits are then reviewed on the basis of all the available monitoring and inspection information along with other information concerning the best available techniques described in the BAT conclusions and the emission levels associated therewith (section 49(4) of the IEA).
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
In Estonia, the 'main area of activity' is determined on the basis of section 19 of the IEA. No further details are provided in the response.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
Permits may be reviewed in the following cases (as stipulated in Section 49(1) of the IEA): ▪ following the results of the regular inspection of an installation;

- after the publication of a decision on the BAT conclusions relating to the main activity of an installation;
- where an installation is not covered by any of the BAT conclusions, in the case where developments in the best available techniques allow for the significant reduction of the amount or hazard of emissions;
- where the contamination caused by the installation is of such significance that the emission limit values need to be reduced or additional emission limit values have to be set;
- where other measures besides the ones determined in the integrated environmental permit have to be used for ensuring safety of the operation of the installation;
- where the environmental quality standards are amended or new ones are established;
- where there are changes to the legal provisions on which the requirements of the permit are based; and
- where substantial changes in the nature or functioning of an installation have been imposed or are proposed.
- Estonia added that as stipulated in section 50 of the IEA, the requirements of a permit must be amended if:
- there are changes to the provisions in the legislation on which the requirements of the permit are based;
- the contamination is of such significance that adverse changes are caused to the site of the installation, wherefore the existing emission limit values need to be reduced or additional limit values need to be determined;
- changes in the best available techniques make it possible to substantially reduce emissions or the hazard created without imposing excessive costs;
- in order to prevent accidents, techniques different from those determined by the integrated environmental permit are required; and
- substantial changes in the nature or functioning of the installation have been imposed or are proposed.

QUESTION 8 – Site closure (Article 22)

Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

In Estonia, all installations that fall within the scope of the IED and operate in areas of activity that pose a high environmental hazard are considered to require a baseline report where the operation of the installation involves the use, production or release of hazardous substances into the environment (Section 57(1) of IEA).

Thus the list of activities requiring baseline reports includes the following activities:

- 1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more.
- 1.2. Refining of mineral oil and gas.
- 1.4. Gasification or liquefaction of (a) coal or (b) other fuels in installations with a total rated thermal input of 20 MW or more.
- 2.3. Processing of ferrous metals as defined under (a) to (c).
- 2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day.
- 2.5. Processing of non-ferrous metals as defined under (a) or (b).
- 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3.
- 3.1. Production of cement, lime and magnesium oxide as defined under (a) to (c).
- 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day.
- 3.5. Manufacture of ceramic products by firing with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m3 and with a setting density per kiln exceeding 300 kg/m3.
- 4.1. Production of organic chemicals as defined under (a) to (k).
- 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound

fertilisers).

- 4.6. Production of explosives.
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k).
- 5.2. (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour.
- 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for for hazardous waste with a capacity exceeding 10 tonnes per day.
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v).
- 5.3. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of activities (i) to (iv).
- 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste.
- 6.1. (a) Production in industrial installations of (a) pulp from timber or other fibrous materials or (b) paper or card board with a production capacity exceeding 20 tonnes per day.
- 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day.
- 6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day.
- 6.4. (b) Treatment and processing, other than exclusively packaging, of raw materials as defined under (i), (ii) or (iii).
- 6.5. Disposal or recycling of animal carcases or animal waste with a treatment capacity exceeding 10 tonnes per day.
- 6.6. Intensive rearing of poultry or pigs as defined under (a), (b) or (c).
- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.

The measurements used in the baseline reports are planned and performed having regard to the possibility of soil and groundwater contamination by the hazardous substances used, produced or released from the installation (Section 57(5) of the IEA).

Question 8.1 (c) – What information are operators required to include in baseline reports (Article 22(2))?

Estonia reported that the baseline report shall contain information concerning soil and groundwater which makes it possible to determine the pollution thereof and to make a quantified comparison of the state at the time of preparation of the report with the state upon definitive cessation of the activities.

As a result, the baseline report shall contain at least the following information:

- information about the activities conducted at the time of preparation of the report and, where available, on past activities of the site;
- where available, existing information about soil and groundwater contamination measurements that reflect the state at the time of preparation of the report;
- if existing information about soil and groundwater contamination is unavailable, information about new soil and groundwater contamination measurements.

Where the information required in the baseline reports are contained in a document prepared pursuant to any other legislation, that information may be attached to the baseline report (section 57(3), (4) and(6) of the IEA).

Question 8.1 (d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

Estonia indicated that its guidelines 'for the preparation of baseline reports' have been based on the Commission's guidance, and made publicly available.

These set minimum requirements for describing the content and format of baseline reports, the procedures for taking samples of surface and groundwater and the usability of existing data. Requirements for self-monitoring are also laid down more precisely. The guidelines are used as the basis for both the preparation of the baseline reports and the assessment of the quality of the reports by the competent authority responsible for issuing the permit.

Question 8.2 (a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
Upon definitive cessation of the activities of an installation, the operator shall assess the state of soil and groundwater contamination by the hazardous substances used, produced by or released from the installation, compared with the condition of the environment upon definitive cessation of activities (Section 58(1) of the IEA). The operator shall immediately notify the issuer of permits of the results of the assessment conducted and the aftercare measures implemented (Section 58(4) of the IEA).
Question 8.2 (b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Estonia indicated that where the activity has raised the concentrations of hazardous substances in the soil or groundwater of the installation site compared to the original state, it is considered that significant pollution has been caused (sections 58(1) and 5(2) of the IEA).
Question 8.2 (c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
The contamination of soil or groundwater represents a serious threat to human health or the environment if the applicable environmental quality standards are infringed (section 5(2) and Section 21 of the IEA).
Question 8.2 (d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Estonia reported that where the activity has caused contamination of soil or groundwater compared to the state described in the baseline report, the operator shall take the necessary aftercare measures to restore the status of the environment described in the baseline report (section 58(1) of the IEA). The specified measures shall ensure that the site would not have a significant adverse impact on the environment, human health, well-being, property and cultural heritage taking into consideration the future use determined or approved upon definitive cessation of the activities. When selecting the measures, the operator shall also take into consideration the description of the site of the installation included in the permit (section 58(3) of the IEA).
QUESTION 9 – Environmental inspections (Article 23)
Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
A national environmental inspection plan has been drawn up under section 156 of the Industrial Emissions Act and contains all of the information set out in Article 23(3) IED. The plan is publicly available on the website of the Environmental Inspectorate, and a link was included in the Estonian response[103]. Programmes for environmental inspections of IED installations are prepared by the Environmental Inspectorate on the basis of the national environmental inspection plan. These set out the time schedule for regular inspections of installations according to the type of installation and the frequency of inspections, as well as an indicative list of control measures, samples and measurements, and other measures. It is stated that the programmes for environmental inspections are publicly available on the internet, although the link provided leads to the national plan[104].
Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of the environmental risks of installations is carried out using an integrated risk assessment methodology, developed in 2010-2011 as part of the European EasyTools project. As assessment is made of the operator's activities (the environmental impact of the activities on human health, the environment and property and cultural heritage and the likelihood of an environmental incident arising), to determine the level of environmental risk from the installation (low, medium, high) and the frequency of inspection. The result of the environmental risk assessment is indicated in the

103 http://www.kki.ee/download/455/K%C3%A4itiste%20%C3%BCleriigiline%20kontrolli%20kava.pdf.

104 http://www.kki.ee/download/455/K%C3%A4itiste%20%C3%BCleriigiline%20kontrolli%20kava.pdf.

inspection report. The maximum frequency of inspection is once every 36 months for installations with low environmental risk, once every 24 months for those with medium environmental risk, and every 12 months for those with high environmental risk. Where there is a breach of the permit conditions, a subsequent inspection is carried out within six months of the order being issued. This is described as part of the national plan (para.2.2), the link to which is provided above.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports include details of the results of the inspection, i.e. whether the operation of an installation complies with the permit, and whether any changes need to be made to the permit. Site visit reports are sent to the operator and made publicly available within 1 month of the inspection. If there is commercially sensitive or confidential information, this will not be included in the version of the site visit reports that are made available to the public, in accordance with Directive 2003/4/EC.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Estonia indicated that where further measures require to be taken following an inspection, a follow-up inspection will be carried out within 6 months.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Estonian response refers to the provisions of the Industrial Emissions Act, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. The public has to be informed of an application effectively and at an early stage (usually within 5 or 7 days of acceptance of an application depending on the method of publication) and of the draft permits, by way of easily accessible information on the websites of the Ministry of Environment and the local municipality, local, regional or national newspaper publications, the online publication Ametlikud Teadaanded, the website and offices of the competent authority, and at the site of the proposed or current installation. Thereafter, the public has the right to submit comments and questions regarding the application throughout the procedure, and the result of public consultation are to be made publicly accessible.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public through a number of means, namely newspaper and online publications, public notices at the offices of the competent authority and installation site, and various websites. All relevant information is made available on the internet through the Estonian 'Information System on Environmental Permits' (KLIS)[105].
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
The Estonian response referred to the provisions of Article 15(5) of the IED whereby for testing and using emerging techniques, temporary derogations from the application of the best available techniques and the emission limit values may be issued for the application/ use of equivalent parameters or technical measures determined on the basis thereof for a term of up to nine months if the use of the emerging technique is stopped thereafter or at least the emission level associated with the best available techniques is achieved in the activities related to such techniques (section 44(8) of the IEA).

[105] http://klis envir.ee/klis

Finland

Analysis of the completeness of the report

Table A17: Completeness assessment of answers reported by Finland – IED

Question title	Question number(s)	Finland	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

The response of Finland did not provide detail against the questions posed in the Commission questionnaire. The response indicated that given the Directive entered into force in 2014 no relevant implementation experience existed for the 2013 reporting year. Finland provided a link[106] to existing guidance notes that were prepared in 2013-2014 on the implementation of the IED. These notes concern inter alia, the granting of permits, soil and groundwater monitoring and baseline reports. However the link provided directed toward an error page so no further analysis of this information could be conducted.

[106] http://www.ym.fi/fi-FI/Ymparisto/Lainsaadanto_ja_ohjeet/Ymparistonsuojelun_valmisteilla_oleva_lainsaadanto/Ymparistonsuojelulain_uudistaminen/Ymparistonsuojelulain_uudistuksen_toimeenpano

France

Analysis of the completeness of the report

Table A18: Completeness assessment of answers reported by France – IED

Question title	Question number(s)	France	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

France provided a complete response to the questionnaire.

Analysis of France responses

The table below contains the detailed analysis of the responses provided by the France to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A19: France – Response analysis table

FRANCE
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
France uses several indicators to decide whether a breach of permit conditions poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment. These are: ▪ Risk of an installation failure; ▪ Status and vulnerability of the receiving environment; and ▪ Level and hazards rating of emissions.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
In France the national legislation (Article R.515-62) transposing the IED requires that BAT conclusions are used as the reference for setting permit conditions. The French report included a link to the relevant article[107].
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
Permits are granted to operators only if the dangers or disadvantages of operating can be prevented by means of measures specified in the prefectural order issuing the permit. As a result, when stricter conditions than those which are achievable by using BAT are necessary to meet these requirements, they are set in the permit.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
French national legislation (Article R.515-66 of the Environmental Code) states that if BAT conclusions set BAT-AELs then in the permit the emission limit values must be set for the same reference conditions as those associated with these levels. The French report included a link to the relevant article[108].
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
The French Environmental Code provides that following request from the operator, competent authorities may set emission limit values in the permit that exceed the emissions levels associated with the best available techniques, even in normal operating conditions. For this request to be approved, the operator must submit an assessment to justify that the implementation of the BAT-AELs would lead to a disproportionate increase in costs compared to the environmental benefits due to one of the following: ▪ The geographical location or the local environmental conditions of the installation concerned; and / or ▪ The technical characteristics of the installation concerned. The operator must submit an assessment demonstrating that costs are disproportionate. The process for granting derogations involves a public consultation on the assessment submitted by the operator. The inspection department of the competent Prefecture must examine the assessment and the

107 http://www.legifrance.gouv.fr/affichCodeArticle.do?cidTexte=LEGITEXT000006074220&idArticle=LEGIARTI000027387203&dateTexte=&categorieLien=cid

108 http://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=8964F090885519E3CDDC447A50EF3FD0.tpdjo13v_2?idArticle=LEGIARTI000027387218&cidTexte=LEGITEXT000006074220&dateTexte=20141029

permit application or reconsideration file. This authority is responsible to taking the final decision on whether to grant a derogation or not. The decision taken by the Prefecture must be motivated and is re-evaluated at each periodic reconsideration of the permit conditions. The French report included a link to the relevant articles of the legislation setting the process for assessing and granting derogations[109].
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
The cost benefit analysis compares the cost of complying with the BAT-AELs and the expected environmental benefits of meeting these ELVs. Additional costs are considered only against the two possible criteria: the geographical location and the technical characteristics.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
France reported limitations on the magnitude of derogations as these can be granted only for emissions limit values where BAT-AELs apply and point of discharge emissions. However several derogations may be obtained for a single installation. There is no required limitation of duration of derogations and, consequently, these can be either limited or unlimited. If a derogation is granted for a limited duration, then the Prefect decision must include an emission limit value which is lower that the BAT-AEL to be applied once the derogation has expired.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
France reported that the Environmental Code includes provisions for derogations lasting no more than 9 months for the testing and use of emerging techniques provided that after this time the technique is either stopped or the emissions generated by the technique comply with the BAT-AELs. This request for a temporary derogation must be included in the permit application file and is subject to specific instructions from the Inspection Department of the Prefecture.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
In France, guidance on monitoring emissions must be based on the relevant BAT conclusions sections related to monitoring. This is insured by including the requirement in the national legislation. The French response included a link to the relevant legislation[110].
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
▪ The monitoring frequency for groundwater is determined on a case-by-case basis following the assessment of the hydrogeological conditions of the site. ▪ France indicated that most substances are monitored during high and low water periods. For substances considered as a very low contamination risk, the analyses may be limited to once every five years. ▪ Soil monitoring is considered to be difficult to repeat and in France it is conducted every ten years. In some cases more frequent monitoring of the soil may be ordered, however, no information was included on what these cases might be. ▪ When applying for an IED permit, the operator must include overall monitoring frequency for the inspection of the installation. The frequency must be based on a systematic impact assessment, the initial status of the environment and the applicable legislation. Operators must also justify the proposed monitoring frequency in comparison to the hydrogeological conditions of the site and the risk of soil and groundwater contamination.

109 http://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=8964F090885519E3CDDC447A50EF3FD0.tpdjo13v_2?idArticle=LEGIARTI000027387220&cidTexte=LEGITEXT000006074220&dateTexte=20141029

110 http://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=8964F090885519E3CDDC447A50EF3FD0.tpdjo13v_2?idArticle=LEGIARTI000027387196&cidTexte=LEGITEXT000006074220&dateTexte=20141029

Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
France indicated that currently there is no systematic appraisal of the risk of contamination and so this is not used to reduce the monitoring frequency.
QUESTION 5 – General Binding Rules (Article 17)
France has not adopted General Binding Rules.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Once a new or amended BAT reference document is published, the Ministry of Ecology informs the Inspection departments of the Prefectures. In addition, the departments also monitor legislation by reviewing the Official Journal of the European Union (OJEU).
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
New or updated BAT conclusions can be accessed by the public as they are published in the OJEU. In addition, these documents are available online on the websites of the Ministry of Ecology and INERIS (French National Competence Centre for Industrial Safety and Environmental Protection). It is possible to register with the website of INERIS and receive a notification for any updates. Furthermore, the relevant authorities may contact installations by post if they are affected by a reassessment of their permit conditions following the publication of new or updated BAT conclusions.
Question 6.3 – Links to where the information can be found
The following link was included in the French response: http://www.ineris.fr/ippc/node/10. It presents existing BREF and BAT conclusions document, in English but also in French when translations are available.
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
In France operators must submit a list of information to the prefecture when submitting a reconsideration file. This includes: ▪ Additional and updated information on the initial permit, including the names of the manufacturing processes, materials used and products manufactured, maps and plans, analysis of the installation's impact on the environment, information on implementation of the best available techniques and, if relevant, the assessment required for the derogation procedure foreseen under Article 15(4) of the IED. ▪ An overview of operations since the permit was last reconsidered or, if necessary, covering the last ten years. This must demonstrate the conformity to the instructions laid down in the prefectural order issuing the permit and the legislation in force, in particular compliance with emission limit values. ▪ A summary of the monitoring and operating results, including developments in the main pollutant flows and waste management, periodic soil and groundwater monitoring, as provided for in the order issuing the permit, a summary of any accidents or incidents which may have threatened the integrity of the local area, public health, safety or hygiene, agriculture, nature or environmental protection, the preservation of sites or monuments, or archaeological heritage. ▪ A description of the investments made in pollution monitoring, prevention and reduction of pollution. ▪ These requirements are included in the Environmental Code and the French response included a link to the relevant article[111].

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http://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=8964F090885519E3CDDC447A50EF3FD0.tpdjo13v_2?idArticle=LEGIARTI000027387233&cidTexte=LEGITEXT000006074220&dateTexte=20141029

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
The main activity of an installation is defined in the order from the prefecture which constitutes the permit. Furthermore Article 515-58 of the Environment Code foresees that the provisions of the IED apply to the whole installation, that is to say the technical unit conducting activities under the scope of the IED, but also other associated activities which have a technical connection with the unit and which could have an effect on emissions and pollution.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
The national legislation foresees that the conditions of the permit must be reconsidered and updated in the following situations: ▪ The pollution caused is of such significance that the existing emission limit values of the permit need to be revised or new values need to be included in the order issuing the permit, ▪ The operational safety requires other techniques to be used, ▪ It is necessary to comply with a new or revised environmental quality standard. When one of these situations arise, the competent authority send a request to the operator for a reconsideration file to be prepared and sent within 12 months. The French response includes links toward the relevant articles of the legislation[112].
QUESTION 8 – Site closure (Article 22)
Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
▪ France has adopted guidance including a Methodology for Drafting the IED Baseline Report. This sets out the procedure to follow to prepare a baseline report. Two considerations apply when deciding if a baseline report is required to be submitted: the use, production or release of relevant hazardous substances (this includes substances and mixtures included in the CLP Regulation) and the possibility of soil and groundwater contamination at the site of the installation. ▪ In France, all of the IED activities are considered to involve the use, production or release of relevant hazardous substances with the exception of activities 5(3) and 6(6). ▪ Substances are considered to be relevant when they are being used, produced or released by the installation or if the application submitted for the permit provided for their future use, production or release by the installation. ▪ The possibility of soil and groundwater contamination is defined in the guidance document and is estimated by taking into account the hazard rating of the relevant substance or mixture and associated hazard classes, and its physical characteristics in relation to its potential impact on soil, groundwater and the general status of the surroundings and environment. ▪ Preventative measures introduced in order to avoid significant pollution are not sufficient to justify an exemption from the baseline report requirement. ▪ Two rules are used in order to determine whether a hazardous substance has the potential to contaminate soil or groundwater: - Exclusion criteria: substances which are gaseous at room temperature and which will not solidify or liquefy in the event of accidental or chronic release and solid substances which are not water-soluble or powdery are not considered to have the potential to contaminate soil or groundwater. As such these substances alone do not require a baseline report to be produced. Propane and dichlorine were included in the French response as examples of such substances. - Inclusion criteria: any priority substance with respect to water and /or subject to environmental quality standards under legislation enacting the Water Framework Directive is considered to have the potential to contaminate soil or groundwater and require a baseline report to be produced. Benzene and Polycyclic aromatic hydrocarbons were

112 http://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=8964F090885519E3CDDC447A50EF3FD0.tpdjo13v_2?idArticle=LEGIARTI000027387228&cidTexte=LEGITEXT000006074220&dateTexte=20141029

provided as examples of such substances.

- The operator whose installation meet the conditions of the methodology must prepare a baseline report. If the operator considers that it is not justified, it is possible to argue that a baseline report is not required based on a series of criteria. Possible evidence that can be used are, for example, that the physico-chemical characteristics of the substances and/ or the quantities handled do not have the potential to contaminate soil or groundwater on the IED site.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

- The minimum information to be included in the baseline report include information on the present use and, where available, on past use of the site; any existing information on soil and groundwater measurements that reflect the state at the time the report is drawn up or, alternatively, new measurements of pollution having regard to the possibility of such pollution substances or mixtures.
- The French guidance provides a template for content to be included in the baseline report. This includes the following chapters:
  - Chapter 1: description of the site and its environment, and evaluation of challenges
  - Chapter 2: research, compilation and evaluation of existing data
  - Chapter 5: interpretation of results and discussion of uncertainties
- In addition where existing data does not enable the pollution status of soil and groundwater to be sufficiently understood, the report must also include the following chapters:
  - Chapter 3: definition of programme and investigation methods
  - Chapter 4: implementation of investigation programme and delayed laboratory analyses
  - Chapter 5 presents the results, a discussion of the results and the soil and groundwater contamination status determined for the IED site covered by the baseline report. This chapter must include a summary table providing an overview of the analytical results; a critical assessment of the analytical results, together with on-site observations and information previously presented in the baseline report and a discussion of the uncertainties and their impact on the results.
- The results must also be presented in the form of a map, geo-referencing the location of samples taken to assess soil quality, and presenting any potential pollution spots, and groundwater quality, in particular any potential pollution plume.
- Any inaccessible areas for which the status cannot be established owing to existing equipment, constructions, sealed areas, etc., must be identified. Finally, where soil investigations were impossible to carry out, justification must be provided.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

France indicated that its guidance on drafting IED baseline report was developed at the same time as the European guidance and was published prior to the publication of the Commission's guidance (2014/C136/03). However, the content of the draft European guidance was taken into account when producing the French guidance.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Upon cessation of activity, the operator is required to repeat the analysis carried out when producing the baseline report. The results of the analyses are then compared to the results of the baseline report in order to identify whether there are more pollutants in the soil and groundwater and to then decide the necessary steps to be followed.

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

A methodology has been adopted for interpreting the environmental status in relation to soil pollution and groundwater pollution and operators are required to assess potential pollution against it. The procedure was published in February 2007 and includes tools and management plans.

The French response included a link toward the procedure and its accompanying note (Circular of 8 February 2007)[113].

[113] http://www.developpement-durable.gouv.fr/Note-du-8-fevrier-2007-Sites-et.html http://www.developpement-durable.gouv.fr/Circulaire-du-8-fevrier-2007,19383.html

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
France indicated that the national legislation on the management of polluted sites and soil (which applies to all facilities whether covered by Annex I to the IED or not) provides that operators must ensure the status of the installation site is such that it may not adversely affect the interests specified in Article L.511-1 of the Environmental Code and allows the site to be used in future. The interests listed in Article L.511-1 include public health, safety and hygiene, and the environment. In order to determine whether there is significant risk to human health or the environment, the methodology for interpreting the environmental status (IEM) is applied.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
For all facilities (including non-IED) a management plan is adopted which includes measures to be taken by operators in the event of cessation of activities. In the general methodology a cost/benefit study is carried out in order to determine the necessary site management measures. However, for IED installations only the technical feasibility of the measures is taken into account in order to decide necessary measures or actions are needed to be taken in accordance with Article R.515-75 of the Environmental Code.
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
In France, a national 'Strategic Programme of Inspections for classified installations, 2014 – 2017' has been drawn up. The national plan is publicly available at: http://www.developpement-durable.gouv.fr/IMG/pdf/annexes__i120514.pdf). The national plan is supplemented by a policy document which sets out the procedure for drawing up regional environmental inspection programmes and a circular on the definition and monitoring of national priority facilities (http://www.haute-normandie.developpement-durable.gouv.fr/IMG/pdf/cir_eta_pri_cle6afedb.pdf). Programmes for routine environmental inspections (annual inspection plans) are drawn up by the regional directorates based on the national plan, which list the facilities to be inspected that year. The annual inspection plans are presented to the relevant departmental consultative committee (CODERST), which includes stakeholders, but are not made publicly available.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The environmental risk of installations is assessed based on the type of activity and amount of pollutant discharged. The policy document referred to above (a link is not provided) sets out the methodology for systematic risk assessments to determine the frequency of inspections. The document can be requested from the inspection services.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain the instructions, on-site observations and information gathered during the inspection, as well as observations by the operator. A copy of the site visit report is sent to the operator, within 2 months of the inspection. Site visit reports are not published but can be requested from the inspection services. There have been no cases in which the reports have not been made publicly available, following a request, during the reporting period.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?

Where further measures are required to be taken following an inspection, the operator must submit an action plan or provide evidence of having implemented the measures within a certain timescale. Where the operator does not comply within the deadline, further action will be taken by the inspection services.
QUESTION 10 – Access to information and public participation 9Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The French response refers to the provisions of the Environment Code, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. Currently, the application file must be made available to the public at the town hall of the area where the facility is located and the public are notified of this by way a notice and newspaper publication in the area of the municipalities potentially affected by the facility. The notice and a non-technical summary must also be published on the prefecture's website. A period of 4 weeks is provided for public consultation. From 2019, for a permit to be granted, the permit file must be referred to a public inquiry. Notification will also be given to the public by way of a notice and newspaper publication and publication on the prefecture's website. During a public inquiry, members of the public may register their observations in the inquiry register which is available in places where the public is able to consult the file. Alternatively, observations may be sent by post to a third party responsible for the inquiry (namely the commissioner for the inquiry). Following the public inquiry, the commissioner must send a report to the prefecture explaining how the inquiry was carried out and the observations which were received. In a separate document, the commissioner's reasoned conclusions must be presented and an opinion delivered. The major difference between the two procedures (present and future), therefore, relates to the involvement of a third party (the Commissioner for the inquiry) responsible for gathering and summarising the observations in a report.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public at the town hall of the area where the facility is located as well as on the prefecture's website. All relevant information is made available on the internet, at the following link: http://www.installationsclassees.developpement-durable.gouv.fr/rechercheICForm.php.
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
In France the development and application of emerging techniques is primarily supported by financing emerging technology in through project tenders. ADEME (the French Environment and Energy Management Agency) is a public body which is involved in the implementation of these project tenders.

Germany

Analysis of the completeness of the report

Table A20: Completeness assessment of answers reported by Germany – IED

Question title	Question number (s)	Germany	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Germany submitted a complete answer to the IED questionnaire.

Analysis of the Germany's responses

The table below contains the detailed analysis of the responses provided by the Germany to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A21: Germany – Response analysis table

GERMANY
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Germany reported that the permits include specific requirements based on the relevant legal standards as set under: ▪ Emission control legislation (i.e Federal Emission Control Act (BImSchG), and corresponding regulations); ▪ Technical Instructions on Air Quality Control; ▪ Technical Instructions on Noise; ▪ Waste Water Regulation and sectoral annexes; ▪ Landfill Regulations. If permit requirements are not fulfilled, the supervisory authorities must decide if an infringement has been committed. According to the Federal Emission Control Act section 20(1), a direct threat to human health or the environment means a threat which is highly likely to occur in the near future. As the authorities must stop the operation of the installation and have no latitude in such cases, the threat must represent more than a negligible threat to human health or the environment.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Germany reported that General Binding Rules (i.e. regulations, administrative rules) are used in order to ensure that installations are using state-of-the-art measures to prevent and minimise impacts on the environment. The General Binding Rules set out what measures qualify as state-of-the-art in relation to different types of installations. According to No 13 of the Annex to Section 3(6) of the BImSchG and/or No 13 of Annex 1 to Section 3(11) Water Resources Act, state-of-the-art must be determined in secondary rules that take into account the information set out in BREFs. This means that the contents of BAT conclusions and other requirements in regulations or administrative rules are implemented through such secondary rules. Germany also mentioned that when requirements from BAT conclusions are transposed in regulations, these requirements apply directly to the operators. If modifications are made, the operator must check that its installation still fulfils the requirements. If it does not, the operator may need to apply for a modification to its permit in order to bring its installation into line with the new requirements. When changes occur following transposition of new BAT conclusions, the authorities must check if permits need to be amended for the installations concerned and, if necessary, lay down new permit requirements in the form of a subsequent order in accordance with Section 17(1) and (1a) BImSchG. The same procedures apply when transposing binding BAT-AELs. Transposition of BAT-AELs is compulsory for the secondary legislature (Section 7(1a) and Section 48(1a) BImSchG). Finally Germany reported that often, environmental quality targets result in stricter emission limit values being inserted than those laid down in Technical Instructions on Air Quality Control or the annexes to the Waste Water Regulation (AbwV). In the waste water sector, the BAT-AELs laid down in the BAT conclusions are transposed in the form of emission limit values (minimum requirements) and further technical requirements are included in the AbwV. An annex to the AbwV exists for each sector of a BREF, which is updated in light of new BATs.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
Germany reported that the local permitting authorities can set stricter permit conditions if, due to particular circumstances or environmental conditions or other extraordinary basic conditions, the emission levels laid down in BAT conclusions are not sufficient to prevent harmful environmental or health effects. Furthermore, there are cases where authorities include additional conditions e.g. stricter emission limit values than would be required for compliance with the BAT conclusions, in order to safeguard compliance with environmental quality standards. The procedure to set stricter permit conditions than those achievable with BAT is laid down in Germany's environmental law (e.g. BImSchG, WHG) and the secondary rules (regulations and administrative provisions).
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article

15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

The binding status of BAT-AELs has been transposed in the German legislation in Section 7(1a) and Section 48(1a) and in Sections 12(1a) and 17(2a) BImSchG. According to that legislation there are two possible variations for the implementation of these regulations:

a) Emission limit values are set so that they fall within the BAT-AELs (or below if the BAT-AEL is just one value), subject to the same reference conditions and for the same or shorter periods of time.

b) Emission limit values are set that differ in terms of value, period and reference conditions from the values referred to under a). Where b) applies, the competent authority evaluates the results of emission monitoring at least once a year, in order to ensure that the actual emissions from the installation have not exceeded the BAT-AELs under normal operating conditions (Section 52(1a) BImSchG).

These provisions are implemented via:

- Technical Instructions on Air Quality Control;
- Sectoral regulations issued under the BImSchG (e.g. 13th and 17th BImSchG);
- Administrative provisions.

Authorities have to ensure that ELVs based on the BAT-AEL of the BAT conclusions can be met within 4 years of the publications of the BAT conclusions. Within the first year, installations review the necessary changes and conduct tests and, if possible, start applying the BAT-AEL. This is in line with the implementation procedures of the Ministry and Authorities stated below.

Germany has setup committees that decide if the state-of-art techniques according to the BAT are more progressed or stricter than the German regulations and if they are, they issue implementation recommendations or update existing regulations. Furthermore the federal/regional working group on emission control, has described this approach and other details for transposing the IED into German licensing and monitoring procedures in a manual for the implementing authorities: 'Guidelines for the application of national provisions implementing the IED report of the ad hoc working party'. According to these Guidelines, once the BAT conclusions are published, the Ministry of Environment (BMUB) has one year to analyse the state-of-the art of the particular sector and determine whether this is stricter than the German Regulations. If that was the case, the BMUB publishes what the situation is and the new state-of-the-art including the new ELVs according to the BAT-AELs of the BAT conclusions. Once this occurs, the relevant Regulations (previous Technical Instructions on Air Quality Control and Sectoral regulations issued under the BImSchG) do not apply. Authorities must take the new BMUB decision into account in the permit procedures and implement what is contained therein. Prior to the publication of this decision by BMUB, the previous 'old' provisions apply. Therefore, competent authorities are not allowed to directly impose ELVs in line with the BAT conclusions. However, the federal working group on emission control shall develop and publish implementing recommendations that will inform of the new ELVs. Competent authorities may include recommendations in the permit procedure in advance of the publication of the BMUB decision or modification of the Regulations implementing the ELVs in accordance with the BAT-AEL.

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

According to the reported information, derogations under Article 15(4) are only allowed in German law based on the technical characteristics of the installation. Section 7(1b) No 1(a) and Section 48(1b) No 1(a) BImSchG primarily authorise the secondary legislature to regulate derogations based on the technical characteristics of a type of installation. Section 7(1b) No 2(a) and Section 48(1b) No 2(a) BImSchG allow the secondary legislature to authorise the authorities to regulate one-off derogations based on the technical characteristics of the installation. Sections 12(1b) No 1 and 17(2b) No 1 BImSchG authorise the competent authorities to provide for one-off derogations based on the technical characteristics of the installation where secondary rules do not contain binding requirements or in subsequent instructions.

Once the derogation is granted, all the relevant information including justification, must be published on the internet. Authorities must review the application of less stringent ELVs in each permit renewal. Authorities shall verify (inspect) installations to assess whether the reason that led to the derogation is still in place following a derogation having been granted.

Germany reported that in practice, derogations have never been laid down by the secondary legislature and that the permitting authorities have not granted derogations based on Section 17(2b) No 1 BImSchG during the reporting period. Such procedures are explained in the LAI manual referred to under 3.1.

Germany noted that the LAI manual provides a more detailed explanation of the provisions of the law but does not include a description of the specific process that has to be followed and this is something that most probably needs to be included in German secondary legislation.

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are

considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
Germany reported that cost-benefit analysis is included in the mandatory proportionality assessment and has to be carried out when applications for derogations are submitted. Furthermore it was reported that so far the secondary legislature has not granted derogations based on Article 15(4). Germany is not aware of any one-off derogations granted by the competent authorities in the reporting period. No further information was provided about cost-benefit assessment in the derogation process. In addition, Germany clarified that cost-benefit analysis is included in the mandatory proportionality assessment that has to be carried out when applications for derogations are submitted.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Germany provided a reference to question 3.3 which reports that derogations have not been granted during the reporting period.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Germany reported that it is primarily up to the secondary legislature to grant derogations for testing emerging techniques. However, the secondary legislature can again authorise the competent authorities to grant one-off derogations. According to section 7(1b) of the BImSchG., this derogation shall last a maximum of 9 months and may imply setting ELVs that are less stringent that the BAT-AEL. As stated in the LAI manual, operators are required to withdraw this technique after this time unless it complies with the BAT conclusions. In order to be considered an 'emerging technique', it must comply with the definition set out in the IED. This derogation refers not only to technologies that have never been applied but also to modification of methods of technologies that have been proven successful. Technologies do not only have to be new but achieve higher levels of environmental protection or at least the same level of environmental protection but at lower costs. It should be noted that in cases where such derogations are provided the minimum ELVs in the annexes of the IED must be respected. The precise procedure for emerging techniques is also explained in the manual referred to under 3.1 above.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Germany reported that monitoring conditions are defined in the same way as permit conditions which are described in question 2.1.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The frequency of periodic monitoring is stipulated in accordance with Section 21(2a), of the 9th BImSchV. It requires monitoring to be carried out at least every 5 years for groundwater and at least every 10 years for soil, unless monitoring is carried out in the form of a systematic appraisal of the risk of contamination.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Germany reported that is unable to response to the question as it does not have any empirical data available on soil and groundwater monitoring for the reporting period.
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
Germany reported that is using General Binding Rules which contain specific requirements for different types of installations designed to ensure compliance with the basic obligations of Section 5 BImSchG (Article 11 IED). They include (but are not limited to) emission limit values, other technical requirements, in-house monitoring specifications, mandatory notifications and soil and groundwater protection. The activities that are covered by GBRs are: ▪ 1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more.

- 1.2. Refining of mineral oil and gas.
- 1.3. Production of coke.
- 1.4. Gasification or liquefaction of (a) coal or (b) other fuels in installations with a total rated thermal input of 20 MW or more.
- 2.1. Metal ore (including sulphide ore) roasting or sintering.
- 2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour.
- 2.3. Processing of ferrous metals as defined under (a) to (c).
- 2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day.
- 2.5. Processing of non-ferrous metals as defined under (a) or (b).
- 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3.
- 3.1. Production of cement, lime and magnesium oxide as defined under (a) to (c).
- 3.2. Production of asbestos or the manufacture of asbestos-based products.
- 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day.
- 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day.
- 3.5. Manufacture of ceramic products by firing with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m3 and with a setting density per kiln exceeding 300 kg/m3.
- 4.1. Production of organic chemicals as defined under (a) to (k).
- 4.2. Production of inorganic chemicals as defined under (a) to (e).
- 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers).
- 4.4. Production of plant protection products or of biocides.
- 4.5. Production of pharmaceutical products including intermediates.
- 4.6. Production of explosives.
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k).
- 5.2. (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour.
- 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for for hazardous waste with a capacity exceeding 10 tonnes per day.
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v).
- 5.3. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of activities (i) to (iv).
- 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste.
- 5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated.
- 5.6. Underground storage of hazardous waste with a total capacity exceeding 50 tonnes.
- 6.1. (a) Production in industrial installations of (a) pulp from timber or other fibrous materials or (b) paper or card board with a production capacity exceeding 20 tonnes per day.
- 6.1. (b) Production in industrial installations of (c) one or more of the following wood-based panels: oriented strand board, particleboard or fibreboard with a production capacity exceeding 600 m3 per day.
- 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day.
- 6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day.

- 6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day.
- 6.4. (b) Treatment and processing, other than exclusively packaging, of raw materials as defined under (i), (ii) or (iii).
- 6.5. Disposal or recycling of animal carcases or animal waste with a treatment capacity exceeding 10 tonnes per day.
- 6.6. Intensive rearing of poultry or pigs as defined under (a), (b) or (c).
- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.
- 6.8. Production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitisation.
- 6.9. Capture of CO2 streams from installations covered by this Directive for the purposes of geological storage pursuant to Directive 2009/31/EC.
- 6.10. Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m3 per day other than exclusively treating against sapstain.
- 6.11. Independently operated treatment of waste water not covered by Directive 91/271/EEC and discharged by an installation covered by Chapter II.

The GBRs cover a significant list of pollutants including sulphur dioxide, oxides of nitrogen, CO, VOC, metals, dust, asbestos, biocides, carcinogenic and mutagenic substances amongst others.

Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?

General Binding Rules are used as the basis for permit conditions in Germany and an integrated approach is required according to German legislation. According to the reported information, in order to apply the integrated approach to secondary rules, the statutory basis for authorisation explicitly requires to take into account the possibility of adverse effects being shifted from one source to another and the need to guarantee a high level of protection for the environment as a whole (Section 7(1) and Section 48(2) BImSchG, Section 57(1) No 1, in conjunction with Section 3 No 11 of the Water Resources Act (WHG), Section 43(1) of the Recycling Act (KrWG)).

Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?

Germany provided a reference to question 2.1 without further information.

Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?

Germany provided a reference to question 2.1 without further information.

Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?

According to Germany's report, official publications include a reference to the Directive, such as: 'These regulations serve to transpose Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) [version and source]'.

Also any standards published also contain a note such as 'Official reference by legislature to EU law: transposition of EU Directive 75/2010'.

Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.

Several links were provided by Germany:

- http://www.gesetze-im-internet.de/bundesrecht/bimschg/gesamt.pdf
- http://www.gesetze-im-internet.de/bimschv_2_1990/index.html
- http://www.gesetze-im-internet.de/bimschv_13_2013/index.html
- http://www.gesetze-im-internet.de/bimschv_17_2013/index.html
- http://www.gesetze-im-internet.de/bimschv_31/index.html
- http://www.verwaltungsvorschriften-im-internet.de/bsvwvbund_24072002_IGI2501391.htm

- http://www.gesetze-im-internet.de/whg_2009/index.html
- http://www.gesetze-im-internet.de/bundesrecht/abwv/gesamt.pdf

QUESTION 6 – Developments in BAT (Article 19)

Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?

Germany reported that the competent authorities are informed by:

- The federal/regional working groups on emission control (LAI) and on waste water (Waste Water BLAK) under the aegis of the Conference of Environment Ministers. Their members pass the information on to downstream regional authorities.
- The relevant federal government gazettes in which the General Binding Rules are updated in accordance with BAT conclusions being published.
- The Federal Environmental Agency (UBA) website in which the BAT conclusions are made available as downloads
- Annual events (e.g. federal/regional government meetings) to present the new BAT reference documents to the federal states, once they have been announced and published by the European Commission.

Question 6.2 – How do competent authorities make that information available to the public concerned?

According to the reported information, once new or updated BAT conclusions have been announced and published by the European Commission, the Federal Environmental Agency (UBA) makes BAT conclusions available as downloads on its website, where the public concerned can obtain information at any time. Furthermore, the domestic secondary rules concerning state-of-the-art techniques that are based, in part, on BAT conclusions (regulations and administrative provisions) are published in the Federal Law Gazette or the Federal Gazette.

Question 6.3 – Links to where the information can be found

The information can be found in the following link: http://www.umweltbundesamt.de/themen/wirtschaft-konsum/beste-verfuegbare-techniken/sevilla-prozess/bvt-download-bereich

QUESTION 7 – Reconsideration and updating of permits (Article 21)

Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?

Germany reported that the information that operators must provide is regulated in the BImSchG, the Industrial Waste Water Treatment Plant Authorisation and Monitoring Regulations (IZÜV), the Recycling Act (KrWG) and the Landfill Regulations (DepV). The results of emission monitoring are filed by operators once a year in keeping with their permit in the form of annual reports which are then checked (Section 31(1) BImSchG, Section 7(2) IZÜV). As a rule, operators must also file measurement reports or records and reports from in-house and/or outsourced controls with the monitoring authorities. The information required from operators is detailed in the 'Guidelines for the application of national provisions implementing the IED'. In these, it is explained that operators must include information on all events with harmful environmental impacts, and the record of compliances with permit requirements, as well as a monitoring plan and a monitoring programme. Also, it is described that in cases where derogations are granted due to the technical characteristics of the installation, information about the reasons that led to the application of a derogation has to be provided. In the case that a temporary derogation is requested because the time that is needed to renovate the installation is longer than the 4-year period when the ELVs have to comply with the BAT-AEL, the operator must submit the technical features of the installation and the duration of the retrofitting plan. Whenever there is an inspection, the reasons that led to the derogation have to be reassessed in order to set new ELVs if necessary.

Furthermore, the authorities can request information and documents from operators in accordance with Section 52(2) BImSchG for the purpose of verifying permit conditions. As well as filing measurement and control data in accordance with Section 12 DepV, landfill operators must send the authorities additional data in accordance with Section 13(7) DepV, so that the authorities can compare the operation of the landfill with the state-of-the-art within the meaning of Section 3(28) KrWG.

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

The 'main activity' is determined initially by defining the actual purpose or objective of the installation. The main activity is then defined for legal purposes by categorising it under the types of installation listed in Annex 1 to the 4th BImSchV during the authorisation procedure. The annex includes all types of installation named in Annex I to the IED, together with other installations and activities. Where the main purpose of an installation comprising several parts cannot be categorised under one type of installation

named in Annex I to the IED, the possibility of categorising an ancillary installation under one of the types of installation listed in Annex I to the IED is considered, in which case the permit decision must satisfy the corresponding material requirements.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

Germany reported the following procedure for permit reconsideration/update:

- In case of significant pollution, the competent authority will carry out non-routine monitoring/inspection of the operation.
- If such monitoring/inspection indicates that the permit conditions are no longer sufficient to guarantee a high level of environmental protection, the competent authority will update the permit conditions.
- The competent authority shall review the permit in cases:
  - The protection of the neighbourhood and the public is no longer guaranteed,
  - Where substantial changes to the state-of-the-art allow emissions to be reduced considerably
  - Where operational safety needs to be improved
  - Where new environmental requirements so demand.

Additionally it was reported that if, for example, a new or revised environmental quality standard is issued, the competent authority will check the permit and, if necessary, the appropriate measures will be officially ordered or the permit notice will be updated.

Finally, in the case of a landfill, operating permit conditions are verified/updated based on Section 22 DepV.

QUESTION 8 – Site closure (Article 22)

Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

According to the report, the obligation to prepare a baseline report is regulated in Section 10(1a) BImSchG (Section 6 No 7 IZÜV for independently operated treatment plants). That obligation applies if the installation uses, produces or releases relevant hazardous substances and as and when there is a possibility of soil or groundwater contamination by the relevant hazardous substances at the site of the installation. Relevant hazardous substances are substances within the meaning of the CLP Regulation which are used, produced or released in significant quantities in the installation and which, by their nature, may cause soil or groundwater contamination at the site of the installation. For Germany, the federal/regional working groups on soil protection (LABO) and water (LAWA) have prepared a joint manual on baseline reports which is available to the competent authorities. A link was included in the German's response however it was found to be not working[114].

The manual contains specific guidance for establishing the material and quantitative relevance of the substances used in a particular installation. On that basis, the competent authority decides separately in each individual case if a baseline report needs to be prepared.

Germany further mentioned that a general statement as to which activities under Annex I to the IED require a baseline report is not possible. The obligation depends on the use, production or release of relevant hazardous substances, not simply the type of installation. It may be with one and the same type of installation that one installation needs to prepare a baseline report, because it uses relevant hazardous substances, while another installation of the same type does not, for example because the quantities of substances used there do not exceed the relevant threshold. Subject to that, the activities listed below must be understood as types of installations that may (in theory) use, produce or release relevant hazardous substances, but not every installation falling under these categories is likely to require a baseline report to be produced:

- 1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more.
- 1.2. Refining of mineral oil and gas.
- 1.3. Production of coke.
- 1.4. Gasification or liquefaction of (a) coal or (b) other fuels in installations with a total rated thermal input of 20 MW or more.

[114] https://www.labo-deutschland.de/documents/LABO_Arbeitshilfe_AZB_Stand_2013-08-07_finalisiert.pdf

- 2.1. Metal ore (including sulphide ore) roasting or sintering.
- 2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2.5 tonnes per hour.
- 2.3. Processing of ferrous metals as defined under (a) to (c).
- 2.4. Operation of ferrous metal foundries with a production capacity exceeding 20 tonnes per day.
- 2.5. Processing of non-ferrous metals as defined under (a) or (b).
- 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3.
- 3.1. Production of cement, lime and magnesium oxide as defined under (a) to (c).
- 3.2. Production of asbestos or the manufacture of asbestos-based products.
- 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day.
- 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day.
- 3.5. Manufacture of ceramic products by firing with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m3 and with a setting density per kiln exceeding 300 kg/m3.
- 4.1. Production of organic chemicals as defined under (a) to (k).
- 4.2. Production of inorganic chemicals as defined under (a) to (e).
- 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers).
- 4.4. Production of plant protection products or of biocides.
- 4.5. Production of pharmaceutical products including intermediates.
- 4.6. Production of explosives.
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k).
- 5.2. (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour.
- 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day.
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v).
- 5.3. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of activities (i) to (iv).
- 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste.
- 5.5 Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated.
- 5.6. Underground storage of hazardous waste with a total capacity exceeding 50 tonnes.
- 6.1. (a) Production in industrial installations of (a) pulp from timber or other fibrous materials or (b) paper or card board with a production capacity exceeding 20 tonnes per day.
- 6.1. (b) Production in industrial installations of (c) one or more of the following wood-based panels: oriented strand board, particleboard or fibreboard with a production capacity exceeding 600 m3 per day.
- 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day.
- 6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day.
- 6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day.
- 6.4. (b) Treatment and processing, other than exclusively packaging, of raw materials as defined under (i), (ii) or (iii).
- 6.5. Disposal or recycling of animal carcasses or animal waste with a treatment capacity

exceeding 10 tonnes per day.

- 6.6. Intensive rearing of poultry or pigs as defined under (a), (b) or (c).
- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.
- 6.8. Production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitisation.
- 6.9. Capture of CO2 streams from installations covered by this Directive for the purposes of geological storage pursuant to Directive 2009/31/EC.
- 6.10 Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m3 per day other than exclusively treating against sapstain.
- 6.11. Independently operated treatment of waste water not covered by Directive 91/271/EEC and discharged by an installation covered by Chapter II.

Germany reported that the LABO manual (mentioned in the previous question) was prepared before the Commission issued its baseline report guidance, in order to ensure that IED would be transposed into national law on time. Some federal states have already issued decrees requiring the competent authorities to apply the manual.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

The information to be included in the baseline reports are included in Section 4a(4) of the 9th BImSchV and further recommendations are set out in the LABO manual.

Baseline reports include information of the present land use and if available, previous uses; information on groundwater and soil measurements (initial state); information of the hazardous substances. Whenever 'new' hazardous substances may be used, the baseline report must be supplemented with new information about those new substances. The LABO manual contains very detailed information of all the aspects of a baseline report including the determination of the relevant hazardous pollutants and mixtures to consider, arrangements with authorities to agree the level of detail, how to prepare a sampling plan, recommendations for areas with homogeneous distribution of contaminants and when this is not the case, groundwater status characterisation, etc.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

As previously reported, the LABO manual was prepared before the Commission issued its guidance, in order to ensure that the IED would be transposed into national law on time. Once the Commission guidance was issued, the manual was checked and the basic approach in the manual was found to be compatible with the Commission's guidance. Germany has no plans at present to revise its manual.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Germany reported that it had no practical experience on this issue during the reporting period. Some federal/regional working groups are currently preparing assessment criteria.

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

Germany reported that it had no practical experience on this issue during the reporting period. The federal/regional working groups referred to under 8.2.a are preparing criteria for this.

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

Germany provided a reference to the response provided under 8.2.b. Furthermore, it was mentioned that where soil or groundwater contamination which poses a significant risk to human health or the environment has already occurred, the criteria laid down in German soil protection and water law apply.

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

Germany provided a reference to its responses provided under questions 8.2.a and 8.2.b. Furthermore, it was mentioned that decisions as to what necessary measures are required under Article 22(3), sub-section 2, and Article 22(4) are based on the criteria laid down in German soil protection and water law.

QUESTION 9 – Environmental inspections (Article 23)
Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
In Germany, each Lander has drawn up an inspection plan, which contains all of the information set out in Article 23(3) IED. The plans are published on the websites of the Ministry of Environment or those of the supervisory authorities (for example, http://www.umwelt.bremen.de/de/detail.php?gsid=bremen179.c.18557.de#Plan), with the exception of Berlin (BE) which is stated to be in progress. On the basis of the inspection plans, the competent surveillance authorities in each of the Lander have drawn up programmes for routine environmental inspections, which set out the programme for regular monitoring of IED installations, including site visits, monitoring of emissions and checks of internal reports and follow-up documents, verification of self-monitoring, amongst other tasks, based on the activities carried out at the particular installation, and the frequency of inspections required. The monitoring programmes are publicly available on the websites of the supervisory authorities or the website of the Ministry of Environment (for example, http://www.lubw.baden-wuerttemberg.de/servlet/is/225638/).
Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of the environmental risks of installations is carried out using criteria which include the potential and actual impacts on human health and the environment, the record of compliance with permit conditions and participation in EMAS. These therefore reflect the criteria set out in Article 23(4) IED. Based on this, most of the Lander have developed their own system of risk assessment, which is set out in each of the monitoring programmes for the Lander (for example, https://um.baden-wuerttemberg.de/fileadmin/redaktion/m-um/intern/Dateien/Dokumente/3_Umwelt/Schutz_nat%C3%BCrlicher_Lebensgrundlagen/Luft/IE-Richtlinie/Anhang2_SYBURIAN.pdf).
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED. In addition, the German response refers to the broad power of the competent authority to carry out inspections in other circumstances.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain information on the relevant findings regarding compliance with permit conditions and conclusions as to whether further measures are needed. The reports are notified to the operator, usually by email or in some cases by post, within 2 months of the site visit. The reports are publicly available on the internet, or in some cases a summary is available on the internet and the full report can be requested from the competent authority. These are provided to the public in accordance with the provisions on access to environmental information, although there have been no cases in which the reports have not been made publicly available during the reporting period.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where further measures are required to be taken following an inspection, implementation of these measures will be monitored by the competent authority who may conduct a further site visit within 6 months or take further action, including the imposition of administrative fines if necessary.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The German response refers to the provisions of national legislation, transposing Article 24 IED, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in

Article 24(1) IED. Following receipt of an application, the competent authority is required to publish notification of the application in its official journal, as well as either the internet or in local newspapers circulated within the locality of the site. The notification must include details of where the application and relevant documentation is available for inspection for a period of one month following publication, and how the public can comment on the application and the deadlines for doing so (normally 2 weeks after the period for access to documents has ended).
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is to be made available to the public via the competent authorities' official journal, and either the internet or local newspapers. All relevant information is made available on the internet (for example, the Official Journal of Berlin http://www.berlin.de/landesverwaltungsamt/logistikservice/amtsblatt-fuer-berlin/).
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Germany reported that the Federal Emission Protection Act allows less stringent emission values or deadlines to be set when implementing BAT conclusions in the corresponding regulations or administrative provisions for installations in which emerging techniques are being tested or applied, for a limited period (maximum of 9 months), or authorise the authorities to stipulate less stringent requirements on a one-off basis. The competent licensing authorities must take account of these less stringent emission values or deadlines in the former case when granting permits for such installations. The development and application of emerging techniques are supported in Germany by: ▪ Aid programmes such as the Environmental Innovation Programme (UIP) of the Federal Ministry for the Environment (BMUB) and aid programmes of the Federal Ministry of Research (BMBF). ▪ Resource and energy efficiency agencies that some federal states operate which support the development and application of emerging techniques.

Greece

Analysis of the completeness of the report

Table A22: Completeness assessment of answers reported by Greece – IED

Question title	Question number(s)	Greece	Comments
Non-compliance (Article 8)	1		
Permit conditions (Article 14)	2.1		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	3.1		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	4.1		
	4.2		
	4.3		
General Binding Rules (Article 17)	5.1 (a) to (b)		
	5.2	N/A	
	5.3	N/A	
	5.4	N/A	
	5.5	N/A	
	5.6	N/A	
Developments in BAT (Article 19)	6.1		
	6.2		
Reconsideration and updating of permits (Article 21)	7.1		
	7.2		
	7.3		
Site closure (Article 22)	8.1 (a) to (d)		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	9.1 (a) to (c)		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		
Emerging techniques (Article 27)	11		

Greece provided a complete response to the questionnaire.

Analysis of the Greece's responses

The table below contains the detailed analysis of the responses provided by Greece to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A23: Greece – Response analysis table

GREECE
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses

an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?

Greece reported that the following criteria are used:

- **Type of pollution (air, water, soil/underground);**
- **Type of pollutant;**
- **Scope of pollution (rate of overrun or load, time);**
- **Size and nature of the project/activity;**
- **Permitted uses of land in the region and intensity of the environmental problems (e.g. status of the project or activity in relation to urbanisation, population affected, distance from natural recipient, recipient's type and characteristics, extent to which environmental standards are met in air, ground/surface water, etc.);**
- **Project/activity background in relation to previous infringements.**

QUESTION 2 – Permit conditions (Article 14)

Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?

Greece reported that the used of BAT conclusions is ensured according to the provisions of Article 4(1a) of Joint Ministerial Decision 11014/703/F104/2003 (GG II 332), Article 11(3) of Joint Ministerial Decision 36060/1155/E.103/2013 (GG II 1450) and Annex 3(1.1) of Ministerial Decision 170225/14 (GG II 135).

In particular, in accordance with Article 4. 1a) of Joint Ministerial Decision 11014/703/Φ104/2003, the environmental impact studies (EIS) of the activities included in Annex I to Directive 2008/1/ΕΚ include among other things the following information:

- **Appropriate pollution prevention measures, in particular through application of BAT, including measures to monitor emissions of pollutants.**
- **The selection of BAT to be used, taking into account of Community and international data and practices.**
- **Proposed technologies and other techniques intended to prevent emissions from the facility or, if this is not possible, to reduce them.**
- **Measures for the prevention and recovery of waste generated by the installation (if required).**
- **Monitoring plan of emissions into the environment.**

After the evaluation of this information, the competent authority issues the decision approving environmental conditions which include, inter alia, the measures necessary to ensure protection of the air, water and soil in order to achieve a high level of protection for the environment as a whole, in particular by:

- **Setting emission limit values for the polluting substances which are expected to be emitted in a substantial quantity and to be dispersed in the water, air and soil. In this case, if necessary, they can set environmental conditions, limitations, measures and conditions for the protection of the soil and groundwater and measures concerning the management of waste generated.**
- **The use of the BAT, taking into account, inter alia, Community and international experience and practice, so as to set the above limit values without specifying the use of a specific technique or technology. For the setting of such limit values, account shall be taken of the technical characteristics of the installation in question, its geographical location and local environmental conditions. If an environmental quality standard laid down by specific provisions of the legislation requires stricter conditions than those achievable by the use of the best available techniques additional conditions are imposed without prejudice to other measures which may be taken to comply with environmental quality standards,**
- **Setting appropriate monitoring requirements covering the procedure and frequency of measurements, the procedure for evaluating the measures, and the obligation to record and provide the competent authority with the necessary data to check compliance with the environmental conditions that have been imposed by a decision.**

Relevant provisions exist in the recently adopted Joint Ministerial Decision 36060/1155/E. 103/2013 which specifies the content of decisions approving environmental conditions, and Ministerial Decision 170225/14, according to which the environmental impact assessment study should include a report on the application of BAT including details on the BATs implemented or proposed, with reference to the relevant paragraphs, tables and graphs

contained in the relevant sectoral BREFs and horizontal BREFs that apply to all sectors. In case that some BAT are not implemented then sufficient justification is required. In addition, the report must include information about emission limit values and water and energy consumption associated with the use of BAT. Techniques that are not included in the BREFs can be considered as BAT after the relevant justification, taking particularly into account the criteria referred to in Annex III of the abovementioned Joint Ministerial Decision in order to ensure a level of environmental protection equivalent to that described in the relevant BREF documents.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
The competent authorities can set stricter permit conditions than those achievable according to the BAT conclusions via Article 11(3) of Joint Ministerial Decision 36060/1155/E.103/2013 (GG II 1450). No further information or web links were provided.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Greece indicated that this requirement is found within the provisions of Article 4(1a) of Joint Ministerial Decision 11014/703/F104/2003 (GG II 332), Article 11(3) of Joint Ministerial Decision 36060/1155/E.103/2013 and Annex 3(1.1) of Ministerial Decision 170225/14. Reference to the response made under question 2.1 was also provided.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Greece reported that the assessment and granting of derogations takes place according to Article 12(4) of Joint Ministerial Decision 36060/1155/E.103/2013.The competent environmental must justify in a specific annex to the environmental permit and based of the relevant information in the EIA study, the application of the derogation including the result of the assessment and the justification for the conditions imposed. However, the emission limit values applied should not exceed the emission limit values set out in the Annexes V-VII of the above Joint Ministerial Decision (the content of which is identical to the content of Annexes V-VII of the IED).
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
Greece reported that guidance related to cost-benefit analysis has not been issued and the granting of derogations is considered on a case-by-case basis.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
The magnitude and duration of derogations are set out on a case-by-case basis depending on the cost-benefit analysis submitted.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Greece reported that temporary derogations are granted on the basis of a review of the decision approving the environmental conditions of the installation, as referred to in Article 12(5) of Joint Ministerial Decision 36060/1155/E.103/2013 (GG II 1450). Article 15(2) states that the total period of the temporary derogation cannot exceed nine months with the requirement that after the end of the period the operator either will stop the use of the technique or the technique can achieve at least the BAT-AELs.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Article 13(1) and (2) of Joint Ministerial Decision 36060/1155/E.103/2013 (GG II 1450) and Annex 3(1.1) of Ministerial Decision 170225/14 (GG II 135) require that BAT conclusions are the basis for defining monitoring requirements in permits.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined

(Article 16(2))?
Greece reported that the minimum frequency of monitoring is provided for in Article 13(3) of Joint Ministerial Decision 36060/1155/E.103/2013 (GG II 1450). The decision approving the environmental conditions sets out the measurement methodology, the frequency and the procedure for the evaluation of monitoring results, taking into account the content of the Environmental Impact Assessment (EIA) of the project or activity, the main report and the monitoring reports.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Greece reported that it is possible to set a lower frequency for monitoring of groundwater based on the results obtained from monitoring the quality of groundwater carried out by the Special Secretariat for Water under the National Monitoring Network for Surface and Groundwater and the proposals/conclusions of the water resource management plans of the Water Department to which the project or activity belongs.
QUESTION 5 – General Binding Rules (Article 17)
Greece does not use General Binding Rules for implementing the IED.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The competent department of the Directorate General for the Environment of the Ministry of the Environment, Energy and Climate Change follows and receives information about any developments in BAT and the publication of any new or updated BAT conclusions in accordance with Article 15 of Joint Ministerial Decision 36060/1155/E.103/2013.
Question 6.2 – How do competent authorities make that information available to the public concerned?
Greece indicated that all new or updated BAT conclusions are published on the website of the Ministry of Environment and made available to the public.
Question 6.3 – Links to where the information can be found
The link provided is: http://www.ypeka.gr/Default.aspx?tabid=804&language=el-GR
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Greece reported that pursuant to Article 17 of Joint Ministerial Decision 36060/1155/E.103/2013, for the reconsideration/updating of a permit the operator must submit to the competent environmental authority: **▪ The results of monitoring (findings of the initially applied monitoring programme); and** **▪ The results of checks (findings of routine and non-routine environmental inspections).**
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
In Greece the main activity is determined by considering only the main economic activity of the installation.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
In Greece, in the case of new/revised EQS the competent authorities can request the submission of a technical report which should include all appropriate additional measures required to control pollution or to ensure compliance with the requirements of a new/revised EQS. In any event, the competent environmental authority may request the submission of a specific study or a new Environmental Impact Assessment for addressing these issues (Article 2(9), Law 4014/11 (GG I 209).
QUESTION 8 – Site closure

Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation.

According to the response provided by Greece, the baseline report is part of the EIA file of all projects and activities falling within the scope of Joint Ministerial Decision 36060/1155/E.103/2013. A decision regarding the need to submit a baseline report is taken on the basis of the assessment of data submitted when drawing up Stages 1-3 of the baseline report. The above applies also in the case of a first renewal of the environmental permit after 7 January 2014. So far, there has been no need to prepare a baseline report.

Greece reported the following activities as requiring a baseline report:

- **1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more;**
- **1.2. Refining of mineral oil and gas;**
- **2.5. Processing of non-ferrous metals as defined under (a) or (b);**
- **2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3;**
- **4.1. Production of organic chemicals as defined under (a) to (k);**
- **4.2. Production of inorganic chemicals as defined under (a) to (e);**
- **4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers);**
- **4.4. Production of plant protection products or of biocides;**
- **5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k);**
- **5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day;**
- **5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste;**
- **5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated;**
- **5.6. Underground storage of hazardous waste with a total capacity exceeding 50 tonnes;**
- **6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day;**
- **6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day;**
- **6.10. Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m3 per day other than exclusively treating against sapstain.**

It should be highlighted that the selection of activities listed by Greece is not based on results of baseline reports but on an assessment of the competent environmental authorities made on the basis of data contained in the EIA and the environmental permits issued to date.

Greece reported that if the findings of the baseline report identify a potential risk of soil or groundwater pollution, the environmental permit of the plant must set out specific conditions for soil and groundwater, in accordance with Article 11(1e) of Joint Ministerial Decision 36060/1155/E.103/2013.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

Greece reported that operators prepare baseline reports in compliance with Commission Guidance 2014/C 136/03 and Article 18(2.2) of Joint Ministerial Decision 36060/1155/E.103/2013 (GG II 1450). No further information was provided.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

Greece indicated that they have not used so far the EC guidance as no baseline reports have been submitted (i.e. none of the conditions set out of Article 18(2) of Joint Ministerial Decision

36060/1155/E.103/2013 have occurred).
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
Greece reported that operators take into consideration: ▪ **The history of the project or activity (maintenance records, inspection results, an archive of accidents/incidents, etc.);** ▪ **The results of analyses of soil and groundwater;** ▪ **Details of the on-site inspection.** **If pollution is detected, Article 12 of Joint Ministerial Decision 13588/725/06 is implemented.**
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Significant pollution is identified by: ▪ **Comparing the results of soil and groundwater analyses with the corresponding elements of the baseline report; and** ▪ **Considering any detected breaches of limit values for the concentration of specific pollutants, groups of pollutants or indicators of pollution in groundwater as provided for in Joint Ministerial Decision 1811/11 (GG II 3322).**
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
Greece reported that a decision is taken mainly on the basis of the following criteria: ▪ **Type of pollution (air, water, soil/underground);** ▪ **Type of pollutant;** ▪ **Scope of pollution (rate of overrun or load, time);** ▪ **Size and nature of the project/activity;** ▪ **Status of the project or activity in relation to urbanisation, the population affected, distance from natural recipient, recipient's type and characteristics.**
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Greece indicated that a decision on measures and actions that the operator should take is based on responses provided in the elements reported under questions 8.2b and 8.2c.
QUESTION 9 – Environmental inspections (Article 23)
Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
Law 4014/2011 requires the Environmental Inspectorate to draw up a five year environmental inspection plan, which must be reviewed at least every five years, and where appropriate, updated. However, as secondary legislation setting out the powers of the decentralised administrations to carry out environmental inspections has not yet been introduced, the environmental inspection plan had not yet been drawn up. The inspection plan will set out the environmental inspections that are to be carried out during the period of the plan and contain all of the information set out in Article 23(3) IED. The Greek response does not state where this will be made publicly available and whether the plan will be published on the internet. **As the environmental inspection plan has not yet been drawn up, programmes for routine environmental inspections have also not yet been drawn up. Once introduced, the programme will set out the categories of activities to be checked and the frequency of inspections. Currently the Environmental Inspectorate carries out inspections based on monthly or bi-monthly plans within the scope of its annual plan. The Greek response does not state where the programme will be publicly available and whether it will be published on the internet.**
Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of environmental risks is based on the criteria set out in Article 23(4) IED, which is transposed by Law 4014/2011. The frequency of site visits is determined on the basis of the type and rates of emissions, the sensitivity of the local environment and the risk of

accidents, the size and type of project/activity and the seriousness and extent of the burden on the environment. Law 4014/2011 requires site visits to be carried out at least every year, for the installations included in Annex I IED, category A1, and at least every three years for the installations included in Annex I IED, category A2. A link is provided to the legislation (http://www.ypeka.gr/Default.aspx?tabid=804&language=el-GR), but no other guidance is referred to within the Greek response.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED. An inspection may also be carried out following an order of the public prosecutor or of the General Inspector of Public Administration.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
The site visit report is prepared on the basis of a standard form which includes information on the history to the inspection, responsible persons, the circumstances/observations during the inspection, as well as general information on the exact location of the inspection, the operator, the date and time of inspection, the type of inspection (regular or special, total or partial), names of participating inspectors/auditors and their specialty. Where the inspection covers an activity, the report must include data on the production process, capacity, fuel consumption, and installed capacity as well as information on the permit (number, date of issue, expiry date, authority issuing the decision, and the safety and risk assessments). The report also provides background information, including details of checks carried out in the past, infringements identified, as well as the status of any fines or other administrative penalties imposed. The inspection report is also used to request any further data, documents, studies, licences, drawings, or technical information required, related to the inspection. Once the inspection is completed, the report is signed by the inspectors and the responsible person, and a copy provided to the operator's representative. The Greek response only refers to the annual report of the Environmental Inspectorate being made publicly available, although Law 4014/2011 does require that each individual site visit report is made publicly available within 4 months in accordance with Directive 2003/4/EC. There have been no cases in which the reports have not been made publicly available during the reporting period.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
The operator will have at least 5 working days to comment on any breaches of environmental legislation that are noted in the site visit report. The Environmental Auditor will then prepare a reasoned statement confirming the breach or otherwise, which is then sent to the competent authority and a copy provided to the public prosecutor to consider potential criminal offences. Depending on the severity of the infringement, the Environmental Inspectorate may also impose a fine.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Greek response refers to the provisions of JMD 36060/1155/E.103/2013, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. The public are to be informed of certain information at the beginning of the procedure or, at the latest, as soon as the information can reasonably be provided. Law 4014/2011 and JMD 1649/45/2014 set out the detailed procedure regarding public participation and consultation. The competent environmental authority is required to give notice of an application through public notices, the municipalities website, in shops and at least one daily journal or national daily newspaper, informing the public that views can be provided on the application and providing details of where the relevant environmental information can be viewed and the start and end dates of the public consultation, amongst other information. The public concerned are entitled to express and submit their opinion to the competent environmental authority before a decision on authorisation, renewal, modification or adjustment of the terms of a permit. The results of the consultation are to be taken into due consideration by the CA in each

case.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public by public notices (municipality website, shops and at least one daily journal or national daily newspaper) or other appropriate means such as electronic media where available. All relevant information is made available on the internet (http://aepo.ypeka.gr/).

QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Greece indicated that the development and application of emerging techniques is encouraged through the co-financing of relevant actions through the LIFE programme (a wide range of topics such as: management and monitoring of air quality, waste management and recycling, industrial pollution, waste control) and through the State aid programme "Green Infrastructures 2010", in the thematic priority code 06 "Assistance to SMEs for the promotion of environmentally-friendly products and production processes (adoption and use of pollution prevention technologies, integration of clean technologies into company production).

Hungary

Analysis of the completeness of the report

Table A24: Completeness assessment of answers reported by Hungary – IED

Question title	Question number(s)	Hungary	Comments
Non-compliance (Article 8)	1		
Permit conditions (Article 14)	2.1		
Row heading	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	3.1		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	4.1		
	4.2		
	4.3		
General Binding Rules (Article 17)	5.1		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	6.1		
	6.2		
Reconsideration and updating of permits (Article 21)	7.1		
	7.2		
	7.3		
Site closure (Article 22)	8.1 (a) to (d)		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	9.1 (a) to (c)		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		
Emerging techniques (Article 27)	11		

Hungary provided a complete response to the questionnaire.

Analysis of Hungary's response

The table below contains the detailed analysis of the responses provided by Hungary to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A25: Hungary – Response analysis table

HUNGARY
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Pursuant to Section 26(5) of Government Decree No 314 of 25 December 2005 on the procedures of environmental impact assessments and integrated pollution prevention and control, in the case of an activity entailing an environmental threat or pollution, the inspectorate may issue a decision to restrict, suspend or prohibit such activity or any part of it, depending on the extent of the resulting environmental impact. Pollution and environmental threat are defined as follows in the Act LIII of 1995 on the general rules of environmental protection: ▪ pollution means a load on an environmental medium above the emission limit values, ▪ environmental threat means an immediate threat of environmental damage, ▪ environmental damage means any major and measurable – either direct or indirect – significant adverse effect on the environment or any medium thereof, or any major and measureable – either direct or indirect – deterioration in the service provided by an environmental medium.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Hungary reports that this is governed by Section 17(2) of Government Decree No 314 of 25 December 2005. The conditions in the IPPC permit are specified in view of the BAT conclusions specified in the Commission's decision for a given activity. The following web link was provided www.njt.hu
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
Hungary reports that this is governed by Section 20(13) of Government Decree No 314 of 25 December 2005. There are ten regional inspectorates operating in Hungary. They can specify additional conditions in the permits if the use of the best available techniques is not sufficient to achieve the target environmental status required under the relevant legislation or to ensure compliance with pollution limit values.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Pursuant to Section 20(7) of Government Decree No 314 of 25 December 2005, the inspectorate specifies emission limit values ensuring that, under normal operating conditions, emissions from the installation will not exceed the emission levels associated with the best available techniques in accordance with the relevant BAT conclusions. The ELVs are set through either of the following measures: ▪ setting emission limit values for the same or shorter reference periods and under the same reference conditions as the emission levels associated with the best available techniques; or ▪ setting different emission limit values to those referred to in the point above in terms of value, reference period and reference conditions.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Hungary reports that inspectorates can grant derogations from paragraph 7 and set less strict emission limit values. This applies when the operator is able to demonstrate that the achievement of emission levels associated with the best available techniques as described in the relevant BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to the geographical location, local environmental conditions or the technical characteristics of the installation concerned. Where Section 20(8) of Government Decree No 314 of 25 December 2005 is applied, the inspectorate informs the European Commission via the Minister, in accordance with paragraph 9.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article

15(4))?
Hungary reported that no such derogation was granted during the reporting period. No further information was provided on what would be considered as disproportionately high cost.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Hungary reported that no such derogation was granted during the reporting period. If such a derogation was to be granted, it would be determined on an installation specific basis by the licensing authority. No further information was provided on the limitations on the magnitude or duration of derogations.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
The inspectorate orders a testing period in the case of new installations, substantial changes or emerging techniques where due to the nature of the technology no official monitoring is able to establish compliance with the requirements set out in the IPPC permit. During the testing period the inspectorate may grant derogations from the conditions of normal operation. After the testing period the activity may be carried out only in compliance with the conditions laid down in the IPPC permit. After the end of the testing period ordered by the inspectorate, but no later than six months – or, in the case of emerging techniques, nine months – after the start of the testing period, the operator shall demonstrate and the inspectorate shall check compliance with the conditions laid down in the IPPC permit during the operation of the installation. In doing so, the operator shall submit a completion document, listing the equipment of the completed installation and demonstrating compliance of the completed installation with the conditions laid down in the IPPC permit.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
The monitoring requirements are defined in the permit according to point 4 of Annex 11 to Government Decree No 314 of 25 December 2005. These cover measurement/inspection (monitoring) conditions – based on the relevant BAT conclusions, after they are published – required for monitoring the environmental impact of the activity, specifying measurement methodology, frequency and evaluation procedure (including conditions for evaluating compliance with emission limit values). Where the emission limit values are different to those set out in the BAT conclusions, the results of emission monitoring are available for the same periods of time and reference conditions as for the emission levels associated with the best available techniques.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
Hungary reports that pursuant to Section 22(10) of Government Decree No 314 of 25 December 2005, the operator must carry out monitoring for groundwater and soil with the frequency required in the IPPC permit. This is at least once every 5 years for groundwater and once every 10 years for soil.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Hungary's response does not include information on how the systematic appraisal of risk of contamination is used, instead it indicated that the monitoring required under Section 22(10) of Government Decree No 314 of 25 December 2005 must be carried out for each installation required to hold an IPPC permit.
QUESTION 5 – General Binding Rules (Article 17)
Hungary has not used General Binding Rules for the implementation of the IED.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
All current information on the publication of new or updated BAT conclusions is posted on the integrated pollution prevention and control website operated by the Ministry of Agriculture. Hungary did not report other means of communicating the publication to the competent authorities.
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?

Hungary referred to the integrated pollution prevention and control website mentioned in response to question 6.1. where up to date information on the BAT conclusions is published.
Question 6.3 – Links to where the information can be found
Hungary provided the following link to the IPPC website: www.ippc.kormany.hu
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
The information and the content of review documents to be submitted by the operator are specified jointly by the review provisions of Government Decree No 314 of 25 December 2005 and Act LIII of 1995 on the general rules of environmental protection. The mandatory content of the full environmental review documents is specified in Annex 2 to Decree No 12 of 4 July 1996 of the Minister for Environmental Protection and Regional Development. The mandatory content of the partial environmental review documents covers provisions of point 1 and 2 of Annex 2 to Decree No 12 of 4 July 1996 of the Minister of Environmental Protection and Regional Development, and an analysis of the review areas set out in point 3 which fall within the scope of the review as specified by the environmental inspectorate. Pursuant to Section 20/A(7) of Government Decree No 314 of 25 December 2005, the form and content of data and information submitted for the purpose of the environmental review must enable the inspectorate to compare (specifically in terms of emissions): the operation of the installation with the best available techniques described in the applicable BAT conclusions and with the emission levels associated with the best available techniques. The link to the following website was provided by Hungary: www.njt.hu This website is the database of the Hungarian national legislation which allows the user to search for relevant Government Decrees as covered above.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
The response provided did not discuss the determination of what is the main activity at an installation. Instead the response stated that a review of the requirements and provisions applicable to the activities concerned must be carried out within four years of the publication of the decision on BAT conclusions relating to any of the activities listed in the IPPC permit.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
The permit reconsideration / update is undertaken when the inspectorate establishes that: ▪ the environmental safety of operation requires the use of new techniques, ▪ the significant environmental load caused by the installation justifies a review of the limit values set out in the former permit, ▪ the use of the best available technique is no longer sufficient to ensure compliance with any limit value or target environmental status, In such instances, the inspectorate orders the operator to carry out an environmental review. Penalties stipulated in Section 26 of Government Decree No 314 of 25 December 2005 may also apply. As a result of the review, the inspectorate may, pursuant to Section 20/A(12) of Government Decree No 314 of 25 December 2005, adopt a decision to: ▪ issue or amend the IPPC permit required to continue the activities, or ▪ revoke the IPPC permit or refuse the application and, if necessary, stipulate obligations with regard to the cessation of activities.
QUESTION 8 – Site closure (Article 22)
Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
The information submitted with the IPPC permit application, and for the review must be supplemented with a baseline report. The content of the baseline report is governed by principles in Section 15(8) of and Annex 13 to Government Decree No 219 of 21 July 2004 on groundwater protection unless the inspectorate holds the baseline report on the site or the detailed fact-finding closing documents specified

in Government Decree No 219 of 21 July 2004.

If, based on the description of the past and present use of the site (point 1 of the baseline report), no soil or groundwater pollution can be assumed to have been caused by activities performed before the date of the baseline report, and if the activities to be started or resumed pose no hazard to soil and groundwater, the relevant soil and groundwater status description (point 2 of the baseline report) may be omitted subject to inclusion of a justification. If the inspectorate refuses to accept the justification, the operator will be requested to fill point 2 of the baseline report.

Hungary reported that the following activities are covered by the baseline report:

- 1.1 Combustion of fuels in installations with a total rated thermal input of 50 MW or more
- 1.2. Refining of mineral oil and gas
- 1.3. Production of coke
- 1.4. Gasification or liquefaction of (a) coal or (b) other fuels in installations with a total rated thermal input of 20 MW or more
- 2.2. Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2.5 tonnes per hour
- 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3
- 3.1. Production of cement, lime and magnesium oxide as defined under (a) to (c)
- 3.2. Production of asbestos or the manufacture of asbestos-based products
- 3.3. Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day
- 3.4. Melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tonnes per day
- 3.5. Manufacture of ceramic products by firing with a production capacity exceeding 75 tonnes per day and/or with a kiln capacity exceeding 4 m3 and with a setting density per kiln exceeding 300 kg/m3
- 4.1. Production of organic chemicals as defined under (a) to (k)
- 4.2. Production of inorganic chemicals as defined under (a) to (e)
- 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers)
- 4.4. Production of plant protection products or of biocides
- 4.5. Production of pharmaceutical products including intermediates
- 4.6. Production of explosives
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k)
- 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v)
- 5.3. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of activities (i) to (iv)
- 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste
- 5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated
- 5.6. Underground storage of hazardous waste with a total capacity exceeding 50 tonnes
- 6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day
- 6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day
- 6.5. Disposal or recycling of animal carcases or animal waste with a treatment capacity exceeding 10 tonnes per day
- 6.6. Intensive rearing of poultry or pigs as defined under (a), (b) or (c)

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

The mandatory information to be included in the baseline report is as follows (Annex 13 to Government

Decree No 219 of 21 July 2004):

1. Description of the past and present use of the site:

   1.1.Precise delimitation of the site, EOV coordinates of corner points, topographical lot number(s), a map obtained from the database of the public land register, a general map on a scale of 1:10 000, name of the relevant settlement, location of the site, street name and street number (for sites within village limits), site area, site identification with a map on a scale of 1:4 000, land use category, name of non-agricultural area

   1.2. Aerial photos, archived maps or photo documents that best show the changes in former use, built-in ratio and coverage ratio of the site,

   1.3. Description of the site in terms of its geography, climate, geology, hydrogeology, flora and fauna as well as natural areas to be safeguarded,

   1.4. History of site use including a detailed description of past and present activities, technologies and materials used (including, in particular, hazardous substances and hazardous waste), turnover, storage, transport and handling of materials,

   1.5. A detailed description of further site use including details of activities, technologies, materials used, waste produced, emissions and diagrams of the turnover of materials,

   1.6. Study of whether the hazardous substances used, produced or emitted during past or planned activities on the site may cause soil or groundwater pollution, including a detailed description of the study methodology, the applied procedures, measurements and modelling efforts,

   1.7. Description of pollutant emissions as a result of past activities and extreme contingencies (fire, explosion, leakage, spillage, dust release, inundation, military events, etc.) affecting the site, description of already completed damage elimination measures (damage prevention, mitigation, elimination and remediation efforts), environmental reviews, status appraisals, audits and the related documents,

   1.8. Name and amount of hazardous substances stored on and near the site, description of the conditions of transport, storage and use regarding hazardous substances, description of underground storage tanks and piping regarding their use, turnover of hazardous substances, conditions of the installation and reconstruction, technical data, conditions of inspection and maintenance, precise identification on a map,

   1.9. Description of site use classification and site sensitivity category according to the applicable spatial plan,

   1.10. Name, home address or registered office, e-mail address and phone number of site owners/users.

2. Description of the status of soil and groundwater:

   2.1. Determination of baseline status on the basis of tests:

   2.1.1. Data of person(s) in charge of compiling the baseline report and documents, including the number and validity of operating/expert licences and sampling/sample testing accreditation,

   2.1.2. Description of testing methods including, in particular, the following:

   2.1.2.1. Sampling and laboratory testing methods, applied software and standards,

   2.1.2.2. Geodetic, geophysical and other tests,

   2.1.2.3. Testing facilities,

   2.1.2.4. Sampling,

   2.1.2.5. Analytics,

   2.1.2.6. On-site measurements and tests,

   2.1.3. Description of the quality, quantity and concentration of pollutants and their relation to concentration limit values [background concentration (A) or proved background concentration (Ab), contamination (B) or site specific contamination (E) and proposed remedial target (D) limit values.

   2.2. Where the concentration of a pollutant exceeds the contamination (B) limit value under point 2.1.3, the following must also be included in the baseline report:

   2.2.1. Spatial delimitation of the contamination up to the contamination (B) limit value or proved background concentration (Ab) or, in the case of pollutants typical of diffuse sources of pollution, up to the level where the tested diffuse source can still be shown to significantly contribute to the contamination,

   2.2.2. Forecasting the movement of pollutants in space and time (trend analyses, trend recognition), physical delimitation of the vulnerable zone,

2.2.3. Impacts of pollutants or contamination on the environment,

2.2.4. Description of the cause, origin and circumstances of contamination/damage,

2.2.5. Overall description of water use practices in the contaminated zone and description of vulnerable water use practices in the contaminated zone (with the level of detail meeting the substantive requirements applicable to water right permits),

2.2.6. Description of the outcome and methodology of simplified and detailed quantitative remedial risk assessment.

The data and information regarding the status of soil and groundwater must also be displayed in maps and figures (e.g. hydrogeological sections); depending on the variability of the tested zone and contamination. Such display may take the form of consolidated maps and figures or in any number of single maps and figures required for the purpose of clear demonstration of contamination levels.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

The operator must prepare and submit to the inspectorate a baseline report, with the content specified in Annex 13 in the Government Decree No 219 of July 2004 as detailed in response to question 8.1.c, and in view of the Commission's guidance.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Hungary reports that an environmental review must be carried out to identify and study the environmental impacts of each individual activity, and to check compliance with the environmental requirements. For the purposes of this review, an activity will be deemed to include the commencement, continuation, resumption, restoration or cessation of any operation – involving the use of, hazards to, and pollution of, the environment – as well as the performance of any related construction or preparatory work. An overall review must also cover the measures to be taken after the cessation of activities. As a result of the review, the inspectorate will revoke the permit and, if necessary, stipulate obligations with regard to the cessation of activities. The frequency of such reviews was not included in the Hungarian response.

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

Upon the cessation of activities which have caused environmental damage to soil or groundwater in comparison with the status shown in the baseline report, a remedial procedure as per Government Decree No 90 of 26 April 2007 on the rules for preventing and remedying damage to the environment or a remediation procedure as per Government Decree No 219 of 21 July 2004 must be carried out.

Hungary provided an example of an installation that ceased operation during the reporting period whereby a competent inspectorate requested a cessation plan, which contained groundwater test results obtained from existing monitoring wells. According to the results, no contamination occurred on the site.

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

Hungary reported that upon the cessation of activities where such activities have caused environmental damage to soil or groundwater in comparison with the status shown in the baseline report, a remedial procedure as per Government Decree No 90 of 26 April 2007 on the rules for preventing and remedying damage to the environment, or a remediation procedure as per Government Decree No 219 of 21 July 2004 must be carried out. Hungary in its response has not provided information as to how it is decided whether any contamination of soil or groundwater poses a significant risk to human health or the environment.

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

The measures to be taken are determined in the course of the remedial procedure (as per legislation quoted in the response to question 8.2.c).

QUESTION 9 – Environmental inspections (Article 23)

Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?

An environmental inspection plan has been drawn up and is updated annually for IED installations, which contains all of the information set out in Article 23(3) IED. It is stated that some environmental

authorities make the main content of the environment inspection plan available on their website (for example, http://kdtktvf.zoldhatosag.hu/index.php?p=t&id=6-52). However, others do not in order not to jeopardise the success of the environmental inspections.

Annual programmes for inspections are prepared by the inspectorate on the basis of the general inspection plan. These set out the subject matter of the scheduled inspections, the inspection period, the timetable, the means and criteria of inspections as well as any other particulars defined by the inspectorate. The programmes for inspections are publicly available on the websites of the individual inspectorates (for example, http://kdtktvf.zoldhatosag.hu/).

Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

The frequency of site visits is decided on the basis of the criteria set out in Annex 15 of Government Decree No 314. This requires an annual inspection to be carried out where there has been an adverse environmental effect or environmental threat or pollution as a result of the improper operation of the installation, where the installation failed to comply with the conditions of the permit, where a previously suspended activity has resumed, where the installation is a SEVESO site, or where is site is situated on or near a protected site or within a protection zone of a catchment area. A site visit may be carried out between every 1 and 3 years where the installation is operated under the EMAS scheme, the activity has not commenced or been suspended and the installation complies with the conditions of the permit. The systematic appraisal of environmental risks of installations is, therefore, based on the criteria in Article 23(4) IED.

Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.

Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?

Site visit reports contain the location, date/time of the inspection, duration, the name and title of all persons involved in the inspection, the name, address and contact details of the inspected party, the subject matter of the inspection, the applicable legislation and a notice regarding the rights and obligations of the inspected party. The report must also contain the activities and permits of the inspected party, a description of the findings of the inspection, in particular regarding compliance with the permit, and a brief summary of the findings established on the site or the general description of the environment. Following completion of the site visit report, the operator may comment on the inspection or provide additional information on the individual findings. At the end of the inspection, the operator receives an original of the site visit report or will be sent a copy within 10 days of the inspection. Site visit reports are made publicly available on the website of the inspectorate. There have not been any circumstances under which such reports have not been made publicly available, although where necessary certain information will be withheld.

Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?

Where further measures require to be taken following an inspection, the inspectorate will set a deadline for these and will carry out further checks or site visits to confirm that these have been completed. If the actions specified in the report are not implemented within the deadlines set, further statutory enforcement measures can be taken, which may result in the imposition of a fine.

QUESTION 10 – Access to information and public participation (Article 24)

Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?

The Hungarian response refers to the provisions of Government Decree No 314, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. Within 15 days of receipt of an application the inspectorate is required to inform the public of the procedure by publishing an announcement on its notice board and website, and forward the announcement and the application to the local municipality where the activity will be carried out, and those likely to be affected by the activity, who must also within 5 days, put a notice of the application in public places, following

which the public have a period in which to make representations on the application.

Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?

Information is to be made available to the public through announcements of the inspectorate both on its noticeboard and website, and public notices. All relevant information is made available on the internet (for example, http://nydtktvf.zoldhatosag.hu/index.php/e-tajekoztato/hirdetmenyek).

QUESTION 11 – Emerging techniques (Article 27)

Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?

Hungary reported the use of the following mechanisms for the identification of emerging techniques:

a) The P-graph approach – this is used for planning optimum engineering production structures that meet all environmental, reliability and safety criteria, and for generating, in view of the primary purpose of the structure, optimum engineering production structures, while also providing input for the tools responsible for detailed planning. Recommended fields of application include planning and re-planning of production systems for the chemical industry, oil industry and machine industry including, in particular, when cost efficiency is coupled with environmental, reliability and safety criteria. Economic operators and a university research and development centre are involved in the process.

b) Through the publications and periodicals issued and the conferences or workshops organised by the professional associations operating in Hungary.

Methods and processes designed to encourage the development and application of emerging techniques in Hungary involve:

I.) Research and development projects: this approach is used in several sectors generally in the form of cooperation between industrial enterprises and research centres, where the industrial enterprise specifies a demand and the research centre provides ideas and background for, and participates in, the creation of proposals/tenders. Hungary reported the following examples of such projects:

- EU-funded development projects for energy rationalisation
- Tenders under the Economic Development Operational Programme (GOP)
- Tenders for the Central Hungary Region
- R&D&I UMBRELLA project
- R&D TÁMOP type project
- R&D projects involving academic research facilities for the development of novel techniques (financed from EU and domestic funds)

II.) Conferences and publications:

- professional conferences at the sector level
- 'interdisciplinary workshops'

III.) Some industrial enterprises in Hungary use their own funds for development purposes, though in order to maintain their competitive advantage they are usually not inclined to share the resulting innovations with other participants within the sector.

Ireland

Analysis of the completeness of the report

Table A26: Completeness assessment of answers reported by Ireland – IED

Question title	Question number(s)	Ireland	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		

Question title	Question number(s)	Ireland	Comments
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Ireland provided a complete response to the questionnaire.

Analysis of Ireland responses

The table below contains the detailed analysis of the responses provided by Ireland to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A27: Ireland – Response analysis table

IRELAND
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The Competent Authority (CA) has developed an online system called LEMA (Licensing, Enforcement, and Monitoring and Assessment system). Non-compliances must be reported to the CA through this module. Where a non-compliance is notified to the CA, an Inspector initially considers whether it has the potential to be significant. This is undertaken through a compliance investigation online process and assigned a risk score. All risk scores above a specified value are considered to 'pose an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
Section 86(A) of the Environmental Protection Agency (EPA) Act 1992 as amended addresses this requirement. The response included a link toward the relevant legislation[115]. Reference to the text of the EPA Act 1992 provides the following information: ▪ The EPA will not grant a license unless it is satisfied that BAT will be utilised to prevent, eliminate or minimise emissions and the overall impact on the environment ▪ BAT conclusions are a reference for attaching one or more conditions to a licence or a revised licence granted for industrial activities Ireland further reported that all applicable BAT conclusions are considered and assessed during the permit application/review consideration. The Permit Holder is required to specify how they are currently meeting/or propose to meet the applicable BAT conclusions and the Environmental Protection Agency then determines how the requirement is to be addressed by way of permit requirements.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
Ireland's response only states that this can be done in accordance with Section 83(5)(b) of the EPA Act

115 http://www.environ.ie/en/Legislation/Environment/Miscellaneous/FileDownLoad,33267,en.doc

1992 as amended.

The referenced section of the EPA Act 1992 states that the license will not be granted by the Agency in cases where an environmental quality standard requires stricter conditions to be attached to the licence or revised licence than would otherwise be determined by reference to best available techniques, unless:

- A licence or revised licence conditions of an appropriate kind for the purpose of that standard are attached
- A proposed licensee or the licensee proposes, for the purpose of that standard, to take steps that are different from those that would be required by the imposition of conditions under point above, and
- The Agency is satisfied that those steps will be taken.

QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

Section 86(A) of the EPA Act 1992 (as amended) requires ELVs to be set in permits in accordance with the BAT Conclusions associated emission levels. ELVs are set by way of a reconsideration of the permit, i.e. permit review. The Permit Holder is required to provide information to demonstrate how they are or will achieve the emission levels associated with BAT. The EPA the sets ELVs in-line with the specified associated emission levels, based on an assessment of the provided and available information.

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

To date the EPA have not granted a derogation from Article 15(3). In order for such a derogation to be granted, the operator is required to provide a robust justification (with an appropriately detailed assessment) as to why, in their particular situation, the achievement of the relevant ELVs would lead to disproportionate costs. In the event that the EPA agree to such a derogation, it would be issued with the permit and documented as set out in Article 15(4).

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

Ireland reports that the EPA has not developed any specific guidance on the cost-benefit assessment or analysis of such an assessment. The assessment will be considered based on the specific scenario put forward by the permit holder/applicant and will be determined on a case-by-case basis.

Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

Limitation on the magnitude and/or duration of a derogation will be determined at the time of consideration of the cost-benefit assessment as provided by the permit holder/applicant.

Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

Temporary derogations can be granted under the EPA 1992 Act. This is only applicable for consideration following permit application and for a maximum period of 9 months. Temporary derogations can also be considered as part of a revised permit application. They will be granted based on the assessment of the specific proposal.

QUESTION 4 – Monitoring requirements (Article 16)

Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?

The monitoring requirements as set in the BAT Conclusions are defined in the permit. During the application phase, the applicant/permit holder is asked to comment on the applicability and compliance with the BAT Conclusion requirements. The response is considered and the relevant BAT Conclusion requirements are then transposed, as appropriate, into the permit.

Ireland provided the following link to the Guidance on BAT Conclusions: http://www.epa.ie/licensing/info/bat/

Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?

The frequency of periodic soil and groundwater monitoring is set at a frequency of at least once every 5 years for groundwater and 10 years for soil. Where there is considered to be a greater risk of groundwater and/or soil contamination more frequent monitoring is specified. Information from the Baseline report,

Environmental Impact Statement, groundwater/soil assessment documentation, etc. are used to inform decision on the monitoring frequency.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
To date no formal 'systematic appraisal of risk of contamination' has been developed to stipulate less frequent monitoring. Ireland reported that it may be that in future the consideration of the assessment information contained in an Environmental Impact Statement, relevant monitoring reports, Baseline Report and Environmental Liabilities Risk Assessment in relation to groundwater/soil will assist in this determination.
QUESTION 5 – General Binding Rules (Article 17)
Ireland has not implemented any GBRs.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The EPA is made aware and informed on new and updated BAT conclusions through participation in EIPPCB Technical Working Groups, the IED Article 13 Forum and Article 75 Committee meetings and regular review of the European IPPC Bureau's website http://eippcb.jrc.ec.europa.eu/reference /. The Member States representative keeps relevant people informed. In addition training is provided for EPA Staff on updates to BAT.
Question 6.2 – How do competent authorities make that information available to the public concerned?
Competent authorities make the information available on the EPA website[116]. High level information on BREFs and a link to the EIPPC Bureau website is also included on the EPA web-site.
Question 6.3 – Links to where the information can be found
http://www.epa.ie/pubs/advice/brefs/
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Permit reviews are addressed by Section 90 of the EPA Act as amended. The operator is requested to provide a completed full application of all aspects of the operation of the installation and this includes an assessment of performance against the applicable BAT Conclusions. The original text of the EPA Act, section 90 states that: ▪ Licenses (or revised licenses) for industrial emission installations need to be reviewed within 4 years of the publication of a decision on BAT conclusions ▪ When reviewing the license the EPA should re-examine the installation for compliance with the Industrial Emission Directive ▪ In conducting such examination, the EPA should take into account new or updated BAT conclusions applicable to the installation and adopted by the Commission
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
Ireland reported that the main activity of an installation is determined by the EPA as follows: ▪ Where a single IED activity is carried out, the main activity is considered to be the IED activity ▪ Where multiple IED activities are carried out, the main activity is determined based on consideration of the main 'economic purpose' of the installation; and ▪ Based on further discretionary consideration, where required.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
In Ireland, permit reviews are carried out under Section 90 of the EPA Act 1992 as amended. Section 90(4) specifies the criteria where the EPA is required to review a licence. This includes:

[116] http://www.epa.ie/licensing/info/bat/

- to address significant pollution,
- where operation safety requires other techniques to be used, and
- to comply with a new or revised environmental quality standard.

QUESTION 8 – Site closure (Article 22)

Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

Ireland reported that EPA has issued Industrial Emissions licences for the following IED classes of activity (up to 1st August 2014):

- 4.2 Production of basic inorganic chemicals
- 4.5 Production of pharmaceutical products
- 5.1 Disposal or recovery of hazardous waste
- 5.2 Disposal or recovery of waste in waste incineration plants
- 6.4(c) Treatment and processing of milk - (it was not possible to select this option from the drop-down list)
- 6.6 (b) & (c) The intensive rearing of pigs
- 6.6(a) The intensive rearing of poultry.

The majority of installations were found to involve the 'use, production or release of relevant hazardous substances' and applicants submitted a baseline report as part of their licence application. The EPA has not determined that any particular Annex I activities do or do not require a baseline report. Some intensive agriculture (pig and poultry) installations under assessment involve the use, production or release of relevant hazardous substances, however the quantities involved are small. Having regard to the risk to soil and groundwater, a baseline report may not be required for some of these installations.

The following activities listed in Annex I have been found to involve the use, production or release of relevant hazardous substances:

- 4.2. Production of inorganic chemicals as defined under (a) to (e)
- 4.5. Production of pharmaceutical products including intermediates
- 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k)
- 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for for hazardous waste with a capacity exceeding 10 tonnes per day
- 6.6. Intensive rearing of poultry or pigs as defined under (a), (b) or (c)

The information received from the operator in relation to baseline reports is assessed by an EPA licencing inspector. This information includes the determination by the operator as to whether they consider a baseline report is required. The EPA inspector applies the Commission Guidance concerning Baseline Reports (2014/C 136/03) to ensure the relevant stages are followed (Stage 3 is most relevant to point (b)). Where the installation does involve the use production or release of relevant hazardous substances' the following information is assessed:

- the quantities of substances,
- how and where they are stored, transported, used and emitted,
- soil and groundwater characteristics, and
- protection measures.

Ireland reported further that the assessment of the possibility of soil and groundwater contamination is based on the Commission guidance, assessment of all available information and expert judgement. The Inspector may also consult with in-house expertise in soil and groundwater contamination.

An installation may involve 'use, produce or release relevant hazardous substances' but the operator may determine that a baseline report was not required. Where the Agency has not agreed with this determination due to the possibility of soil and/or groundwater contamination a baseline report is requested.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

Operators are advised to use the 'Commission Guidance Concerning Baseline Reports' (2014/C 136/03) which is available on the EPA website at www.epa.ie. The EPA assesses baseline reports against the Commission guidance.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report'

(2014/C136/03) been used in this context (Article 22(2))?
Ireland reported that it uses the Commission's Guidance - Stage 3 to determine whether a baseline report is required. This is used to assess applications on a case-by-case basis. The statement in Section 5.3 in relation to quantities of relevant hazardous substances is taken into account in assessing if a baseline report is required i.e. 'where very small quantities are used, produced or released on the site of the installation then the possibility of contamination is likely to be insignificant'. Ireland noted that 'very small quantities' is not defined. Stage 3 of the Commission guidance refers to 'release of the substance in sufficient quantities to represent a pollution risk'. It also refers to where there is 'no significant possibility for contamination'. Assessments are being carried out on a case-by-case basis for applications in order to determine the possibility for contamination.
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
Ireland reported that state of soil and groundwater contamination is assessed as follows: ▪ upon definitive cessation, operators assess the state of soil and groundwater contamination by arranging for the completion of an "Independent Closure Audit" (ICA) by a competent, adequately qualified and experienced hydro-geological expert or similar ▪ the purpose of the ICA is to ensure that necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of the operation to a satisfactory state. In 2013 the EPA published "Guidance on Contaminated Land and Groundwater at EPA Licensed Sites": http://www.epa.ie/pubs/advice/waste/contaminatedland/contaminatedland/Guidance_on_the_Management_of_Contaminated_Land_and_Groundwater_at_EPA_Licensed_Sites_FINAL.pdf In Ireland a series of guideline template reports have also been developed in order to assist licensees with the preparation of suitable reports to address the various stages and sub-tasks within the land and groundwater risk assessment methodology. The following link was provided: http://www.epa.ie/pubs/advice/waste/contaminatedland/contaminatedland/ Stage 1 Site Characterisation & Assessment (including as necessary the following steps Preliminary Site Assessment, Detailed Site Assessment and Quantitative Risk Assessment) can be used by operators to assess the state of soil and groundwater contamination at a site.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
This is decided upon the results of the ICA. The use of a risk based approach by operators as outlined in EPA Guidelines is considered best practice by the EPA when assessing whether an installation has caused 'significant pollution of soil or groundwater'.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
This is decided upon the completion the ICA. The use of a risk based approach by operators as outlined in EPA Guidelines is considered best practice by the EPA when assessing if contamination of soil or groundwater 'poses a significant risk to human health or the environment'. Section 4 of the EPA guidance provides more information on soil and groundwater standards and risk assessment tools recommended by the EPA when assessing risk to human health and environment.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Ireland reports that as part of the closure audit and procedures the licensee must refer to the EPA Guidance and associated guideline template reports as described above. Following the completion of Stage 1 Site Characterisation and Assessment, an evaluation of the overall risk of the site to the environment will be made and a decision made on what necessary measures or actions are required of operators. If Stage 1 identifies problem areas at a site that need to be addressed, then the process moves to Stage 2 Corrective Action Feasibility & Design, where the feasibility of Corrective Action options are considered and a design/plan for Corrective Action determined. The implementation of the Corrective Action scheme designed at Stage 2 is undertaken in Stage 3 Corrective Action Implementation & Aftercare with a critical element being verification that the corrective action strategy achieves its aims.
QUESTION 9 – Environmental inspections (Article 23)
Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?

An 'Environmental Inspection Plan' is drawn up each year by the Environmental Protection Agency (EPA), the most recent of which is from September 2014, which contains all of the information set out in Article 23(3) IED. The plan is publicly available on the website of the EPA[117]. Programmes for routine environmental inspections are drawn up annually at the national level and implemented by the regional inspectorates. These contain details of routine inspections (based on criteria for the systematic appraisal of the environmental risks of an installation, an assessment of the environmental issues at the sites and additional sectoral requirements for site inspections due to priority issues within each sector), and also makes provision for non-routine inspections, setting out the frequency of inspections. While the plan is publicly available, details of the programmes were not provided.
Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
Guidance on how the environmental risks of installations are 'systematically appraised' is provided in section 4 of the Environmental Inspection Plan. A Risk Based Method of Enforcement (RBME) is used to categorise sites into one of nine categories – A1, A2, A3, B1, B2, B3, C1, C2 and P – based on factors including the complexity of the site, emissions, location, operator management and the enforcement record. A link to the relevant guidance was included in the Irish response[118]. The minimum frequency of site visits is then determined based on the categorisation of the site, with A1 sites being the highest risk sites for which inspections are carried out every year. For B, C and P sites, site visits are carried out every 2, 3 and 3 years respectively.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED. In addition, non-routine environmental inspections are carried out to investigate any complaints about the site.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports are completed on the basis of a template, which requires information to be completed on the scope, media, area visited, documents inspected, site specific information, actions required and notifications of non-compliance. Further information may be provided depending on the nature of the inspection. Site visit reports are notified to the operator using a web based system, and are publicly available at the offices of the competent authority. There have been no cases in which the reports have not been made publicly available during the reporting period.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where further measures require to be taken following a site visit, the operator is required to complete these within a specified timescale and either the operator reports back to the competent authority or these actions are checked at the next site visit.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Irish response refers to the provisions of the Industrial Emissions Licensing Regulations 2013, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. A notice of intention to apply for a new licence or a review of a licence must be placed in a local newspaper at least two weeks before an application is made. Upon making the application, a site notice must also be fixed at the application site. All documentation (including the application, correspondence, submissions, additional information and the recommended determination) is made available on the website of the EPA as soon as practicable after it is received. Before making a decision on a new or revised licence,

117 http://www.epa.ie/pubs/reports/enforcement/iedinspectionplan/inspectionplan.html#.VY6i6djbKUk

118 www.epa.ie/enforcement/lic/how/categories/

the EPA must notify any person who made written submissions in relation to the application or the review and indicate the manner in which the Agency propose to determine the application or the review. This notification is given within 8 weeks of receipt by the Agency of an application for a licence or a review of licence. Any person can object to the proposed determination of an application for a new or revised licence and that person may also request an oral hearing.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public on the website of the EPA. All relevant information is available online and a link toward the relevant website was included in the response[119].
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Ireland reported that emerging techniques are encouraged through discussion with companies during the pre-application meetings and through the Industrial Emissions Licence application process. In addition Ireland stated that the new LIFE Multi-Annual Work Programme 2014-2017 includes project topics under Thematic priorities for air quality and emissions, including urban environment, and in particular projects developing and testing pollution prevention and abatement techniques referred to in IED as emerging techniques. The LIFE programme is one avenue through which innovative and emerging techniques are encouraged in Ireland. Ireland provided the link to the Department of Environment, Community & Local Government's LIFE webpage[120].

[119] http://www.epa.ie/licensing/info/files/#.VY8IgflVhBd
[120] http://www.environ.ie/en/Environment/LIFEProgramme/

Italy

Analysis of the completeness of the report

Table A28: Completeness assessment of answers reported by Italy – IED

Question title	Question number(s)	Italy	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Italy provided a complete response to the questionnaire.

Analysis of Italy responses

The table below contains the detailed analysis of the responses provided by Italy to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A29: Italy – Response analysis table

ITALY

QUESTION 1 – Non-Compliance (Article 8)

Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?

The competent authority is responsible for this assessment, at the request of supervisory authority. The response from Italy does not state specific criteria used for this assessment. Nevertheless the Legislative Decree No 152/2006 states dictates that if the infringement is repeated more than twice in a year it is imperative that the activity involved is suspended.

QUESTION 2 – Permit conditions (Article 14)

Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?

Use of BAT conclusions for setting permit conditions is an essential requirement of the Environmental Integrated Permits, required by the Legislative Decree No 152/2006. Italy states in its report that there is no need to provide additional guidelines on this to the competent authorities. Guidelines previously issued concerning the identification and use of best available techniques in the context of the IPPC Directive no longer have legislative force.

Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?

The setting of stricter permit conditions than those achievable through the application of the reference best available techniques is permitted under Italian law, but only in special cases. No information on the numbers of such cases is presently available, particularly given that BAT conclusions have been defined only for certain sectors and most of the existing permits have not yet been adapted to the requirements of the IED Directive. No further information on how the stricter permits can be set has been provided.

QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

Emission limit values under normal operating conditions must correspond to BAT-AELs unless:

- Derogations allowed under the IED have been granted;
- Stricter conditions apply.

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

According to the Legislative Decree No 152/2006, derogations from compliance with the BAT-AELs under normal operating conditions may be granted in specific cases, provided that an assessment shows that setting emission limits corresponding to the BAT-AELs would lead to disproportionately higher costs compared to the environmental benefits, due to the geographical location, the local environmental conditions and the technical characteristics of the installation. The criteria to take into account when assess derogation requests and draw up the related assessment are included in the Legislative Decree No 152/2006 but were not included in the Italian response.

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

The cost benefit analysis demonstrating why a derogation should be granted needs to be attached to the permit application and is verified by competent authority. The following are considered disproportionate costs:

- Compliance with the BAT-AELs in the specific context does not have any beneficial effect compared to compliance with the permit conditions set
- Achieving the BAT-AELs has a positive effect, but it is not significant in the specific context given the extremely high cost. This is particularly true if a comparable positive effect can be achieved through compensatory measures not specifically directed at the installation and at a much lower cost than would be required to adapt the installation
- Territorial constraints make it impossible to implement the best reference techniques at the plant, or they mean that it is only possible at a fully disproportionate cost compared to what the

installation would have to bear in a 'normal' territorial context ▪ The particular geographical location means that the BAT-AELs cannot be achieved even if the best reference techniques are fully and correctly applied ▪ It is advisable to extend the deadline for achieving the BAT-AELs beyond the tight deadline that is technically feasible, to enable them to be economically sustainable, in particular where the break-even point has not yet been reached for the past investments made in order to fulfil the conditions of the previous IPPC permit, or where the new BATs can only be implemented by rebuilding the entire plant, which naturally forms part of non-routine maintenance activities planned on a multi-annual basis.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Derogations must comply with other applicable legislation, for example emission limit values for Large Combustion Plants or measures laid down in Italian air quality plans.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Temporary derogations can be granted by the competent authority for the testing and use of emerging techniques for a total period of time not exceeding nine months.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Article 29 (6) of Legislative Decree No 152/2006 specifies the methodology, measurement frequency, compliance conditions, assessment procedure and reporting obligations for monitoring at IED installations that has been drafted on the basis of the BAT conclusions.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
Specific monitoring is required under the permit at least once every five years for groundwater and at least once every ten years for soil, unless, on the basis of a systematic appraisal of the risk of contamination, different methods or greater frequencies are laid down for such monitoring.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Italy reports that this matter has not yet been studied in depth. Guidance is expected to be issued in a circular to the competent authorities upon conclusion of the coordination work referred to in Article 29 of Legislative Decree No 152/2006.
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
Italy is planning to issue General Binding Rules but these have not yet been adopted for any category of activity.
Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?
This is required under Article 29-bis(2) of Legislative Decree No 152/2006, and the authorities drafting GBRs will ensure that it is implemented (Ministry of the Environment, Ministry of Labour, Ministry of Health, Regions).
Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?
No response has been provided to this question. This can be explained by the fact that no GBRs have been issued to date.
Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?
This is one of the requirements of Article 29-bis(2-bis) of Legislative Decree No 152/2006. Where the update has not occurred within six months of the issue of the BAT conclusions, the general requirements already issued are automatically invalidated.

Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?
As a general rule, the reference to the IED Directive is an integral part of the preamble to the rules.
Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.
A decree laying down general requirements has not yet been issued.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The Ministry of the Environment informs the regional authorities of the publication of the BAT conclusions by means of a circular, as well as publishing copies of these documents on its website.
Question 6.2 – How do competent authorities make that information available to the public concerned?
Italy has not responded to this question but has provided a link to the website in response to question 6.3.
Question 6.3 – Links to where the information can be found
A link to the Ministry of the Environment website has been provided by Italy[121]. The website contains eight BAT conclusions documents in Italian.
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Information from operators for the purpose of permit reconsideration must include at least: ▪ the results of the emission monitoring ▪ any other data allowing a comparison to be drawn between the operation of the installation, the techniques described in the applicable BAT conclusions and the BAT-AELs; The level of detail of the information required is specified on a case-by-case basis by the competent authority when launching the reconsideration. In case of reviews concerning the whole installation, all of the information submitted as part of the original permit application the permit must be updated.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
Pending EU guidance on the subject, the competent authorities are responsible for determining the main activity of an installation on a case-by-case basis. Italy reports that often the main activity is identified by determining which activity has the greatest economic impact on the installation. Italy reports that it is particularly so given that the BREFs are defined on the basis of considerations relating to economic feasibility of techniques that are theoretically applicable. Where several unconnected activities are covered by the same permit (for example due to being managed by the same operator on the same site), the authorities assess whether it is reasonable to consider each of these activities as a 'main activity'. If so the existing permit is updated in sections as the various relevant BAT conclusions are issued.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
The competent authority shall order the full or partial review of the IPPC permit in cases where an update becomes necessary due to: ▪ cases of significant pollution; ▪ ensuring operational safety; ▪ assessing compatibility with environmental quality standards (such as in the case of significant developments in available techniques, amendments to the applicable reference legislation and

[121] http://aia.minambiente.it/Documentazione.aspx

negative outcomes of checks on the effectiveness of emission limit values established in relation to the BAT-AELs).
QUESTION 8 – Site closure (Article 22)
Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
Italy reported that the legal references in Legislative Decree No 152/2006 correspond to those of the Directive. National guidelines concerning the baseline report are being drawn up and will be issued by Ministerial Decree. Italy reported only one activity requiring a baseline report: "1.2. Refining of mineral oil and gas". In response to question 8.1b on the possibility of soil and groundwater contamination, Italy reported that national guidelines are being prepared on this matter.
Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?
The guidelines under preparation as referred to in response to question 8.1.b will cover this matter.
Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?
The Legislative Decree No 152/2006 provides for the Commission's guidance to be taken into account when drawing up the baseline report.
Question 8.2(a) and (b) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))? How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Italy reported that the legal references correspond to those of the Directive (Legislative Decree No 152/2006) and that national guidelines are currently being drawn up on this matter.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
Italy reported that legal references correspond to those of the Directive. The competent authority is responsible for the assessment of whether the contamination of soil and groundwater poses a significant risk to human health or the environment.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Italy reported that legal references correspond to those of the Directive. The competent authority is responsible for the assessment of necessary measures or actions required of the operators. Italy pointed out that financial guarantees by operators are required as security for these obligations.
QUESTION 9 – Environmental inspections (Article 23)
Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
Legislative Decree No 152/2006 requires environmental inspection plans to be developed at a regional level in Italy. However as the criteria to be applied when drawing up such plans are yet to be defined, environmental inspection plans have not yet been prepared. The legislation does require that these contain the information set out in Article 23(3) IED. Once prepared, the plans will be made available for inspection by the public and the Ministry of the Environment will publish these on the internet. Programmes for routine environmental inspections have not yet been drawn up and legislation setting out the requirement to do so under Article 23(4) IED) has yet to be enacted. Details of what they shall contain are, therefore, not provided. The programmes, once introduced, will be made available for inspection by the public and the Ministry of the Environment will publish these on the internet.
Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

The systematic appraisal of environmental risks is based on the criteria set out in Article 23(4) IED, which is transposed by Legislative Decree No 152/2006. No further guidance has been issued by the Italian authorities. Each regional authority can apply their own criteria for classifying facilities based on the environmental risk and, thus, define the inspection plans and programmes. For regions with a significant number of installations, common classification criteria is to be applied based on an IT tool developed under an IMPEL project for the regions of Lombardy, Calabria and Puglia.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
The Italian response states that non-routine environmental inspections are carried out only in cases of serious environmental complaints. The other circumstances set out in Article 23(5) IED of serious environmental accidents, incidents and occurrences of non-compliance, and before the granting, reconsideration or update of a permit, are not covered.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain the findings of the inspection regarding compliance of the installation with the permit conditions and conclusions on whether any further action is necessary. Site visit reports must be notified to the operator and the competent authority within 2 months by the party that carried out the inspection and made publicly available on the website of the competent authority within 4 months. The response, however, does not provide further details on how the site visit report is to be notified to the operator. Site visit reports have not been withheld from the public, although parts of the report may be redacted where it contains sensitive date relating to national security, intellectual property or personal privacy, in accordance with Directive 2003/4/EC.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
In order to ensure compliance with 'any necessary actions' the CA will specify a deadline for any further measures to be taken by the operator. Thereafter, the competent authority may issue a warning or order a review of the permit.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Italian response refers to the provisions of Legislative Decree No 152/2006 which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. Within 15 days of the start of the procedure, the competent must publish the relevant information on its website, including information relating to the request for derogation (if any), giving the public at least 30 days to submit comments on the application. All comments received must be considered (even after the above-mentioned 30 days) before the investigation is closed at the inter-service conference. Furthermore, the standard procedure is that members of the public are allowed to participate in the inter-service conference to put forward their comments if they make a request to this effect.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public on the website of the competent authority. All relevant information is made available on the internet at the following link: http://aia.minambiente.it/ or the websites of the local authorities.
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Emerging techniques brought to the attention of the Ministry by operators or competent authorities may be supported on a case-by-case basis within the scope of EU work for the preparation of the BREFs. However, Italy has not adopted any specific initiative in this regard.

Latvia

Analysis of the completeness of the report

Table A30: Completeness assessment of answers reported by Latvia – IED

Question title	Question number(s)	Latvia	Comments
Non-compliance (Article 8)	1		
Permit conditions (Article 14)	2.1		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	3.1		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	4.1		
	4.2		
	4.3		
General Binding Rules (Article 17)	5.1 (a) to (b)		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	6.1		
	6.2		
Reconsideration and updating of permits (Article 21)	7.1		
	7.2		
	7.3		
Site closure (Article 22)	8.1 (a) to (d)		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	9.1 (a) to (c)		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		
Emerging techniques (Article 27)	11		

Latvia provided a complete response to the questionnaire.

Analysis of Latvia responses

The table below contains the detailed analysis of the responses provided by Latvia to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A31: Latvia – Response analysis table

LATVIA
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The national legislation (Article 8(1) of the Law on Pollution) states that the location of polluting

activities should be selected so that they have the least adverse impact on human health and the environment. In situations where the violation of the permit conditions poses an immediate threat to human health, the competent authority is required to suspend the operations (either partially or in its entirety). The competent authority is responsible for assessing the existence of such threats.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
In Latvia, operators are required to base their activities on BAT conclusions. In the absence of relevant BAT conclusions, the operators are entitled to use BAT guidance documents and guidance issued by other organisations. The legislation establishes that BAT conclusions are equal to regulations issues by the Cabinet of Ministers. **In addition, competent authorities must refer to BAT conclusions when issuing permits.** **Prior to applying for a permit, operators of category A polluting activities (equivalent to IED Annex I activities) are advised to consult the competent authorities on the existing best available techniques, including emissions and consumption levels, techniques considered for the determination of best available techniques, as well as BAT conclusions and any emerging techniques.**
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
The national legislation foresees that stricter permit conditions may be observed in order to achieve, for example, specific environmental quality standards.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
The emission thresholds for polluting substances in permits should be set so that under normal operating conditions, the installation does not exceed the emission levels set in the BAT conclusions.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
The Latvian national legislation foresees that derogations from the emission levels associated with BAT (BAT-AELs) set in the BAT conclusions may be granted by the competent authority. It is the responsibility of the operator to prove that the achievement of the BAT-AELs set in the BAT conclusions would result in costs that are unreasonably high compared to the threat to the environment. When a derogation is granted, an Annex is added to the permit which present the assessment and the agreed derogation. When the permit is reconsidered, the competent authorities are required to also reconsider the derogation.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
The assessment conducted by the operator must be based on the environmental quality standards set in the legislation, the location and site of the installation and the results of studies of the technical characteristics of the installation. In practice, Latvia indicated that the operator submits to the competent authority its considerations and calculations supporting the costs and it is the competent authority, assisted when necessary by experts from relevant Ministries, that evaluates whether these costs are unreasonably high compared to the benefit to the environment.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Latvia indicated that derogations granted are limited in time as each time the permit is reconsidered, the derogation must be reconsidered too.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Latvian legislation foresees that for installations used for studying, developing or testing of emerging techniques or manufacturing processes, the regional environmental authority when granting the permit can allow a transition period for derogations from BAT-AELs and the use of BAT as well as measures that prevent pollution for a period of time not exceeding 9 months. After the specified transition period, the operator is required to ensure that the installation used for studying, developing or testing of emerging techniques either conforms to the BAT conclusions or stops operating.

QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
The monitoring requirements are set by the competent authority in accordance with the monitoring requirements included in the BAT conclusions.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The permit includes monitoring conditions such as the parameters to be determined, the location for sample taking, the frequency and methods of measurement, and the type of data collection and storage. In Latvia groundwater at IED installations is required to be monitored at least once every five years and soil monitoring is performed at least once every 10 years. The permit can specify that the monitoring must be carried out more frequently.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
The operator is required to conduct monitoring in accordance with the conditions set in the permits. Latvia indicated that operators that use, produce or store hazardous substances are required to produce a baseline report on which the assessment of the soil and groundwater contamination risks are based. Hence the monitoring requirements take into account the information presented in the baseline report and it might be possible to monitor at a lesser frequency than those stated in the legislation. It was indicated that this would apply in very limited circumstances.
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
According to Latvian legislation, special requirements may be set for polluting activities that conform to a specific industry. **Currently, GBRs exists only for the manufacture of glass (activity 3.3).** **The GBRs are set as Cabinet Regulations and are drafted in reference to the best available techniques and are, therefore, incorporated Latvian national law. During the reporting period, Regulation (No 1416) was adopted concerning special environmental requirements for the manufacture of glass and glass fibre that contains the relevant GBRs for the sector.** **Latvia provided information on pollutants covered by GBRs. With regard to emissions to water Sulphates, Fluorides, Total hydrocarbons, Lead, Antimony, Arsenic, Barium, Zinc, Copper, Chromium, Cadmium, Tin, Nickel, Ammonia, Boron, and Phenol are covered by GBRs. For emissions to air, dust, NOX, SOX, Hydrogen chloride, Hydrogen fluoride, Titanium compounds, Tin compounds, Hydrogen chloride, Selenium compounds, Formaldehyde, Total volatile organic compounds, Ammonia, Lead, Hydrogen sulphide and Amines are covered by GBRs.**
Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?
The GBRs are set with reference to best available techniques and must be applied in order to enable the highest level of overall environmental protection.
Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?
In Latvia, the BAT conclusions are incorporated in the laws and regulations through GBRs.
Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?
When new BAT conclusions are published, the Cabinet of Ministers draws up a draft regulation taking into account the latest agreed BAT and sets a 4 year implementation period from the date of publication of the BAT conclusions. **Furthermore, following the publication of new BAT conclusions, the competent authorities can decide to reconsider the permit conditions of the relevant permits so as to ensure that the installations are in conformity no later than four years after the publication of the relevant conclusions.**
Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?

In Latvia, Cabinet Regulation No 1416 setting GBRs for the glass sector refers explicitly to the IED.
Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.
Latvia provided a link to the following website - http://likumi.lv/doc.php?id=262861
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The competent authority (the State Bureau for Environmental Supervision) monitors regularly whether new or updated BAT conclusions are published as well as the revision process of the BREF documents.
Question 6.2 – How do competent authorities make that information available to the public concerned?
When the competent authority identifies that new or updated BAT conclusions have been published these are in turn made available to the public on the website of the State Bureau for Environmental Supervision. By law, the State Bureau for Environmental Supervision is required to keep the information up-to-date and to inform the regional environmental authorities on new information published by the European Commission or international organisations regarding best available techniques.
Question 6.3 – Links to where the information can be found
The Latvian response included a link to the following website: http://www.vpvb.gov.lv/lv/piesarnojums/lptp-vadlinijas
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
The reconsideration of permits is regulated by Articles 65 and 66 of Cabinet Regulation 1082. **Within 20 days of receiving notification from the competent authority on the reconsideration, the operator must prepare an application for reconsideration and renewal. The information to be submitted must include any changes planned to be made, but the operator is only required to complete the sections where changes apply. It must also include confirmation that the installation operates in conformity with BAT and the emissions levels associated with BAT. Within 10 days of receiving the application, the competent authority is required to issue a written opinion on the completeness of the application. Additional information can be requested, if necessary, which must be submitted within 10 days of the request being received.**
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
Operators can request clarification from the competent authority if they are unclear about which category their activity falls under. According to the national legislation, if the installation performs a number of activities that correspond to different categories of IED activities, the operator is required to submit only one application. The main activity will be the one for which the strictest requirements for environmental protection apply. In Latvia, the strictest requirements are for category A activities, then B and C. So if an installation conducts activities A and B, the requirements of A will apply to the whole installation.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
If the pollution caused by the installation is significant, the permit will be reconsidered, and new emission limit values will be set. Similarly, if the competent authority receives information concerning adverse impacts on human health or the environment resulting from the operation of the installation, or if the thresholds of environmental quality standards have been exceeded, the emission limit values in the permit will be reconsidered. Latvia added that permits can be reconsidered throughout the entire period of validity of the permit.
QUESTION 8 – Site closure (Article 22)
Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

Baseline reports are required for installations whose activity involves the use, manufacture or emission of such dangerous chemical substances that may cause pollution of soil and groundwater in the site of installation. Typically this includes the production of organic and inorganic chemicals (activity 4.1 and 4.2). **The report is to be submitted to the regional environmental authority together with the permit application or the permit reconsideration information. The competent authority uses the information included in the baseline report to set the permit conditions and, when the operation of the installation is discontinued, to restore the site to an appropriate condition.** **If the baseline report information refers to a level of contamination that causes risk to human health or the environment, during the reconsideration of the permit the competent authority may impose measures to ensure the site is restored to an appropriate condition with regard to the national legislation on soil and groundwater standards and quality.** **The report is not required for installations for which a quality assessment of soil and groundwater was performed during the environmental impact assessment if this took place no later than three years after the date of the opinion on the environmental impact.**
Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?
Latvian Cabinet Regulation of 2 April 2013 No 183 describes the procedure for the preparation of baseline reports and their content. The baseline report is prepared by the operator of the installation and it contains information on the planned or present use of the installation (if the installation's activity is not commenced yet, information on previous uses of the site should be included) and dangerous chemical substances used and intended to be used in manufacturing processes, manufactured or stored. The report should also include an opinion on the condition of the site of installation based on an assessment of the contamination of chemical substances in soil and groundwater and a summary of measures planned to be carried out to ensure safe storage and maintenance of dangerous chemical substances. Detailed actions to be taken in the event of leaks of chemical substances that threaten the quality of soil and groundwater should also figure in the report.
Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?
In Latvia, the Commission's guidance is used by competent authority as an aid to support the preparation and review of baseline reports.
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
Article 4 (9) of the Law On Pollution requires operators to ensure that after the installation has fully ceased operation, measures are taken to prevent the risk of pollution and the site of installation is brought to the appropriate condition. The operator must submit an assessment of the state of soil and groundwater contamination which refers to the baseline report. At this point, the information disclosed in the baseline report is used by the competent authority to decide on the measures required to restore the site to an appropriate condition. If an activity is discontinued the operator shall ensure that an assessment of the state of soil and groundwater is made with regard to those dangerous chemical substances that were used in manufacturing, were manufactured by the installation or drained.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
A decision as to whether pollution is considered to be significant is taken by comparing the results of the monitoring with the initial results presented in the baseline report.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
If the operation of the installation causes threats to human health and the environment, the competent authority imposes measures on the operator requiring them to restore the soil and groundwater to their initial state. The measures are decided based on the information contained in the baseline report.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
The measures are decided based on the information contained in the baseline report.
QUESTION 9 – Environmental inspections (Article 23)

Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
An Environmental Inspection Plan 2013-2019 has been drawn up by the State Environmental Service (SES) in Latvia and contains all of the information set out in Article 23(3) IED. The plan is publicly available on the website of the SES (http://www.vvd.gov.lv/public/fs/CKFinderJava/files/kontrole/VVD_VIDES_INSPICESANAS_PLANS_2013-2019.pdf). **Programmes for routine environmental inspections are drawn up annually by the regional environmental authorities of the SES on the basis of the Environmental Inspection Plan 2013-2019. These set out the planned inspections for each regional environmental authority of the SES. The annual inspection programmes are not published and not publicly available.**
Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The frequency of site visits is decided on the basis of the criteria elaborated upon in the Environmental Inspection Plan 2013-2019. Sections 4.1 and 4.2 set out the criteria to assess the frequency of control and the control of high risk sites respectively. When determining the frequency of inspection, basic criteria are taken into account (type of installation, proximity to protected areas, emissions, hazardous waste generated etc.) as well as efficiency criteria (use of BAT, compliance with an environmental monitoring system, the number of complaints received or penalties applied, polluting incidents/accidents etc.). Inspections are to be carried out once a year or through application of the above criteria at least once every three years.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
A pro forma site visit report has been approved by the Council of the SES, and requires details of the inspector, information on the inspected site (address, registration number etc.), scope of the inspection and conclusions following the inspection to be provided. Site visit reports are notified to the operator by issuing the report to the operators' representatives, and are made publicly available on the website of the SES (http://www.vvd.gov.lv/kontrole/vides-aizsardzibas-kontrole/zinojumi-par-a-iekartu-parbaudes-rezultatiem/). There have been no cases in which the reports have not been made publicly available during the reporting period.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where further measures are required to be taken following an inspection, the inspectors of the SES will issue an order specifying the steps to be taken and a deadline for completion. Fulfilment of the order is checked through notification by the operator that the order has been executed, follow-up inspections, or receipt of complaints indicating non-compliance.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Latvian response refers to the provisions of Cabinet Regulation No 1082, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. The operator is required to inform the public of permit applications within 14 days, which is considered to be as 'early in the procedure' as required by the IED. In addition to providing information to allow the public to make comments on the application, public discussions are also organised.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all

relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is to be made available to the public at the operators office and local municipality, by publishing it in the newspaper Latvijas Vestnesis as well another local newspaper, by publishing it on the website of the operator or SES, sending individual notifications to the owners of neighbouring properties, and in the case of new polluting activities, through announcements on Latvian radio stations. All relevant information is made available on the internet (http://www.vvd.gov.lv/pakalpojumi/veidlapas/).
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Latvia indicated that the competent authority and operators both monitor the development of emerging techniques and explore opportunities to use them on a regular basis. No additional information was included on ways used to encourage the development and application of emerging techniques.

Lithuania

Analysis of the completeness of the report

Table A32: Completeness assessment of answers reported by Lithuania – IED

Question title	Question number(s)	Lithuania	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2	**N/A**	
	5.3	**N/A**	
	5.4	**N/A**	
	5.5	**N/A**	
	5.6	**N/A**	
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Lithuania submitted a complete answer to the IED questionnaire. However, it was noted that the response to question 9.1 refers to annual environmental inspection plans which in fact are the equivalent of the IED 'programmes for routine environmental inspections'. The response to question 9.2 refers to an overarching inspection programme, which is therefore the equivalent of the IED 'environmental inspection plans'. The answers are, therefore, provided in the wrong order due to the differences in terminology used at the national level for the various plans and programmes. For the purpose of this analysis they have been placed in what is considered to be the correct order.

Analysis of Lithuania responses

The table below contains the detailed analysis of the responses provided by the Lithuania to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A33: Lithuania – Response analysis table

LITHUANIA
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
A permit can be suspended if the pollution results in large loss of animals or vegetation or poses an immediate danger to human health or life. A criterion used to determine if there is an immediate risk to human health and environment is non-compliance with the media quality standards set by legal acts.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
In Lithuania, national regulations require the operator's permit application to compare the technology, operational methods and monitoring measures with the techniques referenced in the BAT conclusions. According to the "Rules for the Issue, Updating and Invalidation of Integrated Pollution Prevention and Control Permits" (further referred to IPPC Rules), the permitting authorities are obliged to define the emission limit values or derogations from them in the permits in line with the relevant BAT conclusions. When discussing the emission abatement steps to be undertaken, the permitting authority and operator consider the different possibilities of implementing measures in the relevant BAT conclusions and other BAT reference documents. Results of these negotiations and final agreement on the conditions to be set are reported in the Environmental Action Plan which forms part of the permit.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
No cases of stricter permit conditions than those achievable with BAT have occurred in Lithuania. If, in the application for a permit for a new installation or for extension of existing installation, the methods described in BAT conclusions are insufficient to meet the required environmental quality standards, the operator would be recommended by the permitting authority to select additional emission abatement methods or choose an alternative location for the installation.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Emission levels associated with the best available techniques and temporary derogations from them for new installations or substantial changes to existing installation, as defined in the relevant BAT conclusions have to be included in all permits according to the IPPC Rules. The emission limit values can be set so that: ▪ They do not exceed emission limit values associated with best available techniques. The ELVs have to be set for the same or shorter period of time and under the same reference conditions as the ELVs in BAT conclusions ▪ They are different from the ELVs in the BAT conclusions in terms of the values, periods of time and reference conditions. If this is the case, the authority authorised by the Minister of Environment should at least annually assess the results of emission monitoring in order to ensure that emissions under normal conditions do not exceed the ELVs set out in the relevant BAT conclusions Unless environmental quality standards require stricter conditions than those met in relation to BAT, the ELVs and equivalent parameters and technical measures shall be based on BAT, without prescribing any specific technology or technique. In case of permit updates, the time limit to ensure compliance with the

BAT conclusions (of no less than two years from the approval of the relevant BAT conclusion document) can be granted to an operator upon request.

The permits can include less strict ELVs than those commensurate with the emissions levels associated with the best available techniques included in the BAT conclusions. This can occur only when the environmental quality standards do not require stricter conditions than those met in relation to BAT. When setting such ELVs the permitting authority needs to consider the geographical location, local environmental conditions and technical characteristics of the installation concerned. The less strict ELVs cannot exceed emission limit values set by Lithuania's legal acts which are referred to in the IPPC Rules. If a derogation is granted the Regional Environmental Protection Department (REPD) must ensure compliance with environmental quality standards and achievement of high level of environmental protection. Justification of granting derogations also requires indication of the reasons for the application for derogation, and justification of the set permit conditions (as an annex to the permit).

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

As described in response to question 3.1, derogations apply only if the environmental quality standards do not require stricter conditions than those met in relation to BAT. Less strict emission limit values take into consideration local conditions (e.g. dilution). The derogation may only apply if the results of economic benefit and cost assessment of possible solutions demonstrate that achievements of the emission levels associated with the best available techniques described in the BAT conclusions would lead to disproportionately higher costs than the environmental benefits. This can occur because of the geographical location or local environmental conditions of the installation or technical characteristics of the installation concerned. The remaining information provided by Lithuania with regard to granting derogations is summarised in its response to question 3.1.

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

There has been no practical application of these provisions in Lithuania during the reporting period. As described in the responses to questions 3.1 and 3.2 above, the IPPC Rules specify the general principles for granting derogations. The arguments for application for a derogation related to the economic assessments and possible technical solutions would be evaluated on an individual case basis, taking into consideration local conditions.

Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

Such limitations have not been applied in practice. Nevertheless the environmental permitting framework in Lithuania allows introduction of limitations on the scale of the production and the duration of individual processes (e.g. night operation).

Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

Temporary derogations for testing and use of emerging techniques can be granted for a total period of no longer than 9 months. The derogation is granted upon the condition that following that period the installation will either stop using the emerging technique or achieve the BAT AELs.

QUESTION 4 – Monitoring requirements (Article 16)

Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?

IPPC Rules require that in its application for a permit the operator compares the proposed technology, operational methods and monitoring measures with those indicated in the BAT conclusions. The permit has to be based on BAT conclusions.

Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?

- These are prescribed in the Entity Monitoring Rules.
- The monitoring programme for installations listed in Annex I to the IPPC Rules (which use, produce or release hazardous substances, and which operation may result in groundwater contamination by hazardous substances) has to include monitoring of contamination by these hazardous substances at least once every five years for groundwater and once every ten years for soil.

Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?

- The Entity Monitoring Rules states that the monitoring programme can exclude periodic examination of groundwater contamination in cases where groundwater and soil monitoring is undertaken by the operator on the basis of systematic appraisal of risk of contamination.
- The appraisal can be carried out on the basis of alternate parameters such as through other regular examinations of the operation of equipment, buildings and mechanisms which pose risks to groundwater or soil contamination.
- The above clause and implementing conditions must form part of the permit conditions.

QUESTION 5 – General Binding Rules (Article 17)

Lithuania has not adopted any General Binding Rules.

QUESTION 6 – Developments in BAT (Article 19)

Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?

Representative of the competent authority (Environmental Protection Agency) participate in the activities of the European Commission related to updating, revision and approval of BAT reference documents.

Question 6.2 – How do competent authorities make that information available to the public concerned?

BAT reference documents and BAT conclusions are published in Lithuanian on the Environmental Protection Agency website. The documents are used both by the operators and permit issuers.

Question 6.3 – Links to where the information can be found

The following link was provided: http://gamta.lt/cms/index?rubricId=70160852-bcfc-4e18-881e-01868bf61adb.

It includes a link to the JRC reference document website and relevant documents translated into Lithuanian. In addition the website contains links to guidance documents published by other countries, such as UK, Denmark, Finland, US and other European groups such as IMPEL.

QUESTION 7 – Reconsideration and updating of permits

Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?

The decision on permit reconsideration or updating is made by the Environmental Protection Agency on the basis of inspection results and data from environmental monitoring. In case this information is insufficient, the following information may be requested according to the IPPC Rules:

- emission monitoring results;
- Other data that enables comparison of the operation of the installation with the BAT and BAT-AELs described in the relevant BAT conclusions.

Additional information needs to be provided to the EPA by the operator no later than 10 working days of the receipt of the application. If it is not possible within this timescales, the operator needs to provide EPA with a written explanation as to why this is not possible.

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

The main activity of an installation is defined on the basis of its purpose, as described in the technical design of the installation.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

IPPC Rules regulate permit reconsideration and updating and the types of data required to be submitted where changes are made to an installation that may require the permit to be changed. The permit is re-considered according to the procedure summarised in question 7.1. In addition:

- When reconsidering the permit conditions, the EPA shall take account of all new and updated BAT conclusions relevant to the installation or activity and approved by the EU after the issue of the last permit
- If the permit requires an update, the EPA shall notify the operator in writing without delay. The operator then needs to apply for an updated permit within one month of the receipt of the notification.
- The operator needs to inform EPA in writing in advance of any planned changes that may

change the nature or functioning of the installation, or of any planned extension of the installation which may have an impact on the environment. This should include information based on the EIA procedure if such was carried out, or full information about planned changes.

- The EPA considers whether changes or extension to the site are substantial and require the permit to be updated. The criteria for this consideration are outlined in the IPPC Rules but were not provided in the report submitted by Lithuania.

QUESTION 8 – Site closure (Article 22)

Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

- Industries, types of economic activities, and related main polluting substances requiring a baseline report are defined in the Annex III to the Regulation on Eco-Geological Surveys.
- Chemically Contaminated Area Management Requirements are binding upon the owners and users of the site used for activities listed in Annex I of the IED.
- The following activities have been found to involve the use, production or release of relevant hazardous substances:
  - 1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more
  - 1.2. Refining of mineral oil and gas
  - 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3
  - 4.1. Production of organic chemicals as defined under (a) to (k)
  - 4.2. Production of inorganic chemicals as defined under (a) to (e)
  - 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers)
  - 4.4. Production of plant protection products or of biocides
  - 4.5. Production of pharmaceutical products including intermediates
  - 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the activities (a) to (k)
  - 5.2. (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour
  - 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day
  - 5.3. (a) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of activities (i) to (v)
  - 5.3. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of activities (i) to (iv)
  - 5.4. Landfills, as defined in Article 2(g) of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25 000 tonnes, excluding landfills of inert waste
  - 5.5. Temporary storage of hazardous waste not covered under point 5.4 pending any of the activities listed in points 5.1, 5.2, 5.4 and 5.6 with a total capacity exceeding 50 tonnes, excluding temporary storage, pending collection, on the site where the waste is generated
  - 6.1. (a) Production in industrial installations of (a) pulp from timber or other fibrous materials or (b) paper or card board with a production capacity exceeding 20 tonnes per day
  - 6.2. Pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of textile fibres or textiles where the treatment capacity exceeds 10 tonnes per day
  - 6.3. Tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day
  - 6.4. (a) Operating slaughterhouses with a carcass production capacity greater than 50 tonnes per day
  - 6.5. Disposal or recycling of animal carcases or animal waste with a treatment capacity exceeding 10 tonnes per day
  - 6.6. Intensive rearing of poultry or pigs as defined under (a), (b) or (c)

- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year
- 6.10. Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m3 per day other than exclusively treating against sapstain.
- 6.11. Independently operated treatment of waste water not covered by Directive 91/271/EEC and discharged by an installation covered by Chapter II

- The European Commission Guidance (2014/C 136/03) concerning baseline reports is followed regarding "the possibility of soil and groundwater contamination at the site of the installation" (specifically on the stages of risk assessment of polluting substances as set out in table 5.1 of the Guidance document)
- Applications for the issue or updating of the IPPC permit are handled taking into account the hazardousness and amount of pollutants released into the environment, the capacity of waste recovery and disposal installations (including landfills), specific aspects of the technological processes employed, the nature of the environment and previous experience of pollution incidents at the installation.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

- According to the requirements of the Regulation on Eco-geological Surveys, the following information is required:

  1. Goals and objectives of surveys carried out;

  2. Information about the current use of land and, if available, previous use of land, specification of the site and activities of the operator concerned and its analysis;

  3. Scope and methodology of surveys carried out, including small-scale maps showing sampling sites;

  4. Description of geological and hydrogeological conditions and representation of the geological framework in geological sections;

  5. Assessment of soil, ground and groundwater contamination;

  6. Conclusions on the environmental impact of pursued activities and recommendations for detailed eco-geological surveys;

  7. Annexes to the report shall cover the following:

  7.1 original physical and chemical test reports or certified copies thereof;

  7.2 sampling reports;

  7.3 geological and technical sections of bore-holes made during surveying;

  7.4 copy of a permit for underground survey;

  7.5 copies of permits for laboratory measuring of the environment and pollution sources;

  7.6 a table indicating chemical sample testing methods employed and their sensitivity thresholds.
- A preliminary eco-geological survey report (i.e. baseline report) may be based only on the results of the direct underground survey (physical and chemical test data) carried out no more longer than five years ago.
- When filing an application for the issue or updating of the IPPC permit, an operator also must provide full information about substances being produced, used and released into water or soil with waste water discharge. This information may also be relevant for drafting a baseline report.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

In answer to this question reference to the answer provided in question 8.1b is to be made where it was stated that the European Commission Guidance 2014/C 136/03 concerning baseline reports is followed regarding "the possibility of soil and groundwater contamination at the site of the installation" (specifically on the stages of risk assessment of polluting substances as set out in table 5.1 of the Guidance document).

Question 8.2(a) and (b) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))? How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

- The IPPC permit usually includes the following condition: "Upon definitive cessation of the

activities the site shall be fully returned in the state defined in the design of the installation, plans and regulations. Upon definitive cessation of the activities, the operator must assess the state of soil and groundwater contamination in relation to hazardous substances assessed in the baseline report. Where the installation has caused significant pollution of soil or groundwater by those substances compared to the state established in the baseline report at the start of operation, the operator shall take the necessary measures to address that pollution so as to return the site to that state."

- No such cases have occurred in the reporting period.

According to the Entity Monitoring Regulations the operator must carry out groundwater and soil monitoring for hazardous substances that were assessed in the baseline report to show the level of groundwater and soil contamination.

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

Exceedances of the soil or groundwater contamination levels set by legal acts is deemed to pose a significant risk to human health or the environment.

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

Geology specialists commissioned by the operator determine the contamination level, the area of spread of pollutants and assess possibilities for restoring the state of the site. No such cases occurred during the reporting period.

QUESTION 9 – Environmental inspections (Article 23)

Question 9.1.a to 9.2.c – What environmental inspection plans have been drawn? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn? What do they contain and are they publicly available?

Each Regional Environmental Protection Department (REDP) in Lithuania has drawn up an environmental inspection plan which contains all of the information set out in Article 23(3) IED. While the Lithuanian response does not refer to the plan covering provisions on cooperation between different inspections authorities, it is presumed that this is not required since the plan is drawn up at a regional level. The plan is publicly available on the website of each REDP (for example, http://vrd.am.lt/VI/index.php#r/206).

On the basis of the annual environmental inspection plans, each REDP draws up an inspection programme for the installations in its region. The programmes contain the name of the installation to be inspected, its legal form, company number, area of economic activity, address, name of the inspecting officer and preliminary inspection time. The programmes are publicly available on the website of each REDP (the links provided are the same as for the inspection plan).

Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

The systematic appraisal of environmental risks is carried out in accordance with Annexes I and 2 of the Rules for Integrated Pollution Prevention and Control (approved by Order No AV-111), which set out the procedure for this. The environmental risk assessment takes into account the distance between the site and residential and public buildings, the hazards and amount of emissions or pollutants released into the environment, whether hazardous and non-hazardous waste activities are carried out, the landfill capacity, the distance between the site and protected areas, whether the installations uses BAT, is part of EMAS, whether the installation uses an automated emission or pollutant release self-check system, and whether there have been any environmental non-compliances, for which administrative sanctions may have been imposed. The procedure, therefore, applies the criteria set out in Article 23(4) IED. The Order setting out the procedure is publicly available on the website of each REDP (for example, http://vrd.am.lt/VI/index.php#a/7123).

Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.

Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on

public access to environmental information and repealing Council Directive 90/313/EEC?
In accordance with the Procedure for Routine and Non-routine Site Visits Related to the State Control of Environmental Protection (approved by Order No D1-145) the findings of a site inspection must be recorded in a prescribed form. The site visit report should contain the findings regarding compliance of the installation with the permit conditions, other environmental requirements, fulfilment of reporting obligations, etc. and conclusions as to whether any further action is necessary. The report is made in two counterparts, one copy for the operator concerned and the other for the inspection authority and the report is sent to the operator within 3 working days of the site visit. Site visit reports are not publicly available but a report containing the names of the inspected sites, dates of inspection, the nature of non-compliance and the legal measures taken, is made publicly available on the website of the inspection authorities within 10 days of the end of each quarter. Personal or commercially sensitive information is not made available in accordance with the national legislation transposing Directive 2003/4/EC.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where further measures are required to be taken following an inspection, a deadline for compliance with these will be set and the operator is required to notify the inspection officer by mail or email within 3 days of implementation of the measures. Thereafter, environmental inspection officers may make a further site visit to check compliance. Where the further measures are not implemented by the operator within the deadline set a further instruction can be issued or enforcement action taken.
QUESTION 10 – Access to information and public participation
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Lithuanian response refers to the provisions of Chapter VIII of the IPPC Rules, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. In all cases the public are to be informed of the receipt of an application via the local press and the website of the EPA. The IPPC Rules further set out the procedure for taking a decision on the granting of a permit, which includes provision for the consultations that are to be held before the decision is taken and how the results of consultation are to be taken into account in the decision making process.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is to be made available to the public via the local press, the website of the EPA, and the EPA is to inform the public where information may be accessed. All relevant information is made available on the website of the EPA (http://gamta.lt/cms/index?rubricId=89862870-c431-46ac-97dc-76dfef1f0435).
QUESTION 11 – Emerging techniques
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Lithuania reported that the competent authority (i.e. Environmental Protection Agency), if needed, in accordance with the guidance provided by the European Commission, take steps in order to promote development and application of new techniques, in particular, those defined in BAT reference documents. However no further information was provided about specific action that are taken in order to promote emerging techniques.

Luxembourg

Analysis of the completeness of the report

Table A34: Completeness assessment of answers reported by Luxembourg – IED

Question title	Question number(s)	Luxembourg	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		

Question title	Question number(s)	Luxembourg	Comments
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Luxembourg provided a complete response to the IED questionnaire. The response included only one link which refers to IMPEL website login page.

Analysis of Luxembourg responses

The table below contains the detailed analysis of the responses provided by Luxembourg to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A35: Luxembourg – Response analysis table

Luxembourg
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The criteria to determine whether a breach of permit conditions poses an immediate danger are the same as those considered during the permitting procedure, namely the ELVs for air and water and the conditions of the local environment. The permitting conditions include the obligation to submit regular reports to the competent authorities stating results of monitoring. This information is used to judge whether breaches pose an immediate danger to human health or the environment.
QUESTION 2 – Permit conditions
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
In Luxembourg, the national legislation transposing the IED (Article 15(3)) of the Law of 9 May 2014) requires that BAT conclusions must be used as the reference for setting permit conditions.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
The national legislation (article 15(4) of the Law of 9 May 2014) foresees that stricter permit conditions than those achievable by the use of the best available techniques as described in the BAT conclusions may be set when necessitated by the technical requirements of the installation, its geographical location or local environmental conditions.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated

with the best available techniques' set out in the BAT conclusions (Article 15(3))?
The national legislation (article 16(2) of Law of 9 May 2014) foresees that emission limit values are based on best available techniques. The permit includes emission limit values which ensure that, under normal operating conditions, emissions do not exceed the emissions levels associated with best available techniques. In addition, different emission limit values can be set in terms of values, periods of time and reference conditions. However, in this situation, the Competent Authority (i.e. the Administration for the Environment) shall assess annually the results of emission monitoring in order to ensure that emissions under normal operating conditions have not exceeded the emission levels associated with the best available techniques.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
In specific cases, the Competent Authority may set less strict emissions limit values. A derogation may apply only where an assessment shows that the achievement of emissions levels associated with the best available techniques would lead to disproportionately higher costs compared to the environment benefits due to either the geographical location or the local environmental conditions of the installation concerned, or the technical characteristics of the installation concerned. The permit benefiting from a derogation must include an annexed document detailing the reasons for the use of a derogation and the justification for the conditions imposed.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
Luxembourg indicated that it has not adopted specific criteria for undertaking cost benefit assessments.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
The emission limit values used as derogation cannot exceed the emission limit values set out in the Annexes of the national legislation transposing the IED. Furthermore, despite the granting of the derogations, it must be ensured that no significant pollution is caused and that a high level of protection of the environment as a whole is achieved. Finally, the derogation is to be reassessed as part of each reconsideration of permit conditions.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
The national legislation (Article 16(5) of the Law of 9 May 2014) states that temporary derogations may be granted for the testing and use of emerging techniques. These derogations cannot exceed 9 months, after which either the technique is stopped or the activity achieves at least the emissions levels associated with best available techniques.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
In Luxembourg, the legislation refers directly to BAT conclusions for setting monitoring conditions in permits. In addition, operators must provide annually to the competent authorities the results of emission monitoring. The permit also sets the appropriate requirements for the regular maintenance and monitoring of measures taken to prevent emissions to soil and groundwater and appropriate requirements concerning the periodic monitoring of soil and groundwater in relation to relevant hazardous substances likely to be found on site. These requirements must be based

on the monitoring conclusions as described in the BAT conclusions.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The legislation states that the monitoring frequency must be stated in the permit and be at least once every 5 years for groundwater and once every 10 years for soil.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
In Luxembourg, Article 17 of Law of 9 May 2014 states that the minimum frequency for soil and groundwater is 10 and 5 years unless the monitoring is based on a systematic appraisal of the contamination risk. However, the response indicated that the systematic appraisal procedure is not being used. When assessing a permit application or renewal, the competent authority uses available information from land planning and relevant baseline reports. Luxembourg indicated that in addition to soil and groundwater contamination, its national legislation requires that monitoring of pipes is conducted at least every 5 years in installations that store dangerous substances.
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
Luxembourg has not adopted General Binding Rules.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Luxembourg indicated that its Competent Authority regularly consults the website where new or updated BAT conclusions are published (i.e. http:eippcb.jrc.ec.europa.eu)
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Luxembourg reported that at the moment, information is being provided to those concerned on an individual basis.
Question 6.3 – Links to where the information can be found
Luxembourg reported that it is planning to develop a website with information on, inter alia, BAT conclusions, which will link directly to the European website.
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
In Luxembourg the information typically requested includes the results of emission monitoring and other data that can be used to make a comparison of the installation's performance with the BAT described in the BAT conclusions and the associated emission levels.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
Luxembourg reported that there is no specific definition that can be used to determine the main activity of an installation.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

In Luxembourg, significant pollution, threat to operational safety or new / revised EQS are all included as triggering permit reconsideration and, if required, update as per Article 20(5) of the Law of 9 May 2014.
QUESTION 8 – Site closure (Article 22)
Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
▪ In Luxembourg, the activities covered by sections (2), (3), (4) and (5) of Annex I of the IED are considered to involve the 'use, production or release of relevant hazardous substances'. ▪ Operators of installations presenting the possibility of soil and groundwater contamination are required to produce a baseline report.
Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?
▪ The content of the baseline report must inform the Competent Authority on the state of the soil and groundwater contamination so as to make a quantified comparison with the state of the site upon definitive cessation of activities. Luxembourg indicated that it includes information on the present use and where available on past uses of the site. It also includes existing information on soil and groundwater measurements that reflect the state of the site at the time the report is drawn up or, alternatively, new soil and groundwater measurements having regard to the possibility of soil and groundwater contamination by the hazardous substances to be used, provided or released by the installation concerned.
Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?
The Competent Authority encourages operators to use of the Commission's guidance (2014/C136/03) for the preparation of the baseline report.
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
Upon definitive cessation of activity, Luxembourg indicated that the operator is required to assess the state of soil and groundwater contamination related to the hazardous substances used, produced or released by the installation.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Luxembourg reported that no specific criteria has been adopted to define 'significant' pollution. However, the level of pollution is compared to the state established in the baseline report which is then assessed by the Competent Authority.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
The current assessment system uses the 'ALEX' check list which has been established for the state of Rhineland-Palatinate. Luxembourg added that a different system is currently being prepared.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Luxembourg reported that no specific measures have been established
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article

23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
Environmental inspection plans are not yet available in Luxembourg as the IED was only transposed into national law in 2014. Due to a lack of resources, the plan (there will be a single plan) has not yet been finalised. Once this is drawn up, the national legislation requires that it contains the information set out in Article 23(3) IED. The response of Luxembourg does not state whether or not the plan will be published on the internet and, therefore, made publicly available. While environmental inspection plans have not yet been drawn u, upon which to base the programmes for routine environmental inspections, the response of Luxembourg states that inspection programmes are already drawn up for individual establishments. These contain information on the installation and the activities covered by the routine environmental inspection. The Administration for the Environment has a check-list of the criteria for inspection. Inspection programmes are not published on the internet, and it does not appear that these are made publicly available by other means.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of environmental risks is based on the criteria set out in Article 23(4) IED, which is transposed by Law of 9 May 2014. In addition, the IMPEL IRAM tool is used which assesses the environmental risks based on a number of criteria, including legitimate complaints, environmental accidents or incidents, releases to air, water and soil or subsoil, the proximity of sensitive areas, the risk of accidents with hazardous substances, the operator's compliance with the permit and willingness to correct any shortcomings, and the implementation of an environmental management system, which reflect the overall criteria set out in the IED.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain the date and duration of the inspection, whether it is planned/regular or a one-off inspection, a description of the installation/activity/establishment, the location of the site, the name of the operator/establishment, the name of the competent authority, the scope and legislative basis for the inspection, and the outcome of the inspection, including information on any shortcomings and supplementary actions to be taken such as review or withdrawal of the permit, ban on operations or penalties. The site visit report is issued by the Administration for the Environment to the operator within 2 months of the inspection, following which the operator has a period to comment. The Luxembourg response, however, does not provide further details on how the site visit report is provided to the operator. While it is a requirement of the national legislation that the site visit reports are to be made publicly available, these are not currently accessible via the internet. Public access to site visit reports has not been refused.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
In order to ensure compliance with 'any necessary actions' the site will be inspected again in

six months to check whether the instances of non-compliance have been rectified and that the operator has implemented the measures required. Where there has been a breach of the permit conditions, administrative penalties may be imposed.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The response of Luxembourg refers to the provisions of the Law of 9 May 2014, which provides the public with an 'early and effective' opportunity to participate in the proceedings listed in Article 24(1) IED. Within 10 days of receipt of an application, the municipal authorities are required to give notice of the application for 15 days, and allow all interested parties to consult the file at the offices of the municipality during this period. A summary of the application must also be published in at least four daily newspapers in Luxembourg. Any comments received are to be taken into account, and interested parties attending the examination of the application are given a hearing, following which an enquiry report is drawn up.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public by displaying a notice in the offices of the municipality where the installation is located and the neighbouring municipalities, displaying a notice at the proposed location of the installation, publishing a summary of the application in at least four daily newspapers in Luxembourg, and allowing the file to be inspected at the premises of the local municipality. While the Law of 9 May 2014 requires that all relevant information is made available on the internet, internet access has not yet been granted in Luxembourg.
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
The response to this question is 'NA'. It is interpreted as Luxembourg not taking any specific steps to encourage the development and application of emerging techniques.

Malta

Analysis of the completeness of the report

Table A36: Completeness assessment of answers reported by Malta – IED

Question title	Question number(s)	Malta	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	6.1		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		**It would be useful to have some additional information on the type of information requested for the reconsideration**
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		

Question title	Question number(s)	Malta	Comments
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		The response states that not all information is made available on the internet.
Emerging techniques (Article 27)	11		

Malta provided an almost complete response to the questionnaire, the only gap identified is the response to question 7.3. However this gap has not prevented a complete analysis of the implementation of the IED in this Member State.

Analysis of Malta's responses

The table below contains the detailed analysis of the responses provided by the Malta to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A37: Malta – Response analysis table

MALTA
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
▪ In Malta, danger to human health and the environment is assessed on a case-by-case basis, depending on the type of activity and the type of breach. ▪ Malta indicated that facilities regulated by the IPPC Directive are regularly inspected by the competent authority (Malta Environment and Planning Authority, MEPA) in order to assess compliance with permit conditions. The inspection schedule is based on a risk assessment which takes into consideration various factors such as the type and scale of activity undertaken and the emission points requiring monitoring. Installations presenting the highest risks are inspected more frequently. ▪ During inspection, observed breaches that pose an imminent threat to human health are reported to the Environmental Health Directorate and the Civil Protection Department as required, so that a proper response can be coordinated. Where necessary the Authority may order to suspend operations on site until the necessary remedial action is taken. The response included a link toward the permitting sections of the competent authority's webpage.
QUESTION 2 – Permit conditions
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting

permit conditions (Article 14(3))?
As part of the permit application process, operators are required to provide a comparison of their proposed operations with BAT. This comparison is reviewed by the competent authority when drafting the permit conditions. It allows the identification of BAT that are yet to be achieved. When the result of the comparison identifies that BAT is yet to be achieved, the requirements relating to this are included as items of the improvement programme for the facility. It includes targets and dates by which these should be met.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
In special circumstances stricter permit conditions than BAT can be set by the competent authority. The circumstances include location, proximity to sensitive receptors and scale of operations.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Malta indicated that, where applicable, BAT-AELs are automatically applied as permit conditions.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
For situations where the emission levels associated with BAT as set out in BAT conclusions are not achievable, operators are requested to submit a technical justification and a cost-benefit analysis as part of their permit application to say why this is the case. These elements are reviewed by the Authority and made available to the public for feedback. The board of MEPA makes a decision on whether to grant the derogation or not.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
The costs associated with the technological investment required to meet BAT is compared to the environmental gains achievable through the application of BAT. Where the achievement of BAT would incur higher energy costs and consumption which might render a particular treatment process unfeasible, the competent authority may take this into account when taking its decision of a derogation. However, Malta indicated that under no circumstances is the competent authority allowed to set less stringent ELVs that would lead to the degradation of the surrounding environment.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Malta indicated that in cases where derogations are applied, the permit may include the achievement of BAT in its improvement programme section. As such this provides a timeframe during which the derogation for implementation would apply. In other cases, where the achievement of BAT is not achievable within the timeframe of the permit, the derogation granted is reviewed when the application for renewal is submitted. The competent authority then decides whether the derogation should be granted again.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Where the operator wishes to use emerging techniques, a testing period is allowed by the competent authority during which all emissions from the installation are monitored. During the testing period, specific operating conditions may be required to ensure the impacts are mitigated. In addition, remedial actions may be imposed on the operator. Malta included an

example in its responses, it described the situation of a waste water treatment plant within a waste management facility, whereby a derogation was granted for testing of a technique for the treated effluent which would be discharged to sea. In this case, during the testing period, the operator was instructed to not discharge to sea but to dispose of all effluent as waste for export. Once the emissions and pollution level data were gathered and deemed acceptable by the competent authority, then the operator was allowed to discharge to sea. The competent authority supervises the whole process.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Monitoring requirements are set in accordance with BAT conclusions.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
As part of the permit process, Malta requires operator to conduct a land and groundwater risk assessment, the result of which inform the setting of the frequency for monitoring. As a minimum, the rules included in the IED of 5 years for groundwater monitoring and 10 years for soil monitoring apply.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Monitoring of soil and groundwater at less than the stipulated frequency can be applied in cases where the performance of the installation goes over and above the permit requirements. This would be judged using results of inspection, the lack of incidents on sites etc. However, Malta indicated that to date it has never applied such a provision.
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
Malta has not adopted any General Binding Rules.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The competent authority monitors the publication and updating of BREFs and BAT conclusions.
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Malta indicated that the competent authority contacts operators directly when activities within their facility might fall within the scope of the IED and keep them updated on related BAT developments.
Question 6.3 – Links to where the information can be found
A link was provided to the relevant webpage: http://www.mepa.org.mt/ippc-applications-links
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
When renewing a permit the competent authority requires the operator to submit an application highlighting its intent to renew the permit. When items included in the improvement programme have not been achieved, the operator is required to provide a

justification on the delay and new deadlines are agreed for the renewed permit. In the case of a request for variation of the permit, a specific application must be made containing responses to specific requests on data related to changes in operation made by the competent authority.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
The operator and the competent authority review the activity of the installation in line with Annex I of the IED. In cases where there are doubts on the determination of the main activity, legal advice is sought. Where several Annex I activities are carried out in the same installation, all the activities are included in the permit.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
Malta reported that usually such changes are dealt with during the renewal process. However, when pollution incidents or legislative deadlines require an earlier resolution of the issue, the competent authority will initiate a procedure to amend the permit.
QUESTION 8 – Site closure (Article 22)
Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
Malta indicated that baseline reports are required for activities involved with the use, production, storage or release of hazardous substances. Typically, this has included activities 1.1 Combustion installations, 1.4 Gasification or liquefaction of coal or other fuels in installations with a total rated thermal input of 20 MW or more, 4.1. Production of organic chemicals, 4.5. Production of pharmaceutical, 5.1. Disposal or recovery of hazardous waste, 5.2. (b) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for hazardous waste, 5.3. (a) Disposal of non-hazardous waste, 5.3. (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste, 5.4. Landfills, 5.5. Temporary storage of hazardous waste and 6.5. Disposal or recycling of animal carcases or animal waste. For activities carrying out storage and / or processing of waste, a baseline report is required when the wastes concerned display one or more of the properties listed in the national legislation and is considered hazardous. Gases are not considered to be relevant as they would not contaminate land or groundwater if released, so hazardous gaseous materials are excluded from the baseline report requirement. The assessment of the possibility of soil and groundwater contamination considers the quantity of substances/wastes (in particular whether they have the potential for significant contamination of groundwater/land in the quantities used, produced, stored or released), the nature of the substances/wastes (including the level of toxicity, mobility, persistence and biodegradability), the impact of a release, including the potential for dispersal and the sensitivity of land and groundwater receptors in the area, and the likelihood of an event happening reflecting the measures in place on site to prevent release of such substances/wastes (e.g. safety valves) and the basis on which the likelihood has been quantified.
Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?
Malta indicated that for installations required to issue a baseline report, operators are required to submit a baseline monitoring strategy which should be drawn up by a team of persons with qualifications in hydrology/geology and chemistry. Furthermore, the monitoring strategy should include a conceptual model for the site, a list of physical and chemical parameters, the location of sampling, the duration of sampling (for groundwater); and sampling and analysis methods to be adopted. The baseline report is based on the information and data gathered according to the baseline

monitoring strategy. In relation to the data analysis, Malta reported that the baseline report should include the proposed method for assessing whether there has been a change in the contamination status of the site during its operation (e.g. sampling, analysis, statistical tests to be used). For groundwater, trigger values are to be identified, and for land, general assessment criteria must be specified. The source of these values/criteria should be documented, and for example guidelines from other EU Member States may be used.

In the case of existing installations already in operation, the baseline report should determine whether the site poses a significant risk to human health or the environment as a result of the activities carried out by the operator before the baseline report was carried out. In case existing contamination from the activity which is posing an immediate risk of further contamination is found, mitigation measures shall be proposed. The report must contain an evaluation regarding the scientific uncertainties and limitations of the approach taken, as well as the results obtained. The methodology should be well documented, to ensure that during the lifetime of the plant and at cessation, a quantified comparison with the baseline is possible.

Following the adoption of the baseline report an ongoing monitoring programme is designed which takes into account the findings of the baseline report.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

Malta indicated that an interim guidance document had been developed based on the AMEC report to the Commission on this topic. It also noted that due to the publication of the Commission's guidance, the national guidance will be updated and published. In the meantime, operators are referred directly to the Commission's guidance document.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Upon making the decision to decommission all or part of the site, the operator is required to notify the competent authority. Land and groundwater monitoring results must be updated to show the state of land and groundwater upon cessation of activities.

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

The competent authority conducts a comparison between the monitoring results included in the baseline report those submitted prior to the cessation of activity in order to decide whether significant pollution has been caused. The history of the site, including past incidents and spillages, are taken into account.

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

The competent authority conducts a comparison of the results from the monitoring to the trigger values and general assessment criteria for land. These values have been set for Malta as part of an ERDF project.

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

Malta reported that the operator is requested to submit a report indicating the actions to be taken for removal, control, containment or reduction of relevant hazardous substances, such that the site, taking into account its current or approved future use (in particular residential or industrial), ceases to pose a risk.

The methods which are used in order to decontaminate the land may also include isolation. A detailed waste management strategy is also requested and shall include the identification and characterisation of sources, types and quantities of waste (including equipment, fuels, by-products such as ash, etc.), criteria for segregation of wastes, proposed treatment, conditioning, transport, storage and disposal/recovery methods, and potential reuse/recycling of such wastes.

The identification of potential sources of emissions and pollution which might arise from the

decontamination process are also requested including any corresponding mitigation measures to minimise the likelihood of such emissions. The approved Decommissioning Plan shall be implemented within 12 months of final cessation or decommissioning of the permitted activities or part thereof or according to a timeframe as may be agreed with the Authority.
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
The Maltese response states that an environmental inspection plan has been drawn up, which is valid for the period 2014/15. It is stated that the environmental inspection plan provides a general overview of the compliance procedures and the priorities of the competent authority during the validity of the plan. It is a legislative requirement that the plan contains all of the information set out in Article 23(3) IED. The plan is not published on the internet and only available to the public on request. Programmes for routine environmental inspections are regularly drawn up by the competent authority, the current programme covering the period 2014/15, and are updated on a monthly basis. The programme contains a list of all permitted IED installations and assigns these a priority risk rating. As inspections are unannounced, the programme of inspections is not publicly available.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of environmental risks is based on internal guidance entitled "IPPC/IED and environmental permitting operational tools", which were developed under an ERDF project. The environmental risk assessment is based on a combination of the environmental complexity (scores are assigned to attributes such as number of emission points, waste management, and presence of environmental management system) and environmental impact of the installation, based on the location of the site, proximity to sensitive receptors, record of compliance, complaints received etc. The overall risk of an installation is classified as high, medium or low and assigned a minimum inspection frequency. As the guidance remains an internal document at this stage, it is not published on the internet.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
In the three regions, non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain the observations of officers of the Authority during the inspection, as well as instructions for remediation where necessary and deadlines for completion of the requested actions. The site visit reports are notified to the operator by email and registered mail within 2 months of the site visit, and are made available to the public on request (certain information may be redacted where this is commercially sensitive). Site visit reports may be temporarily withheld where there are ongoing legal proceedings in cases of serious environmental breach.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary

actions' identified in the site visit report (Article 23(6))?
In order to ensure that any 'necessary actions' identified in the report are completed, follow up inspections are carried out and correspondence is prepared. Where the operator does not carry out the requested actions, the Authority can use a number of compliance tools.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
Once a new application is considered duly made, the applicant is requested to submit a consolidated application, which is then made available to the public during a 30 day public consultation period. At the end of the public consultation period, a report on feedback received during the public consultation together with the Authority's responses is published on the website and all entities/ individuals who had commented on the application are notified in this regard. Once the permit is drafted this is presented to the MEPA Board for a decision. The decision session is held in public where all attendees are given the option to voice any additional comments, which are taken into consideration by the Board prior to taking a decision. An 'early and effective opportunity' is, therefore, provided for the public to participate in the process.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public by uploading the application form on the Authority's website, the publication of a notice on the commencement of the public consultation period in local newspapers and the website, and delivery of hard copies of the application to the local councils. Thereafter during the decision session, information is presented orally and upon determination of the permit, a copy is uploaded on the Authority's website. While the Maltese response states that not all relevant information is available on the internet, this is a legislative requirement under the national transposing legislation.
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
As part of the permitting process, the operator is required to compare different technologies that could be adopted. Malta indicated that the main incentive provided is the support offered for projects aimed at carrying out research on emerging techniques. In addition, meetings are held with operators to discuss technologies being proposed.

Netherlands

Analysis of the completeness of the report

Table A38: Completeness assessment of answers reported by Netherlands – IED

Question title	Question number(s)	Netherlands	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		

Question title	Question number(s)	Netherlands	Comments
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

The Netherlands provided a complete response to the questionnaire.

Analysis of the Netherlands responses

The table below contains the detailed analysis of the responses provided by the Netherlands to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A39: The Netherlands – Response analysis table

The Netherlands
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The Netherlands indicated that the criterion for deciding whether a breach poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment is the extent to which compliance is ensured. If no measure can be applied to guarantee compliance then operators are required to suspend operation. The response included reference to the relevant legislation (i.e. Article 17.1(2) of the Environmental Management Act).
QUESTION 2 – Permit conditions
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
In the Netherlands, the use of BAT conclusions for setting permit conditions is ensured in two ways. Firstly, the requirements of article 14(3) of the IED are transposed into the national legislation. In addition, the national guide for determining BAT (Handleibing bepalen BBT) ensures that BAT conclusions are the reference for setting permit conditions.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
In the Netherlands, stricter permit conditions can be set as follows: When deciding on the application, the competent authority ensures that the best available techniques are applied as a minimum; When determining the best available techniques, the competent authority also takes into account any national information documents on best available techniques specified by ministerial regulation; Stricter conditions may be included in General Binding Rules. For example this is the case in the Livestock Farming and Housing Decree.

QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
In the Netherlands, the guide for determining BAT includes z methodology to support the determination of emission limit values based on BAT conclusions. It also indicates that under normal operating conditions, emissions cannot exceed the emission levels associated with BAT. The response from the Netherlands included a link toward the guidance document[122] .
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
In the Netherlands, the guide for determining BAT provides information and support for determining derogations. The provisions are based on the national legislation which requires that the decisions to grant derogations include justifications from the Competent Authorities on how aspects such as the geographical location of the installation, the local environmental conditions or the technical characteristics of the installation have influenced their decision. The response from the Netherlands included the relevant articles of the Environmental Law Decree and a link toward the guidance document (see link in question 3.1).
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
The cost benefit analyses are conducted based on the BREF on Economics and Cross-Media Effects and the national cost-effectiveness methodology. The response included a link[123] toward the Dutch methodology for cost benefit assessment which details costs to be taken into account, depreciation rate and calculation techniques.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
The Netherlands indicated that the Competent Authority may limit the derogation by applying it only up to a specified time or until a specified circumstance arises. Furthermore, the Competent Authority is required to examine on a regular basis whether the permit conditions, including the derogation, are still adequate in view of developments in technical environmental protection capabilities that is, to say, in view of new or revised conclusions on best available techniques.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Operators are required to apply for temporary derogations via the procedure established for amending existing permits. In its decision on the application, the competent authority decides whether or not to grant the temporary derogation. The derogation cannot apply for more than nine months and is only for testing or use of emerging techniques.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
The requirements of the IED in terms of monitoring are transposed into Dutch legislation. Furthermore, sector binding rules specify specific monitoring requirements that take into account BAT, as is the case for Large combustion plants. Finally, the Netherlands has adopted guidelines on measuring and reporting emissions into air and air quality.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined

[122] http://www.infomil.nl/onderwerpen/duurzame/bbt-ippc-brefs/handleiding-bepalen/

[123] http://www.infomil.nl/onderwerpen/klimaat-lucht/ner/bijlagen-digitale/4-13-beschrijving/

(Article 16(2))?
Frequency of monitoring is based on a systematic appraisal of the risk of effects on the environment. In addition to the transposition of the IED requirements contained in article 16(2), the Dutch legislation states that, when determining the permit rules, the competent authority takes into account the Dutch Soil Protection Guidelines. The Netherlands included in its response a link[124] to the Dutch Soil Protection guidelines (NRB) which provide information for assessing the necessity and reasonableness of soil protection measures and facilities.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
In the Netherlands, the competent authority takes into account the Dutch Soil Protection guidelines when determining the permit rules. The guidelines include information on how systematic appraisal of the risk of contamination should be applied.
QUESTION 5 – General Binding Rules (Article 17)
Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?
T In the Netherlands, General Binding Rules have been adopted and are used to implement the IED. The following pollutants are covered by General Binding Rules: sulphur dioxide, nitrogen oxide, carbon monoxide, volatile organic compounds, metals and their compounds, chlorine and its compounds, fluorine and its compounds, polychlorinated dibenzodioxins and polychlorinated dibenzofurans, metals and their compounds, biocides and plant protection products. Furthermore the rules apply to the following activities: Combustion installations above 50MW, production of inorganic chemicals, incineration or co-incineration of waste and intensive rearing of poultry or pigs.
Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?
The Dutch legislation states that the requirements for permit conditions apply by analogy to General Binding Rules. This relates to ensuring an integrated approach, a high level of protection, the basis of rules on BAT conclusions and the updating of rules to take into account developments in best available techniques. If equivalence is not guaranteed, the law requires the competent authority to deviate from the General Binding Rules and replace these with stricter permit conditions. The response from the Netherlands included reference to the relevant articles of its national legislation.
Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?
The national legislation requires that similarly to the permit conditions, the General Binding Rules must be based on BAT.
Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?
The national legislation requires that the updating of General Binding Rules is based on BAT.
Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?
The preamble of the General Binding Rules, and (or) the explanatory notes make direct reference to the IED.
Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.
In the Netherlands, General Binding Rules are published at: http://wetten.overheid.nl/zoeken/ and https://zoek.officielebekendmakingen.nl/zoeken/staatsblad
QUESTION 6 – Developments in BAT (Article 19)

[124] http://www.rwsleefomgeving.nl/onderwerpen/bodem-ondergrond/nrb/

Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The competent authorities are informed of BAT conclusions via the internet and information meetings that are organised.
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The Netherlands indicated that central government makes information on developments in BAT available to the public via the internet.
Question 6.3 – Links to where the information can be found
Information on developments on BAT are available on the following website: http://www.infomil.nl/onderwerpen/duurzame/bbt-ippc-brefs/
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
The response listed the typical information requested from operators for the purposes of the permit reconsideration and updating. This includes techniques applied, current performance and emission levels, and results of studies examining possible ways to increase environmental protection. In most cases, this information is derived from the permit application and the monitoring results, however if necessary, the competent authority can ask for additional information directly from the operators. This can include for example specific measurements, calculations or counts necessary to determine to what extent the installation has an adverse effect on the environment and a study to be conducted examining possible ways to increase environmental protection beyond the level provided for in the other rules attached to the environmental permit.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
The competent authority determines the main activity based on the content of the permit application. If necessary it consults the operator.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?
In the Netherlands, reconsideration or updating of the permit can result from the following: ▪ complaints from the public concerning significant pollution by the installation ▪ environmental inspections that highlight potential for improving safety and preventing or reducing pollution ▪ studies by the operator or competent authority examining possible ways to increase environmental protection ▪ the need for new or additional permit conditions to prevent accidents and mitigate effects, e.g. following an incident or accident ▪ plans and programmes aimed at improving environmental quality in an area (e.g. programmes referred to in Article 23 of Directive 2008/50 on ambient air quality and cleaner air for Europe) ▪ spatial plans and programmes aimed at further developing an area economically, while at the same time safeguarding or improving environmental quality.
QUESTION 8 – Site closure (Article 22)
Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or

release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
In the Netherlands, the competent authority decides on a case-by-case basis whether the activity involves the use, production or release of relevant hazardous substances, having regard to the possibility of soil and groundwater contamination. In practice it appears that all activities from Annex I, with the exception of category 6.6 (intensive rearing of poultry or pigs), could result in the release of relevant hazardous substances. Processes entailing risks include the storage, transhipment and transport of liquids, semi-open or open processes and the discharge of waste water. Furthermore, if the installation carries out an activity with a risk of soil contamination, within three months of the installation being set up a report containing the results of a soil quality study shall be sent to the competent authority. The competent authority may draw up tailored rules relating to the performance of a soil quality study in the event that the installation is modified, if, in view of the nature or extent of this modification, it is necessary for the soil quality to be documented, with consideration for the potential soil damage or contamination that may arise or may have arisen as a result of an activity with a risk of soil contamination. If the installation has carried out an activity with a risk of soil contamination, within six months of the installation or IPPC installation being discontinued, or of the storage of liquid fuel, waste oil or brine in an underground storage tank being discontinued, a report containing the results of a soil quality study shall be sent to the competent authority.
Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?
The Netherlands indicated that the content of the baseline report has not yet been determined. However, it is expected that the baseline report will include information on the present and past uses of the site. Baseline reports will also present information on new soil and groundwater measurements to monitor the potential risks of the installation concerned.
Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?
This question has been highlighted as not applicable as the content of the baseline reports has not been determined yet.
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
In the Netherlands, the operator is required to have the state of soil and groundwater contamination examined by qualified individuals in accordance with national quality standards. The competent authority is responsible for the supervision of this process.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
The determination of whether significant pollution has been caused is determined during the assessment following cessation of activities during which the soil and groundwater quality are compared to the information included with the baseline report.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
In the Netherlands, the question of whether a significant risk applies is determined during the assessment following cessation of activities by comparing the soil and groundwater quality with the background value for clean soil which are stated in national legislation (Article 2.11(3) of the Activities Decree).
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
The operator is required to take the measures that are necessary to return the soil and

groundwater quality to the quality documented in the baseline report, or in the absence of a baseline report, to the background values for clean soil. It is considered that the soil is restored insofar as it can reasonably be achieved using the best available techniques.

QUESTION 9 – Environmental inspections (Article 23)

Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?

All competent authorities in the Netherlands are required to draw up an overall enforcement policy, which sets out the 'environmental inspection plans', 'programmes for routine environmental inspections' and guidance on the systematic appraisal of the environmental risks of installations. The enforcement policy contains enforcement targets, priorities and the activities carried out to achieve the targets, a regular review of the policy following which adjustments are made where necessary, coordination with other authorities, analysis of problems that could arise in relation to compliance, a strategy for the monitoring of compliance (frequency of routine inspections, the circumstances in which non-routine inspections are carried out and the monitoring and verification of the results of inspections), and reporting on findings and the imposition of sanctions, and therefore contains all of the information set out in Article 23(3) IED. Each enforcement policy is publicly available on the websites of each competent authority (for example, for the Province of Friesland, http://www.fryslan.frl/4884/handhavinguitvoeringsprogramma-hup/#multiple).

On the basis of the overall enforcement policy, each competent authority is required to draw up an implementation programme setting out which of the planned activities it will carry out over the coming year, taking into account the targets and priorities set. Implementation programmes are publicly available on the websites of each competent authority (see link above for the Province of Friesland).

Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

The environmental risks of installations are systematically appraised by analysing the problems that could occur, in particular the likelihood of breaches occurring and the effects of these on the physical environment. This is used to determine the enforcement targets and activities to be carried out to achieve these targets, which are included in the overall enforcement policy. The frequency of inspections depends on the environmental risks, the compliance history and whether or not the operator has a certified environmental management system, and, therefore, the criteria set out in Article 23(4) IED are applied.

Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.

Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?

A site visit report includes information on the inspection carried out, breaches identified, and where applicable, conclusions on the need for further measures, sanctions imposed, any official reports, and details of any complaints received about potential breaches. The competent authority sends the site visit report to the permit holder within 2 months, and makes it available to the public on request within 4 months of the inspection. There have been no cases in which the reports have not been made publicly available during the reporting period, though information may be withheld in the circumstances set out in Directive 2003/4/EC.

Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where further measures require to be taken following an inspection, compliance with these can be checked during subsequent non-routine environmental inspections, or following complaints and requests for enforcement from the public, and sanctions can be imposed in the event of non-compliance.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Dutch response refers to the provisions of the General Administrative Act and the Environmental Law (General Provisions) Act, which provide the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. The competent authority is required to provide information on an application in one or more daily newspapers, via the internet or by other suitable means, which is to include information on where and when the documents will be available for inspection, who can express comments on the application, how this can be done (in writing and verbally) and the period within which the decision will be made. The competent authority is thereafter required to make the draft permit available for inspection for a period of 6 weeks.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is to be made available to the public via the internet and in one or more daily newspapers or free local papers, or by other suitable means. All relevant information is made available on the internet, via the national website www.overheid.nl, and/or the websites of the competent authority concerned.
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
The competent authority assesses with the permit application whether the use of emerging techniques is necessary and feasible. An important factor that is taken into account in this assessment is the compliance with environmental quality requirements, corporate social responsibility on the part of the operator and complaints from the public. To determine the feasibility of the emerging technique, the competent authority requires a range of information from the operator. For environmental problems that are regarded as a priority, national policy also focuses on the broader application of emerging techniques, e.g. voluntary agreements, programmes and General Binding Rules. The response indicated that the Netherlands has adopted a range of fiscal and subsidy programmes in order to support the application of emerging techniques. The response included links towards webpages detailing these fiscal and subsidy programmes.[125] The Netherlands is also involved in the development and implementation of instruments such as the European Business Awards for the Environment and the LIFE Programme.

[125] http://english.rvo.nl/subsidies-programmes/mia-environmental-investment-rebate-and-vamil-arbitrary-depreciation-environmental-investments
and http://english.rvo.nl/subsidies-programmes/energy-investment-allowance-eia

Poland

Analysis of the completeness of the report

Table A40: Completeness assessment of answers reported by Poland – IED

Question title	Question number(s)	Poland	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT	**6.1**		

Question title	Question number(s)	Poland	Comments
(Article 19)	**6.2**		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Poland provided a complete response to the questionnaire. It is noted that in Poland the Inspection System sets out both the 'programmes for routine environmental inspections' and guidance on the systematic appraisal of the environmental risks of installations.

While the response provided to question 7.1 is considered to be complete, Poland response indicated that no installations were requested to provide information for the purpose of permit reconsideration during the reporting period. It is therefore unclear what kind of information would be requested from the operators if the situation was to arise.

Analysis of Member State responses

The table below contains the detailed analysis of the responses provided by Poland to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A41: Poland – Response analysis table

POLAND
QUESTION 1 – Non-Compliance
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant

adverse effect upon the environment'?
Poland reports that such criteria have not been determined. Every breach of permit conditions is considered on a case by case basis. Risk assessment is undertaken for this purpose. This takes into account: ▪ the specific nature of the installation concerned; ▪ local environmental conditions; and ▪ any other information in the possession of the competent authorities.
QUESTION 2 – Permit conditions
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
The Environmental Law Act (Ustawa – Prawo ochrony środowiska – furher referred to as UPOS) explicitly requires that BAT conclusions are taken into account when determining the requirements of the best available techniques (Article 207(1) UPOS). These requirements must be met by installations requiring an integrated permit (Article 204(1) UPOS). Competent authorities did not raise any doubts in applying this approach, hence no additional guidelines were produced.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
UPOS allows competent authorities to determine additional permit requirements where required, in order to achieve a high level of protection of the environment as a whole (Article 211(8) UPOS). As above, Poland reported there was no need to prepare additional guidelines on that matter.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
UPOS clearly provides that 'emission levels associated with the best available techniques', defined as 'emission limit values' (Article 3(4a) UPOS), cannot be exceeded as a result of the operation of an installation requiring an integrated permit (Article 204(1) UPOS). Poland reported that the legislation is sufficiently clear and precise, so that no additional guidelines were required.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Poland reported that Article 204(2) and (3) of UPOS regulates the manner in which derogations from Article 15(3) are granted. When applying for an integrated permit or for a change in a permit, the operator may, in special cases, request that a derogation is granted and provide the justification (Article 208(2)(2)). The competent authority assesses the validity of granting a derogation by analysing if the achievement of emission limit values would lead to disproportionately high costs compared to environmental benefits.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
The assessment of costs and benefits is carried out by the competent authority on the basis of all available information and in compliance with the general rules set out in Article 204(3) of the UPOS. This takes into account the geographical location, local environmental conditions, technical characteristics of the installation or other factors that affect the operation of the installation and the environment as a whole. Other factors may also be considered, such as the requested duration of the derogation. Poland reports that for each derogation request, the assessment involves a comparison of the

total costs incurred by the operator to achieve the emission limit value concerned (e.g. the costs of installing emission abatement equipment), the environmental benefits achieved (e.g. emission reductions, improvement of the environment, etc.) and benefits for the operator (e.g. reduced consumption of raw materials, energy savings, less waste, lower environmental charges, electricity production and sale of by-products). The analysis should include at least two installation operation scenarios – with and without a derogation. Poland reported that to date the above provisions have been implemented through training of competent authorities. Guidelines on the matter are currently being prepared by The Ministry of the Environment. These will be available at the Ministry's website in the section on Integrated Permits (http://ippc.mos.gov.pl/ippc) however the response from Poland does not include any timescale on when the guidelines will be available.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Poland reported that a derogation may concern only specific installations and specific emission limit values and cannot lead to an infringement of other environmental requirements, such as emission standards or environmental quality standards. Public participation in administrative proceedings relating to derogations is ensured. The validity of granting a derogation is considered each time after BAT conclusions for the type of activity concerned are published (Article 215(2) UPOS).
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
In accordance with Article 211a of UPOS, if installation operators wish to test a new technique, the result of which may be that emission limit values are exceeded, they must submit an application for a change of the integrated permit. The competent authority may change the integrated permit, specifying the installation operation variant containing the above-mentioned emission limit values, and allowing a derogation from environmental requirements resulting from the best available techniques. Such an operation variant cannot exceed duration of 9 months. Within 30 days, the operator is required to submit to the competent authority a report containing information about the effects of the tests of the new technique.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
Article 211(5) of UPOS lays down the obligation to determine, for installations which require an integrated permit, the scope and manner of monitoring of emissions compliant with monitoring requirements specified in BAT conclusions.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
Article 217a of UPOS provides that soil and land contamination testing must be performed at least once every 10 years, while measurements of hazardous substances in groundwater must be carried out at least once every 5 years.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Poland reported that Article 211(6) of UPOS states that an integrated permit should also specify, if necessary, the manner of carrying out a systematic appraisal of risk of contamination of soil, land and groundwater. This means that a 'systematic appraisal of risk' is determined on a case-by-case basis for every installation on the basis of knowledge available to the competent authorities.
QUESTION 5 – General Binding Rules (Article 17)

Poland has not implemented any General Binding Rules.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
In Poland the Minister for the Environment is required to gather information on the best available techniques, BAT conclusions and BAT reference documents, and to disseminate it. The information is disseminated through the website of the Ministry of the Environment (section on Integrated Permits): http://ippc.mos.gov.pl/ippc. If new or updated BAT conclusions are published, they are immediately posted on the website of the Ministry of the Environment and the competent authorities are notified by electronic means.
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The website of the Ministry of the Environment dedicated to integrated permits (referred to above) is publicly available.
Question 6.3 – Links to where the information can be found
The following link has been provided by Poland: http://ippc.mos.gov.pl/ippc The website includes numerous information on the application of the IED in Poland, specifically: ▪ General information on the IPPC and IED; ▪ Links to related national and European level legislation; ▪ Explanations to some specific requirements of the IED; ▪ Links to the reports on the related topics; ▪ Decisions and guidance from the EC on the implementation of the IED; ▪ BAT conclusions and BREF documents; ▪ BAT guidance for different types of activities (national, in Polish); ▪ Other documents (e.g. sample application for environmental permit); ▪ Information about the technical working groups and how to get involved; ▪ Information on training available on the topic; ▪ Registration fees; and ▪ List of all registered operators with an integrated permit.
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Between 5 September 2014 (when Article 215(2) of UPOS, which transposes Article 21(2) of the IED came into force) and the date of reporting on the implementation of the IED to the EC, the competent authorities have not requested any installation operator to submit additional information necessary for reconsidering/updating of permit conditions. No further information was provided by Poland on what type of information could be requested should a need to update the permit arise.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
Poland responded that when granting an integrated permit, the competent authority each time specifies the type of installation, referring to the relevant point of the Annex to the Regulation of the Minister for the Environment of 27 August 2014 on types of installations which may cause significant pollution of elements of the environment or the environment as a

whole (Journal of Laws (Dziennik Ustaw) 2014, item 1169). The above-mentioned Annex contains a list of types of installations which transposes Annex I to the IED. No information has been provided on what basis the type of an installation is determined.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

Article 216 in conjunction with Articles 194, 195 and 196 of UPOS apply in cases of significant pollution, operational safety or a new/revised environmental quality standard. The above-mentioned provisions allow an authority to initiate a review of an integrated permit and, in extreme cases, revoke or restrict it (with or without compensation).

QUESTION 8 – Site closure (Article 22)

Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

A list of activities indicating specific industries which could involve the 'use, production or release of relevant hazardous substances' has not been drawn up in Poland. Such an assessment is carried out on a case-by-case basis for all installations requiring an integrated permit included in Annex I to the IED.

As a result in response to question 8.1a Poland reported all activities of Annex I.

- "Poland further reported that in accordance with Article 208(2)(4) of UPOS, in the application for an integrated permit or for a change of such a permit, the operator of an installation which uses, produces or releases hazardous substances must assess if any of these substances could cause soil, land or groundwater contamination. In accordance with the Commission's guidance this analysis considers:
  - physical and chemical properties of such a substance;
  - quantities in which substance was used;
  - procedures followed at installations.

If the analysis shows that there is a possibility of contamination, then the installation operator must enclose a baseline report with the application.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

Content of the baseline report is defined in Article 208(4) of UPOS. The report should include:

1) information about activities carried out at the plant;

2) information about activities carried out at the plant in the past, where available;

3) names of hazardous substances which are used, produced or released by installations which require an integrated permit located at the plant;

4) information about the state of soil, land and groundwater contamination at the plant with hazardous substances that could cause contamination (including the results of appropriate tests and measurements).

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

National guidelines on determining the need to prepare baseline reports and on their scope are based on the Commission's guidance on the content of baseline reports. The Commission's guidance will also be used when developing a draft regulation of the Minister for the Environment issued under Article 101a of UPOS, which will contain, inter alia, the requirements for:

- the assessment of soil, land or groundwater contamination at plants where an installation which requires an integrated permit is operated or was operated in the past, in order to ensure identification of each contaminant before the installation is

commissioned, during its operation and after it is closed;

- the scope and manner of preparation of the baseline report referred to in Article 208(2)(4)(a) of UPOS;
- the measurements referred to in Article 211(6)(4) UPOS; and
- the final report referred to in Article 217b(1) UPOS.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

In accordance with Article 217b of UPOS, before an installation which required a baseline report is decommissioned, the installation operator prepares and submits to the competent authority a final report, which must be prepared in a way that allows comparison with the baseline report. A comparison of the two reports enables the assessment of the state of soil and groundwater contamination.

Article 217c of UPOS, in turn, provides that both the baseline report and the final report must be prepared in compliance with national legislation on soil protection. In accordance with Article 101a(1) of UPOS, soil contamination is assessed by examining whether the permissible levels of hazardous substances in the soil have been exceeded.

In the future, the method of assessing soil contamination will be specified in a regulation issued under Article 101a(5) of the UPOS. In accordance with the interim rules, the Regulation of the Minister for the Environment of 9 September 2002 on soil and land quality standards (Journal of Laws No 165, item 1359 - temporarily maintained in force), will apply in this regard until the regulation concerned is issued (however, no longer than until 5 September 2016).

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

Pursuant to Article 101a(5) of UPOS, the Minister for the Environment, by way of a regulation, specifies:

1) hazardous substances of particular relevance for soil protection and their permissible levels, differentiated for specific soil properties and types of land according to their use;

2) detailed requirements for determining the permissible levels of hazardous substances other than those indicated in point 1 in soil and land, taking into account the analysis of their impact on human health and the environment.

If the final report shows that the permissible level of a hazardous substance has been exceeded, then the competent authority considers that the installation has caused 'significant pollution'. In accordance with interim rules, the Regulation of the Minister for the Environment of 9 September 2002 on soil quality standards and land quality standards, temporarily maintained in force, will apply until the regulation concerned is issued (however, not longer than until 5 September 2016), and the previous soil quality standards and land quality standards are recognised as the permissible levels of hazardous substances.

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

Poland reports that if contamination is identified in the baseline report, documentation of test results during the operation of an installation or in the final report, a copy of these documents, pursuant to Article 217d(1) of UPOS, is submitted to a regional director for environmental protection, who is the competent authority for matters relating to environmental damage and historical land surface contamination.

If as a result of the assessment it has been detected that the permissible level of a hazardous substance has been exceeded, depending on the time when the contamination occurred, the following provisions apply:

- the Act of 13 April 2007 on preventing and remediating environmental damage, hereinafter referred to as the Environmental Damage Act, which transposes Directive 2004/35/CE of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, i.e. the Environmental Damage Directive [it covers soil and land contamination which occurred after 30 April 2007, i.e.

environmental damage to land surface],

- Section IV UPOS on land surface protection [it covers historical land surface contamination not covered by the Environmental Damage Directive, i.e. soil and land contamination caused before 30 April 2007, as well as environmental damage to land surface which occurred more than 30 years ago].

As part of procedures set out in the above-mentioned legislation, contamination must be reported (the Environmental Damage Act – Article 11; UPOS – Article 101e) and a remediation plan must be determined (UPOS – Article 101l, Article 101m or Article 101o; the Environmental Damage Act – Article 13, Article 15 or Article 17). A draft remediation plan should contain, inter alia:

- an assessment of the occurrence of a significant risk to human health or the environment; and,
- information on the geological structure and hydrogeological conditions necessary for carrying out this assessment (where necessary).

When carrying out the assessment of the occurrence of a significant risk to human health or the environment in the remediation plan, the rules set out in Article 17b of the Environmental Damage Act or Article 101p of UPOS respectively are taken into account, including:

- the chemical nature of contaminants and their bioavailability;
- the possibility of spread of the contamination;
- potential exposure pathways, taking into account the spread of the contamination depending on soil properties, terrain, geological structure and hydrogeological conditions as well as land cover;
- the environment and people which could suffer as a result of the contamination; and
- the presence of arable land, gardens, parks, playgrounds, sports grounds, residential and utility buildings, nature conservation areas, drinking water supplies and water intakes in the contaminated area and its vicinity.

Where necessary, an optional regulation of the Minister for the Environment, harmonising the manner in which the assessment of the occurrence of a significant risk to human health or the environment is carried out, may be issued in the future under Article 101p(3) of UPOS.

The assessment of the occurrence of a significant risk to human health or the environment is taken into account when formulating the scheduled remediation method in the remediation plan. If the assessment shows there is no risk of occurrence, a regional director for environmental protection may, by way of a decision, exempt the obliged entity from taking remediation measures.

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

Remediation measures are understood as subjecting soil, land and groundwater to measures aimed at eliminating or reducing the amount of hazardous substances, and controlling and restricting the spread of such substances in such a way that the contaminated area no longer poses a risk to human health or the environment.

If remediation measures must be taken, the above-mentioned Environmental Damage Act or Section IV UPOS on land surface protection respectively apply. Detailed rules for selecting a remediation method are determined on the basis of implementing rules issued under Article 14 of the Environmental Damage Act or Article 101q of UPOS respectively.

In accordance with the provisions of the Environmental Damage Act or Section IV of UPOS on land surface protection respectively, the installation operator (as the entity responsible for the contamination or the owner of the land) must prepare a draft remediation plan. On its basis, the competent authority determines a remediation plan, which specifies:

- the area which requires remediation, by indicating the address and numbers of plots and the size of the area;
- the names of hazardous substances and their levels in soil and land resulting from remediation;
- the remediation method;

- the date of commencement and completion of remediation; and
- the manner of confirming that remediation measures have been taken and the deadline for submitting documentation on the measures taken, including the results of soil and land contamination tests.

QUESTION 9 – Environmental inspections (Article 23)

Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?

Provincial Environmental Protection Inspectors prepare annual work plans, which include inspections planned for that province. The inspection plans are developed on the basis of an analysis of tasks, competence and statutory obligations, and take into account the socio-economic situation and the environmental status of the province concerned, the results of environmental monitoring in the province and the history of accidents and incidents as well as complaints received. The inspection plans contain all of the information set out in Article 23(3) IED. The inspection plans are publicly available on the websites of the Provincial Environmental Protection Inspectorates (for examples, the plan for Warsaw for 2013 and 2014 is available at http://www.wios.warszawa.pl/pl/udostepnianie-informac/plany-pracy-archiwalne/609,Roczny-PLAN-PRACY.html), or is made available upon request. From 2015 onwards, all inspection plans will be published on the websites of the Provincial Environmental Protection Inspectorates.

Programmes for routine environmental inspections have been drawn up as part of the uniform rules contained in the 'Inspection System of the Environmental Protection Inspection', which were introduced in 2010. The Inspection System sets out the procedures for all stages of the inspection process (planning, preparing, carrying out and documenting inspections and follow-up activities) as well as supporting materials for inspections. Routine inspections cover all actions, including site visits, monitoring of emissions and checks on internal reports and follow-up documents, as well as checks on techniques used and on the adequacy of the environmental management of installations, carried out to check if installations complied with their permit conditions and to monitor their environmental impact. The Inspection System is not published but maybe made available by the Chief Environmental Protection Inspector.

Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

Guidance on the systematic appraisal of the environmental risks of installations is set out as part of the Inspection System. Generally, the first inspection is comprehensive in order to provide data for a multi-criteria risk assessment analysis to be carried out and to classify the plant into either a category I (annual inspections), II (inspection ever 2 years) III (inspection every 3 years or less), IV (inspections every 4 years or less), or V (not covered by the annual plan) risk category. IED installations fall within categories I, II or III. The systematic appraisal of the environmental risks is based on the criteria set out in Article 23(4) IED. As above, the Inspection System is not published on the internet.

Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED. In addition, the Polish response states that non-routine environmental inspections are carried out in 'other' circumstances but does not specify what these are.

Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?

Site visit reports are standardised in Poland and cover the number and date of the inspection, the name and address of the plant subject to inspection, data of the inspected entity and persons providing information and taking part in the inspection, the names and surnames of inspectors and their authorisations to carry out the inspection, the date of the previous inspection, the objectives of the inspection, and the findings of the inspection (any irregularities found, sanctions imposed during the inspection and information on the implementation of follow-up recommendations issued previously). The Annexes to the site visit report document any examinations, measurements and results, interviews, etc. The site visit report is signed by the operator and provided to the operator, and are made publicly available upon request. A system is currently being developed to make these publicly available on the websites of the Provincial Environmental Protection Inspectorates. Personal data and classified information is withheld in accordance with Directive 2003/4/EC.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where follow-up recommendations are included in the site visit report, the operator is obliged to inform the Inspectorate within the specified deadline, of the actions taken to implement the recommendations and remove any infringements identified. Where the operator does not comply within the deadline set, minor offence proceedings can be taken, leading to imprisonment, a fine or other measures.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The public are provided with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED, under the procedure set out in the Act of 3 October 2008 on making available information on the environment and its protection, public participation in environmental protection and environmental impact assessments, which requires the public to be informed early in the procedure or at the latest, as soon as the information can reasonably be provided ('without an undue delay'). The detailed arrangements for informing and consulting the public are set out in the national legislation, which provides 21 days for public consultation to allow time for the public to get acquainted with the documentation available, and to prepare and participate effectively in environmental decision-making. The public may submit comments in writing, verbally at a hearing, or via email.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public on the website of the Public Information Bulletin of the CA, at the head office of the CA, by bill-posting at the location of the proposed project, and in the press. All relevant information is made available on the internet on the website of the relevant authority (412 authorities have competence to issue permits).
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
In accordance with Article 400a(1)(35) UPOS, the development and implementation of new environmental protection and water management techniques and technologies (in particular aimed at limiting emissions, water consumption, and improving fuel efficiency) is supported financially through: ▪ the National Fund for Environmental Protection and Water Management (Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej); and ▪ provincial funds for environmental protection and water management.

Portugal

Analysis of the completeness of the report

Table A42: Completeness assessment of answers reported by Portugal – IED

Question title	Question number(s)	Portugal region	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)			
Row Heading	**2.2**		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		

Question title	Question number(s)	Portugal region	Comments
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Portugal provided a complete response to the questionnaire.

Analysis of Portugal responses

The table below contains the detailed analysis of the responses provided by Portugal to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A43: Portugal – Response analysis table

PORTUGAL
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
In Portugal, breaches of permit conditions are assessed by taking into account both objective and subjective criteria. The response does not list these criteria, however it is indicated that the judgment by the authority responsible relates directly to the requirement and the environmental conditions of the site where the establishment is located and the requirements laid down in related environmental legislation. A breach of the limit values laid down for air or for water is assessed taking into account, in addition to direct non-compliance, criteria relating to the characteristics of the site where the establishment is located. The response included an example, indicating that if the establishment breaches emission limit values for air, the air quality may then be considered to be threatened with serious consequences for human health. For Seveso installations, the assessment also takes into account environmental systems.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
The legislation requires that BAT conclusions are taken into account when defining the permit conditions (Decree-Law No 127/2013). Portuguese competent authorities added that Portugal has always adopted the BAT-AELs as a basis for defining its permit conditions, the implementation of the IED has made this practice compulsory. Furthermore, operators are required to list the BATs implemented in their application for an integrated permit and in the event of BATs not being implemented, operators are required to prove that both environmental protection and the environmental performance of the

installation provide the same level of environmental protection than BAT. Portugal's response included a link toward its legislation[126].
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
In Portugal, stricter permit conditions may be imposed whenever necessary to ensure compliance with environmental quality objectives. This is foreseen by the national legislation (Decree Law 127/2013), however Portugal indicated this provision has not been used yet. The procedure for issuing environmental permits include cooperation between several competent authorities responsible for monitoring air and water quality that if necessary, could indicate additional conditions to be included in the permit. Portugal's response included a link toward the relevant legislation[127].
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
In Portugal, the ELVs set in the permits are always based on the BAT-AELs. Portugal's response included a link toward the relevant legislation[128]. The legislations indicates that BAT-AELs included in the BAT conclusions must be applied, it does not indicate whether BAT conclusions are transposed directly into the national legislation or whether the installations' emission limit values are set on a case-by-case basis taking the BAT-AELs into account and as a minimum.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Operators can request that less strict emissions limit values are applied in cases where they do not comply with BAT-AELs. The assessment from the competent authority on allowing this derogation is based on local environmental conditions, and it must be shown in a report that the investment needed to reduce the emissions is disproportionately high in comparison to environmental gains. The response added that in more straightforward situations, for example, if the installation of a piece of equipment for reducing emissions entail a complete re-fitting of the installation, then an in-depth study is not required. However, even in these cases, the assessment of costs and benefits is done in accordance with the Economic Cross Media BREF.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
Portugal indicated that the cost benefit assessment is conducted on the basis of the Economic Cross Media BREF.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article

[126] https://dre.pt/web/guest/pesquisa-avancada/-/asearch/advanced/maximized?types=SERIEI&anoDoc=2013&dataPublicacaoInicio=2013-08-30&tipo=Decreto-Lei&numero=127&search=Pesquisar&p_auth=bn9CwnGh&fpb=dHJ1ZQ%3D%3D

[127] https://dre.pt/web/guest/pesquisa-avancada/-/asearch/advanced/maximized?types=SERIEI&anoDoc=2013&dataPublicacaoInicio=2013-08-30&tipo=Decreto-Lei&numero=127&search=Pesquisar&p_auth=bn9CwnGh&fpb=dHJ1ZQ%3D%3D

[128] https://dre.pt/web/guest/pesquisa-avancada/-/asearch/advanced/maximized?types=SERIEI&anoDoc=2013&dataPublicacaoInicio=2013-08-30&tipo=Decreto-Lei&numero=127&search=Pesquisar&p_auth=bn9CwnGh&fpb=dHJ1ZQ%3D%3D

15(4))?
There are limitations for the derogation, as the emission limits may not be higher than those stipulated in the general national legislation. These are ELVs included in Annexes of the IED which have been transposed in Portuguese legislation. Furthermore the duration of derogations is assessed on a case-by-case basis, but this is reassessed during the renewal procedure of the permits which must be conducted at least every ten years. So it appears that derogations are limited to a period of no more than 10 years in Portugal.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
The legislation transposing the IED indicate that it does not apply to installations which are used exclusively for research, development or trials of new products and processes or for testing specific (i.e. emerging) techniques. For installations which are not only engaged in research, the possibility of not complying with BAT-AELs may be envisaged as long as the values stipulated in national legislation are respected. As required by the IED, the temporary derogation are assessed on a case by case basis and cannot be longer than 9 months.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
The legislation transposing the IED states that BAT conclusions must be taken into account when defining the permit conditions, this includes monitoring requirements.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The information from the baseline report produced by the operator is used to determine the frequency of the monitoring of soil and groundwater which is determined in the legislation in accordance with the IED.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Portugal indicated that installations where the risk of contamination is minimal are not required to submit a baseline report. For these installations, a lower sampling frequency than the one stated in the legislation can be applied, however operators are required to reassess the contamination risk at least every 5 years and demonstrate that the conditions that gave rise to the exemption of the baseline report (and consequently of the monitoring) are still met.
QUESTION 5 – General Binding Rules (Article 17)
Portugal has not adopted any General Binding Rules.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
In Portugal, the authority responsible for issuing integrated permits is the same one in charge of following developments in BREFs and BAT conclusions. In addition, technical experts that follow the procedures for granting permits are part of the working groups for the BREF revision, as such Portugal responded that they are always up to date on the publication of the BAT conclusions.
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Links to the BREFs and BAT conclusions are presented on the portal website of the

Portuguese Environment Agency. In addition, the competent authority is required to keep operators informed with the publication of new BREFs and BAT conclusions and to remind them of the 4 year period for adapting their installations to the new conditions. For this purpose, after the publication of a new BREF, operators are required to submit a plan for adapting to the new conditions.
Question 6.3 – Links to where the information can be found
The response included two links, one to the legislation transposing the IED[129] and another one to the relevant page of the Portuguese Environment Agency: http://www.apambiente.pt/index.php?ref=17&subref=151&sub2ref=321
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Portugal indicated that for existing installations, an analysis is made of historical data reported over time by operators as part of self-monitoring arrangements. If an installation already complies with the BAT-AELs and no alterations have been made, and providing there is no new (national or BREF) legislation published, then the competent authority does not need additional information to update the permit. However, for the first renewal after the implementation of the IED, operators are required to submit a document for assessing the need for a baseline report to be drawn up. For installations for which new BAT conclusions or other national legislation has been published, operators are required to provide information on how they intend on adapting to the new obligations. This should include descriptions of alterations to be made, equipment to be installed, changes in procedures and the proposed timetable for the introduction of the alterations. Where installations come under new categories in annex I (e.g. changes in annex), operators are asked to provide information on the "new" activity and if necessary to submit information on way they intend to adapt to the new obligations. The information should describe alterations to be made, equipment to be installed, changes in procedures and the proposed timetable for the introduction of the alterations. The response included links to the relevant legislation.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
The definition of main activity of an installation for the purposes of issuing a permit takes into account the main activity identified by the operator and the activities defined in Annex I of the IED. In cases where more than one activity is carried out in a single installation, the main activity is deemed to be the one with the greatest impact on the environment or, if the impact of the various activities is similar, the one which the operator deems to be the most relevant economic activity. The response from Portugal included an example of an installation whose main economic activity was paper production, but with a production capacity below the IED threshold but that includes a biomass boiler for energy production with a rated thermal input exceeding the IED threshold, then the permit considers that the installation activity is 1.1 and relates to combustion of fuels in installations with a total rated thermal input equal to or greater than 50 MW.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

129 https://dre.pt/web/guest/pesquisa-avancada/-/asearch/advanced/maximized?types=SERIEI&anoDoc=2013&dataPublicacaoInicio=2013-08-30&tipo=Decreto-Lei&numero=127&search=Pesquisar&p_auth=bn9CwnGh&fpb=dHJ1ZQ%3D%3D

The Portuguese legislation requires operator to request an early renewal of environmental permits in case of significant pollution, operational safety or new / revised EQS.

The early renewal process is triggered by the competent authority sending a letter out to the operators concerns and indicating that their permits are to be reassessed.

QUESTION 8 – Site closure (Article 22)

Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

Baseline reports are submitted by installations conducting the following activities:

- 1.2. Refining of mineral oil and gas;
- 2.6. Surface treatment of metals or plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3;
- 4.1. Production of organic chemicals as defined under (a) to (k);
- 4.2. Production of inorganic chemicals as defined under (a) to (e);
- 4.3. Production of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers);
- 4.4. Production of plant protection products or of biocides;
- 4.5. Production of pharmaceutical products including intermediates;
- 6.7. Surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with an organic solvent consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.

Portugal indicated that the assessment of whether a baseline report is needed is made on a case by case basis. It explained that within these activities there are some exceptions, in particular for small installations that operate in fully waterproofed sites. Moreover for activities where there is typically a low risk of contamination, there may be cases where a baseline report has to be submitted.

Portugal's competent authority has drawn an interpretative note to provide guidance to operators on assessing the contamination risk. If it is deemed probable that contamination could occur, then a baseline report must be produced. A link was provided to this note in the Portuguese response.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

The baseline report is drafted in accordance with the Commission's guidelines and contain an analysis of the contamination risks which is then used to determine the frequency of monitoring.

The report contain a description of the hazardous substances present in the installation, the quantities, the sites where they are stored, the measures set for containing and preventing spillages and the way these substances are transported within the installation.

In specific situations where the competent authority knows that there are soil or water issues, operators can be required to provide more information on the site.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

Portugal indicated relying on the Commission's guidance to define the information that operators must include in the baseline report. It is also used to assess cases where an exemption can be granted from the requirement to submit a baseline report.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Portugal reported that installations which have definitively ceased operations have not drawn up baseline reports which could serve as a comparison. Therefore, the competent authority has requested that operators carry out assessments of the possibility of soil and groundwater contamination, including sampling and analyses of the results compared with the values set out in the Dutch or Ontario standards. The response added that most of the installations requesting cessation of activities were carrying out 3.5 or 6.6 activities which are considered to entail minimal contamination risk. So in most cases, the requirement to submit analysis was dispensed with.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Portugal indicated that no national legislation has been adopted on this and that the values set in the Dutch or Ontario standards have been used for comparison purposes.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
In Portugal, if the result of the analysis show that the contamination risks are higher than the Dutch or Ontario standards, the operators may be required to submit a risk analysis.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
The decision to add necessary measures is taken on a case by case basis and depends on the risk analysis and the intended use of the site.
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
In Portugal, Annual Activity Plans are drawn up which set out the activities and goals of the General Inspectorate for Agriculture, Seas, Environment and Spatial Planning (IGAMAOT) and the allocation of financial and material resources. The plans include the activities of control and inspection that will be carried out. A number of other documents have been drawn up to complement the Annual Activity Plans, which refer to activities with an environmental impact and set out in more details the inspections that will be carried out. The Annual Activity Plan and complementary document for 2013 are publically available on the website of IGAMAOT (http://www.igamaot.gov.pt/apresentacao/instrumentos-de-gestao/plano-de-actividades/). However, from the information provided and consulting both documents (available only in Portuguese), it does not appear that all of the elements set out in Article 23(3) are covered. IGAMAOT draws up quarterly programmes for routine environmental inspections, which contain the necessary information for the inspections. This includes information on the installations that are to be inspected (including IPPC category), the inspectors responsible for the inspection, the week in which the inspection is planned, the date and time of the last inspection, the result of the risk analysis, any appeals/complaints proceedings, the parameters for sampling, and other information deemed relevant for planning and carrying out the inspection. Programmes for routine environmental inspections are not publicly available.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of environmental risks is based on an analysis model for environmental risk management, "RISK", developed in 2009, which assesses the risks from IED installations in accordance with the requirements of Recommendation 2001/331/EC on minimum criteria for environmental inspections, and following the IMPEL "Doing the Right Things" and "Setting Targets & Performance Monitoring" guides. The risk analysis model

generates a classification of the risk associated with each IED installation (the higher the classification, the greater the risk), thus allowing the available resources to be channelled to activities with the highest risk. The frequency and type of inspection is determined based on the risk classification, priority being given to installations where risk is classified as being high, which are inspected annually. Installations classified as a lower risk are inspected once every three years. From the information provided it is not clear if each of the criteria set out in Article 23(4) IED are applied.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out to investigate serious environmental complaints and accidents, therefore not all of the circumstances set out in Article 23(5) IED are covered. The Portuguese response also refers to 'other' circumstances but does not specify what these are.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports describe all the facts checked during the inspection, a description of the facts on which any recorded non-compliance is based, and technical recommendations that the operator is required to implement. Where there is a situation that poses a serious risk to health, the safety of people or the environment, activities at the site may be suspended in whole or in part and preventative/precautionary measures taken. In the event of non-compliance, an official notice is drawn up, setting out the grounds for the notice and the measures to be taken by the operator. Where the site is found to comply with the permit, a copy of the site visit report is sent to the operator. However, where an official notice of non-compliance is drawn up, operators are notified of the outcome of the inspection within the course of minor offence proceedings. Site visit reports are made available to various bodies but are not publicly available (a reporting template for this is currently being developed). Reports can be made available to the public on request, except where these relate to minor offence proceedings and the information is to be treated as confidential.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
In order to ensure compliance with any 'necessary actions', a deadline will be set for implementation of technical recommendations within a reasonable period of time. The Inspectorate has the power to suspend or close operations where there is a serious risk to health, the safety of people and goods and the environment. In the event of non-compliance, this will be dealt with in the official notice, and subsequently in the minor offence proceedings with the imposition of a fine.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Portuguese response refers to the provisions of Decree-Law No 127/2013, which provides the public with an early and effective opportunity to participate in the procedures listed in Article 24(1) IED. The national legislation requires public participation early in the procedure as access is provided for 20 working days following the application. Thereafter, comments may be submitted in writing, by letter or by email, and are taken into account when issuing permit conditions.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?

Information is made available to the public in electronic format. However, the Portuguese response states that not all relevant information is made available on the internet, but does not specify which information is not available.
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Portugal has created the Consultative Commission for Integrated Pollution Prevention and Control (CCPCIP) that is responsible to identify, monitor and publicise BATs. This commission, which comprises representatives from the environment, agriculture, finance, the economy, health and energy, autonomous regions and associations and confederations of various economic activities, was established to ensure the exchange of information, and to promote and publicise BATs and emerging techniques.

Romania

Analysis of the completeness of the report

Table A44: Completeness assessment of answers reported by Romania – IED

Question title	Question number(s)	Romania	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
Row Heading	**2.2**		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		**A link provided as part of the response is not working**
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		**A link provided as part of the response is not working**
	6.2		**A link provided as part of the response is not working**
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		**A link provided as part of the response is not working**
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		

Question title	Question number(s)	Romania	Comments
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		
Emerging techniques (Article 27)	11		

Romania provided an almost complete response to the questionnaire.

The gaps identified are in relation to some links that were provided by the Romanian authorities but that could not be opened. These non-functioning links have not prevented a full analysis of the implementation of the IED in this Member State.

Analysis of Romania responses

The table below contains the detailed analysis of the responses provided by Romania to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A45: Romania – Response analysis table

ROMANIA
QUESTION 1 – Non-Compliance
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Romania indicated that any violation of the conditions stipulated in the integrated environmental permit is considered as presenting the risk of impact on the environment and human health. Its national legislation includes provisions to prevent significant adverse effect upon the environment from breaches of permit condition (Law No 278/2013, article 8(2)). When a breach of permit conditions is observed, the operator is required to inform the competent authority immediately and to take actions to restore compliance in the shortest time possible. Furthermore, the competent authority (the county environmental protection agency) is entitled to suspend the permit in case of non-compliance with the conditions through a suspension order that details conditions to be met for the suspension to be lifted. Prior notice must be provided including a 60 days period during which the operator is provided with the opportunity to restore compliance. The suspension of the permit is maintained until compliance is restored during which time the activity of the installation is interrupted. The suspension cannot be longer than 6 months, after which time if the conditions set in the suspension order are not met, the permit is cancelled by the competent authority.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
The national legislation (i.e. Article 13 of Law No 278/2013) foresees that for activities for

which BAT conclusions have been adopted are the basis for setting permit conditions. For activities where no conclusions have been adopted yet, the applicable conditions are those included in the reference documents. The competent environmental protection authority is responsible for integrated environmental permitting sets emission limit values which ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques, as laid down in the decisions on BAT conclusions, through one of the following alternatives:

- setting emission limit values that do not exceed the emission levels associated with the best available techniques, or
- setting emission limit values different from those referred to in point a) in terms of values, periods of time and reference conditions.

The competent authority is provided with guidance on how BAT conclusions are used as reference for setting permit conditions. The response from Romania included a link to the relevant guidance [130] which states that "As regards the activities listed in Annex I of Law No 278/2013, for which Decisions of the European Commission on BAT conclusions were published and holding a valid integrated environmental permit, the competent environmental protection authority will notify operators of their obligation to comply with the new BAT requirements, as required by Article 21(4) of Law 278/2013. APM will reconsider the conditions in the integrated environmental permit and determine together with the operator compliance measures and deadlines. APM will review the conditions of the integrated environmental permit at the date set for compliance."

Romania indicated that it's General Technical Guidelines for integrated permitting published in 2004 also require that emissions limit values comply with BREF recommendations.

Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?

The Romanian legislation, article 14(4) of Law No 278/2013 states that the competent authority can set, where appropriate, stricter permit conditions than those achievable by the use of BAT. The response included a description of the circumstances where it may be appropriate, particularly where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques.

Local conditions are taken into account when setting permit conditions, as a consequence the integrated permit must take into account the quality of the local ambient air. So in areas where limit values of ambient air quality are exceeded, more restrictive permit conditions should be included in the permit.

QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

In accordance with Article 15(3) of Law No 278/2013, emission limit values set by the competent authority must ensure that under normal operating conditions, emissions do not exceed the emission levels associated with BAT. Two options are available to competent authorities: either setting emission limit values that do not exceed the emission levels associated with the best available techniques which are expressed for the same periods or for shorter periods of time and under the same reference conditions as the emission levels associated with the best available techniques; or setting emission limit values different in terms of values, periods of time and reference conditions.

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

The Romanian legislation foresees that in specific circumstances the competent authority may set less stringent emissions limit values. This is only applicable when the operator demonstrates that complying with the emission limit values associated with the best available

[130] http://www.anpm.ro/upload/129740_Adresa_ref_Legea_278-2013.pdf

techniques laid down in BAT conclusions involves disproportionately higher costs compared to the environmental benefits in that situation, taking into account:

a) the geographical location or the local environmental conditions of the installation; and

b) the technical characteristics of the installation concerned.

When this provision is applied the competent authority is required to document the result of its assessment and its justification for less strict conditions imposed.

Romania indicated that no derogation was granted during the reporting period.

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

Romania reported that the justification of disproportionately higher costs compared to the environmental benefits is conducted in agreement with its national legislation (Law No 278/2013) and takes into account the geographical location, the local environmental conditions of the installation, its technical characteristics and the recommendations of the BREF on Economics and Cross-Media Effects. No additional information was included on the approach to the cost benefit assessment or on applicable guidance.

Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

Romania indicated that the decision to grant derogations is made on a case by case basis and limits both the scope and the duration of the derogation. In addition, it must take into account compliance with environmental quality standards, including air quality standards. The granting of derogation is accompanied by the requirements that ELVs applied are not higher than those included in the national legislation, and that the operating conditions ensure a high level of protection of the environment. Romania is following the results of the IMPEL study on granting derogations, in order to ensure a uniform, fair and rigorous application of the requirement throughout the EU.

Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

In accordance with the IED and where appropriate, the competent authority can provide temporary derogations from some requirements of the IED to test and use emerging techniques. The derogation cannot exceed 9 months, following which the technique is either discontinued or the emissions levels, using the technique, comply with the emissions levels associated with BAT.

QUESTION 4 – Monitoring requirements (Article 16)

Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?

In Romania, monitoring requirements are included in the integrated permits and are based on the conclusions on monitoring described in BAT conclusions.

Guidance on monitoring have been drafted which are available to operators through the competent authority's website. The response from Romania included a link to the following guidance documents: guidance on monitoring and self-monitoring of emissions of sulphur dioxide, nitrogen oxides and dust from large combustion plants[131] , guidelines to the integrated environmental permitting procedure[132] and guidelines for monitoring of emissions of volatile organic compounds[133].

131 http://www.mmediu.ro/vechi/departament_mediu/controlul_poluarii/Ghid_monitorizare.pdf

132 http://mmediu.ro/legislatie/acte_normative/controlul_poluarii/ippc/2012-02-13_controlul_poluarii_ghidaplicordin36din2004autorizatieintegrata.pdf

Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The frequency for monitoring is set in accordance with the IED, that is to say 5 years for groundwater and at least once every 10 years for soil unless the monitoring is based on a systematic appraisal of the risks of contamination.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
The Romanian legislation requires that the monitoring of groundwater quality ensures that necessary precautions are taken to prevent groundwater pollution. Direct or indirect emissions of substances from installation into the groundwater are not allowed. The legislation requires that the water component of the integrated permit includes specific measures on the monitoring of groundwater quality.
QUESTION 5 – General Binding Rules
Romania has not adopted General Binding Rules for the implementation of the IED.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Competent authorities are in charge of managing the exchange of information provisions included in the IED. This includes the coordination of the implementation of the IED at local level with the local competent authority. These are informed by the general competent authority (ANPM) by email and official letters on the developments in BAT and the publication of any new or updated conclusions on BAT. Furthermore, all competent authorities are required to follow and keep themselves informed on the development of BAT and BAT conclusions. Finally, BAT conclusions are made available on the Ministry of Environment and Climate Change website in both English and Romanian[134]. In addition the BREFs are available in English and where appropriate, in Romanian on the ANPM website[135].
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The national legislation requires that the competent authorities keep the public informed of the developments in BAT and the publication of any new or updated BAT conclusions. The public can access easily to the BREFs and BAT conclusions through the Ministry and the ANPM websites.
Question 6.3 – Links to where the information can be found
The response included the following two links where up to date information on BAT conclusions and BREFs is available: http://www.mmediu.ro/beta/domenii/controlul-poluarii/legislatie-controlul-poluarii/ http://www.anpm.ro/lista_celor_mai_bune_tehnici_disponibile_bref-11580
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
The national legislation (article 21 of Law No 278/2013) requires operators submit all the information necessary to reconsider permit conditions, in particular the results of emission

[133] http://www.anpm.ro/docfiles/view/13560
[134] http://www.mmediu.ro/beta/domenii/controlul-poluarii/legislatie-controlul-poluarii
[135] http://www.anpm.ro/lista_celor_mai_bune_tehnici_disponibile_bref-11580

monitoring and other data that enables a comparison of the installation's operation with the best available techniques described in the applicable BAT conclusions and with the emission levels associated with the best available techniques.

In practice, the permits contain conditions requiring the operators to send, usually on an annual basis and to the competent authority, an environmental report containing information on the activity carried out in the previous year, emission monitoring data. The information included in this report is used by the competent authority to assess compliance of the installation with the permit conditions.

When reconsidering or updating the permit conditions, additional information can requested from operators to ensure that all the permit conditions are complied with.

In its response Romania provided a description of the stages followed for the reconsideration and update of permits:

- Evaluation and analysis of information submitted by the holder in the notification regarding the change to the approved installation,
- Decision on the need to reconsider permit and request for submission of the documentation related to such changes: Application form, Updated site report,
- site check,
- Consultation of the documentation,
- Decision to grant/deny the reconsidered permit
- Public debate

Throughout the procedure, the public is kept informed (through the media, by the holder) at key procedural stages: submission of the documentation required for application for permit reconsideration, organisation of public debate, decision to grant/deny the reconsidered permit.

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

In Romania, the main activity of an installation is determined by taking into account the guidance document for implementation of the European PRTR which contains provisions relating to the identification of the main activity of an installation.

Often, the main activity is the same than the main economic activity of the installation. In cases where the main economic activity is not representative of the activities conducted in the installation, the main activity is defined as the most polluting activity of the installation.

Finally, Romania indicated that the operator declare its activity following the NACE (CAEN) nomenclature which is used in case of uncertainties.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

The competent authority are not required to reconsider the existing permit by a specific deadline. However, reconsideration is mandatory in the following circumstances: the pollution caused by the installation is significant, therefore it is necessary to reconsider the emission limit values existing in the integrated environmental permit or to include new emission limit values in the integrated environmental permit for other pollutants; it is necessary to use other techniques, for operational safety reasons; it is necessary to comply with a new revised environmental quality standard or the provisions of new legal regulations require it.

QUESTION 8 – Site closure (Article 22)

Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

According to the Romanian legislation, all installations engaged in an Annex 1 activity are required to provide a Site Report drafted in accordance with the General Technical Guidelines for the integrated environmental permitting procedure.

All annex I activities have been identified by Romania as involving the use, production of release of relevant hazardous substances
Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?
The report must contain the data required by the baseline report as per the Commission Guidance 2014/C 136/03. The report includes at least the following: information on the current use of the site and its previous uses, information on the results of the measurements made on soil and groundwater, taking into account the possibility of soil and groundwater contamination by those hazardous substances which will be used, produced or released by the installation. The response from Romania included a link toward a guidance document[136]. Romania added that the guidelines on baseline reports apply generally to all installations falling within the scope of Chapter II of the Industrial Emissions Directive and, when deciding to draw up a baseline report for the installation, account must be taken of the need for the report to be as comprehensive as possible. In addition, it is in the interest of the operator and the competent environmental authority to ensure that information on the state of contamination of soil and groundwater identified in the baseline report is sufficiently detailed, as this will be used to determine the contamination added during operation of the installation concerned after the setting of reference values. The site report is used as a reference for comparison upon cessation of the activity.
Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?
The Commission's guidance is made available to the public concerned including operators. Operators are required to use the guidelines as a way to identify the specific requirements their documentation must include when submitting an application for a permit.
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
The general technical guidelines for integrated permitting define the assessment stages and the factors to take into account when assessing the possibility of soil and groundwater contamination. The response from Romania included a link toward the guideline[137]. The assessment is done by comparing the results of the soil and groundwater monitoring with the information included in the baseline report with the report prepared upon site closure.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Romania indicated that operators must include in the baseline report the information necessary to establish the state of soil and groundwater contamination, so that a quantified comparison can be made with their state at the time of final cessation of the activity provided in paragraph. However the response does not include information on how it is decided that 'significant pollution' has been caused. Romania added that the investigation conducted to form the basis of the detailed assessment must clarify the delimitation of the polluted area, the nature and intensity of the pollution, the relation of pollutants with the mineral matrix of rocks and the structure of the geological environment, the migration and transport paths of pollutants and the assessment of the geological risk. This information is then used to define the steps for the restoration of the geological environment. National legislations including value for soil and water quality are used as comparison[138].

[136] http://mmediu.ro/file/2012-02-13_controlulpoluarii_ghidaplicareordin36din2004autorizatieintegrata.pdf

[137] http://mmediu.ro/file/2012-02-13_controlulpoluarii_ghidaplicareordin36din2004autorizatieintegrata.pdf

[138] Order of the Minister for Water, Forests and Environmental Protection No 756/1997 approving the Regulation on environmental pollution assessment, published in the Official Journal of Romania No 303 bis of 6 November 1997, and the provisions of

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
Romania indicated that its national legislation requires the results of detailed investigation and assessment to be included in the final geological report on the investigation and assessment of the geological environment pollution, which is submitted to the competent authority. In addition, the operator is required to prepare a risk assessment study. The competent authority reviews the reports and decides whether the pollution of the geological environment on the site has a significant impact on human health and the environment. In Romania 'significant' risk is assessed by reference to the following: hazardous substances used, produced or released by the installation, values exceeding the emission limit values set in the permit for certain pollutants, frequency, amplitude and duration of these excesses, any incidents or accidents and their frequency, affected environmental quality standards.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
The national legislation (articles 19 and 23 of Decision no 1408/2007) states that if the concentration of one or more pollutants is above the alert threshold but below the intervention threshold, the operator must ensure regular monitoring of the evolution of pollutant concentrations in the geological environment, as required by the competent authority. Moreover, if the concentration of one or more pollutants exceeds the intervention threshold, the operator is required to carry out detailed investigation and assessment. In addition to these provisions and other legal requirements, measures should be aimed at intervention on the installation/installation component that caused pollution.
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
In Romania, environmental inspections are carried out in accordance with a General Annual Plan of Activities, prepared each year by the National Environmental Guard (GNM), which sets out the proposed activities for that year, routine and non-routine inspections, and other activities. The Annual Plan of Activities for 2013 contains a list of controlled installations for which environmental inspections are planned, a list of planned themed inspections (air quality, waste management, industrial pollution and risk management, chemicals, water quality, soil and subsoil, noise, and nature protection) and a table of inspection plans, which sets out the activity, priority level and stage of completion at the end of 2013. The Romanian response refers to Law No 278/2013, which requires that the inspection plan contains the information set out in Article 23(3) IED. It is stated that the General Annual Plan of Activities is made available for public consultation at the time of preparation and will be made available on the GNM's database (Artemis), which is currently under development. A link is provided to the report of the activity of the GNM during 2013, which sets out the inspection and control activity completed between 1 January and 31 December 2013 and is publicly available at http://www.gnm.ro/staticdocs/Raport_activitate_GNM-2013.pdf.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
Routine inspections of installations listed in the register of controlled installations are carried out to check compliance with a number of pieces of environmental legislation, and to verify documents evidencing compliance with EMAS (environmental management system). The frequency and duration of routine inspections for each installation is determined on the basis of an assessment of the environmental impact and environmental performance of the installation, taking into account the level and type of emissions, the sensitivity of the local

Government Decision No 53/2009 on the National Plan for the protection of groundwater against pollution and deterioration

environment and the risk of accidents, as well as monitoring results, any incidents and accidents. It can be revised following any additional information obtained during the inspection and control actions. Routine inspections are carried out at least once a year for installations with the highest risk (class A) and at least every three years for low risk (class D) installations. The programmes for routine environmental inspections are not available on the internet but can be accessed at the local premises of the GNM.

Routine inspections are carried out in accordance with the minimum inspection criteria set out in Law No 278/2013 and Order 464/2009 approving the technical rules regarding the organisation and conduct of control and inspection activities in the field of environmental protection, at intervals set according to a systematic assessment of the environmental risks associated with the particular installation. In accordance with Law No 278/2013, the systematic appraisal of the environmental risks is based on the criteria set out in Article 23(4) IED. The Romanian response does not refer to any further guidance.

Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) of the IED, as well as for new installations, at the initiative of GNM, jointly with other competent authorities and to verify implementation of required measures.

Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?

The format of site visit reports is set out in Annex 7 of Order 464/2009, and require relevant information obtained during the visit, details of the installations level of compliance with environmental laws and the permit conditions, as well as details of any fines applied or measures to be taken in the event of non-compliance, including the need for further action to be provided. Site visit reports are notified to and must be signed by the owner of the installation at the final site meeting. The owner may therefore raise objections to the findings or measures imposed at that stage or following the site visit. If the owner refuses to sign the site visit report, this is sent to them by post or displayed in the headquarters of the owner of the installation. While Law No 278/2013 requires that site visit reports are made publicly available within 4 months, the Romanian response states that site visit reports are stored in GNM's database (Artemis) and a computerised system is being developed to make these publicly available. It therefore does not appear that these have been made publicly available during the reporting period. As a result, there are no circumstances noted in which such reports have been withheld under the provisions of Directive 2003/4/EC on public access to information.

Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?

Finally, in order to ensure that operators complete the 'necessary actions' identified in the site visit report, where the operator does not inform GNM of the measures taken within the deadline set, GNM will take further control actions, namely a further site visit to verify whether the necessary actions have been taken.

QUESTION 10 – Access to information and public participation (Article 24)

Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?

The Romanian response refers to the provisions of Law No 278/2013, which require the competent authority to "ensure the necessary conditions for early and effective participation of the public concerned" during all of the procedures listed in Article 24(1) IED. Under Ministerial Orders 818/2003 and 3970/2012, information is to be made publicly available by

the operator upon submission of an application to the competent authority, and is to be made available for public consultation at the headquarters of the competent environmental protection authority or in the town hall of the area where the facility is located, following which the public has 30 days to comment (verbally or by written comments). Public debates are also held and representations may either be recorded within the minutes of debates or sent in writing or by email to the authorities. This is considered to provide an "early and effective" opportunity for the public to participate in the various procedures.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public by the operator via the media (local/regional/national daily newspapers), and by the CA at its headquarters or the local city/town hall. The public is to be informed by public notices for 10 consecutive days, in the press and on local radio and television stations. All relevant information is made available by the CA on the internet (www.anpm.ro).
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
The national legislation states that the competent authority shall promote programmes for development and application of emerging techniques. The National Centre for coordination, information, updating of guidelines on best available techniques and communication with the European Integrated Pollution Prevention and Control Bureau and the European Forum for Information also known as the IPPC Centre was set up in 2005 to coordinate BREF related activities at national level in particular gathering information for updating. After the adoption of the IED, the IPPC Centre organised meetings to diffuse information and analysis on implementation of BAT conclusions and to encourage the development and application of other techniques that could meet the requirements of emerging techniques.

Slovakia

Analysis of the completeness of the report

Table A46: Completeness assessment of answers reported by Slovakia – IED

Question title	Question number(s)	Slovakia	Comments
Non-compliance (Article 8)	1		
Permit conditions (Article 14)	2.1		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	3.1		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	4.1		
	4.2		
	4.3		
General Binding Rules (Article 17)	5.1 (a) to (b)		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	6.1		
	6.2		

Question title	Question number(s)	Slovakia	Comments
Reconsideration and updating of permits (Article 21)	7.1		
	7.2		
	7.3		
Site closure (Article 22)	8.1 (a) to (d)		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	9.1 (a) to (c)		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		
Emerging techniques (Article 27)	11		

Slovakia submitted a complete set of answers to the IED questionnaire.

Analysis of Slovakia's response

The table below contains the detailed analysis of the responses provided by Slovakia to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers provided.

Table A47: Slovakia – Response analysis table

SLOVAKIA
QUESTION 1 – Non-Compliance
Question 1.a - What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The Inspectorate is authorised to suspend operations at an installation if it discovers a breach of permit conditions posing an immediate danger to human health or threatening to cause an immediate significant adverse effect upon the environment due to the operation of installations and facilities pursuant to Annex 1. It can do this until compliance with measures is restored and deficiencies are remedied in accordance with paragraph (4)(e) and (f) of Act No 39/2013 on IPPC (Section 33(5) of Act No 39/2013 on IPPC). The decision taken by the Inspectorate is based on groundwater and soil analysis results or monitoring results, or if it discovers that an installation could have serious health effects on the public, even if they do not pose an immediate (acute) danger to the public.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
BAT conclusions form the basis when setting binding integrated-permit conditions and emission limits. Specifically, the title of the Commission decision on BAT conclusions or the title of the relevant reference document (if conclusions have not been issued for a particular sector) is indicated in the text of an integrated permit as part of the binding conditions for the operation of an IPPC installation (Section 21(2) of Act No 39/2013 on IPPC). The authorising authority also draws on BAT conclusions to determine emission limits within permits without prescribing the use of a specific method, technique or technology (Section 22(5) of Act No 39/2013 on IPPC)[139].
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
In a permit, the authorising authority may set operating conditions intended to achieve compliance with environmental quality standards in those cases where an environmental quality standard requires stricter conditions than those that can be achieved by applying BAT (Section 23(2) of Act No 39/2013 on IPPC). Slovakia indicated that its Inspectorate finds the criteria established in the BAT conclusions are adequate, as yet. It added that there have been no instances in Slovakia where a national environmental quality standard has been stricter than BAT[140].
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
The authorising authority sets emission limits which ensure that, under normal operating conditions, emissions do not exceed emission levels corresponding to the best available techniques as laid down in the decisions on BAT conclusions as follows: a) by setting emission limits that do not exceed the emission levels associated with the

[139] http://www.enviroportal.sk/environmentalne-temy/starostlivost-o-zp/ipkz-integrovana-prevencia-a-kontrola-znecistovania/pravne-predpisy-sr; http://enviroportal.sk/uploads/assets/13-z039.pdf

[140] Ibid.

best available techniques; those emission limit values are expressed for the same or shorter periods of time and under the same reference conditions as those emission levels associated with the best available techniques; or

b) by setting emission limits different from those referred to under point a) in terms of values, periods of time and reference conditions.

Where point b) is applied, the authorising authority, at least annually, assesses the results of emission monitoring, based on proof of results provided by the operator, in order to ensure that emissions under normal operating conditions have not exceeded the emission levels associated with the best available techniques[141].

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

If derogations from emission limits – compared to the emission levels referred to in the best available techniques – are granted, the statement of grounds must include the specific reasons why the derogation was granted, including justification of the binding conditions set on the basis of the derogation granted, including the result of an assessment.

The authorising authority may, in certain cases, set less strict emission limits. Such a derogation may apply only where an assessment shows that the achievement of emission levels associated with the best available techniques as described in BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to a) the geographical location or the local environmental conditions of the installation concerned or b) the technical characteristics of the installation concerned[142].

Furthermore Slovakia reported that when granting derogations, the authorising authority may take account of the socio-economic conditions of the region in which the installation is located, e.g. if the region has a high unemployment rate. The socio-economic criterion is not included in the IED and is something additional to the IED criteria for granting derogations.

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

No criteria for the assessment of such derogation have been set. Slovakia added that the Ministry of the Environment could issue a guideline at some point in the future.

While Slovakia has yet to register an application for such a derogation, until guidelines are published, if an application for a derogation is registered, an assessment will be carried out by two professionally competent people. However it is not mentioned if these two competent people are from relevant Ministries, other permitting authorities or private sector.

Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

Emission limits must not be less stringent than the emission limits provided for under other regulations (Section 22(7) of Act No 39/2013 on IPPC)[143]. Other limitations may be associated with the geographical location of an installation, for example, if it is in an area with controlled air quality or in a protected water management area.

No other limitations on the magnitude or duration of derogations have been set.

Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

The authorising authority may grant temporary derogations from requirements relating to the setting of emission limits for the testing and use of emerging techniques for a total period of time not exceeding nine months, provided that, after the period specified, either the technique is stopped or the activity achieves at least the emission levels associated with the best available techniques (Section 24(8) of Act No 39/2013 on IPPC). Slovakia indicated that it has yet to

[141] Ibid.
[142] Ibid.
[143] Ibid.

register an application for such a derogation.

QUESTION 4 – Monitoring requirements (Article 16)

Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?

The obligation to use BAT conclusions to define monitoring requirements in permits is laid down in Section 21(2)(j) of Act No 39/2013. Monitoring requirements are based on the monitoring conclusions described in the BAT conclusions and also draw on a prior agreement with the operator (Section 23(6) of Act No 39/2013). The Inspectorate defines emission monitoring requirements, which set the methodology for measurements, the frequency and the procedure for evaluating emissions, and emission monitoring requirements in such a manner that the emission monitoring results are available over the same period of time and under the same reference conditions as emission levels associated with the best available techniques.

Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?

Periodic monitoring is to be carried out at least once every five years for groundwater and at least once every 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination (Section 24(2) of Act No 39/2013 on IPPC). The frequency of groundwater measurements is defined by the authorising authority based on the magnitude of the source of pollution, its potential impact on groundwater and the type of pollutant (most frequently four times a year for landfills and once a year for other installations).

Soil monitoring has not yet been defined in any valid integrated permit issued. The initial soil monitoring results are presented in baseline reports.

Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?

Criteria to assess the systematic appraisal of the risk of contamination are not defined. Therefore, the authorising authority proceeds only in accordance with Act No 39/2013 on IPPC, i.e. it has not established a lower soil or groundwater monitoring frequency.

QUESTION 5 – General Binding Rules (Article 17)

Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?

All activities under Annex I to Directive 2010/75/EU and pollutants under Annex II to Directive 2010/75/EU are covered by GBRs under the Act of the National Council of the Slovak Republic No 39/2013 on IPPC. This legislative act includes references to other regulations of general application which are to be applied, where relevant, to IPPC installations.

Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?

Slovakia reported that this is ensured, for example, when defining emission limits by taking into account the possibility for a substance from one component of the environment to be transmitted to another. Where appropriate in light of local conditions, emission limits may be supplemented or replaced by equivalent parameters or technical measures ensuring a high overall level of environmental protection (Section 22(4) of Act No 39/2013 on IPPC).

An integrated approach and a high level of environmental protection are also ensured in Slovakia by the 'integrated permit procedure' itself. These are proceedings that permit and define, in a coordinated manner, conditions for the performance of activities in existing installations and in new installations. This is done with a view to guaranteeing the effective integrated protection of components of the environment and maintaining a level of environmental contamination within the bounds of environmental quality standards.

Integrated permit procedure results in the issuance of an integrated permit. A permit is a decision authorising an operator to engage in activities in an installation or in part thereof and defining the conditions for the performance of activities in the installation. It replaces decisions and approvals issued under special regulations on the environment, the protection of public

health, agriculture, the veterinary protection of land and building permit proceedings (Section 3(1) and (2) of Act No 39/2013 on IPPC).

Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?

As specified within the GBRs, under Section 22(4) of Act No 39/2013 on IPPC, emission limits, equivalent parameters and technical measures must be based on the best available techniques.

Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?

Generally, GBRs make BAT references wherever there is a link to the obligation to operate an installation in-line with emission limits associated with BAT, or wherever set operating conditions incorporating BAT requirements are mentioned. Where specific operating conditions are set, the relevant part of the legislation includes a reference to the fact that such a condition is applied only if, applying BAT, it is impossible to meet a relevant condition (e.g. to achieve the prescribed limit value). Legislation of general application does not describe any specific best available technique. Rather, it only makes references to documents describing BAT. This automatically ensures that the relevant legislation always refers to a BAT which is relevant and current.

With a view to observing Article 21 of the Directive, BAT-related developments are taken into account in such a manner that the authorising authority (in Slovakia this is the Slovak Environmental Inspectorate) reconsiders and, where necessary, updates the conditions defined in permits, for example in response to the publication of a legally binding EU act on BAT conclusions (Section 33(1)(f) of Act No 39/2013 on IPPC).

Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?

References to Directive 2010/75/EU are presented in the lists of transposed legally binding EU acts annexed to the following Slovak legislation:

- Act of the National Council of the Slovak Republic No 39/2013 on integrated pollution prevention and control and amending certain laws (the reference to the Directive can be found in Annex 4).
- Implementing Decree of the Ministry of the Environment of the Slovak Republic No 183/2013 implementing Act No 39/2013 on integrated pollution prevention and control and amending certain laws (the reference to the Directive can be found in the annex to the Implementing Decree).
- Act of the National Council of the Slovak Republic No 137/2010 on the air, as amended (the reference to the Directive can be found in Annex 4)
- Implementing Decree of the Ministry of the Environment of the Slovak Republic No 410/2012 implementing certain provisions of the Clean Air Act (the reference to the Directive can be found in Annex 10).
- Implementing Decree of the Ministry of the Environment of the Slovak Republic No 411/2012 on the monitoring of emissions from stationary sources of air pollution and air quality in the vicinity thereof (the reference to the Directive can be found in Annex 7).

Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.

The following links were included in Slovakia's response:

- http://www.enviroportal.sk/; http://www.minzp.sk/
- http://jaspi.justice.gov.sk/jaspiw1/htm_zak/jaspiw_mini_zak_vyber_hl1.asp?clear=N
- http://www.zakonypreludi.sk/

QUESTION 6 – Developments in BAT (Article 19)

Question 6.1 – How do competent authorities follow, or are informed of, the publication of any

new or updated BAT conclusions?
The competent authorities monitor the European Commission's internet portal. However, they are quite likely to learn of plans to publish BAT conclusions beforehand because they contribute to the activities of working parties at the European Commission and the European IPPC Bureau in Seville. The head office of the Slovak Environmental Inspectorate in Bratislava has set up a BAT centre where the responsible official keeps track of BAT information and distributes it to individual inspectorates. Enviroportál, an environmental information portal serving as a gateway for information from the IPPC process collected in the IPPC information system, is another source of information. A register of BAT, BREFs and BAT conclusions is also part of the IPPC information system.
Question 6.2 – How do competent authorities make that information available to the public concerned?
The Inspectorate, as the competent body, makes this information available via Enviroportál, an environmental information portal serving as a gateway for information from the IPPC process collected in the IPPC information system. A register of BAT, BREFs and BAT conclusions is also part of the IPPC information system. The Slovak Environmental Agency, an expert organisation of the Ministry of the Environment, is in charge of operating Enviroportál. The Slovak Environmental Agency centre responsible for operating the IPPC information system located on Enviroportál also draws attention to the issuance of BAT conclusions in the news Section and on the homepage of Enviroportál. It also emails this information, with BAT conclusions attached, to relevant operators.
Question 6.3 – Links to where the information can be found
The following links were included in Slovakia's response: ▪ http://www.enviroportal.sk/environmentalne-temy/starostlivost-o-zp/ipkz-integrovana-prevencia-a-kontrola-znecistovania/informacny-system-ipkz-1; ▪ http://ipkz.enviroportal.sk/register-bat-bref.php
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
In accordance with Section 33(4) of Act No 39/2013 on IPPC[144], an operator, in order to facilitate checks on compliance with the Inspectorate's obligations relating to the reconsideration or updating of conditions defined in its permit, is required to provide the following information or to make the following possible: a) enable the Inspectorate to inspect the installation, in particular to have access thereto, to take samples and to conduct control measurements, to inspect records and other documents on the installation and to provide truthful and complete information and explanations directly related to the permit; b) notify the Inspectorate of any changes planned in the nature or activities of the installation, or of the expansion thereof, which could have an environmental impact, in particular a change in the raw materials and other substances used or in the energy used, or a change in the production process, technology or method used to handle waste; c) inform the Inspectorate without undue delay of any breach in the permit conditions; d) inform the Inspectorate without undue delay of any accident or other emergency or of any excessive instantaneous leak of emissions or substances at the installation; e) in response to a breach of permit conditions, immediately take the action necessary to restore compliance with permit requirements;

[144] Ibid.

f) remedy, within a specified time limit, deficiencies identified during an inspection of the installation, and take additional appropriate corrective action at the installation which may be imposed by the Inspectorate;

g) monitor the installation in accordance with the conditions defined in the permit;

h) keep records of data on significant operating indicators in a transparent manner facilitating inspections, and retain the recorded data for at least five years;

i) notify the Inspectorate of information based on emission monitoring results and of other required data enabling the Inspectorate to verify compliance with the permit conditions, or of the aggregate emission monitoring results in a manner facilitating a comparison with emission levels associated with the best available techniques.

The operator must let the authorising authority take photographs and make video recordings. The competent authority assesses whether the permit needs to be updated.

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

In an application for an integrated permit, an operator presents, among other things, a list of all industrial activities which it plans to carry out at the installation, indicating which of them is the 'main activity' (Section 7(1)(a) of Act No 39/2013 on IPPC)[145]. The main activity is defined in the wake of consultation between the operator and the authorising authority. Where the main activity cannot be defined clearly by reference to Annex 1 to the IPPC Act, it is determined in a preliminary consultation on the application by the authorising authority based on the data provided by the operator. Where this is impossible, the authorising authority determines the main activity by conducting an in situ inspection of the installation.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

The competent authority reconsiders and, where necessary, updates the permit conditions if:

a) there is a serious breach of permit conditions;

b) based on notification from the operator or further to its own findings, a change in the raw materials and other substances used or in the energy used, a change in the production process and technology or a change in the method used to handle waste is being prepared at the installation;

c) pollution caused by the installation exceeds an environmental quality standard and the emission limits defined in the permit need to be reviewed or new emission limits need to be added to the permit;

d) new emission limits need to be defined following an amendment to an environmental quality standard or an amendment to legislation;

e) the operational safety of the production process or the activity of technical equipment at the installation requires another technique to be used;

f) a legally binding act of the European Union on best available technique conclusions is published.

Furthermore, where necessary, the competent authority can update its decision within four years of publication of a decision on BAT conclusions, and ensure that the operator complies with the permit conditions. The reconsideration takes into account all the new or updated BAT conclusions applicable to the installation since the permit was granted or last reconsidered. Where permit reconsideration and updating identifies that a longer period than four years after the publication of a legally binding act of the European Union on BAT conclusions will be needed to introduce new best available techniques, the Inspectorate may set a longer time period (for compliance) in the permit conditions where this is justified on the basis of the criteria laid down in Sections 23 and 24 of Act No 39/2013.

When reconsidering permit conditions, the authorising authority uses any information resulting from monitoring or checks (Section 33(1), (2) and (3) of Act No 39/2013 on IPPC)[146].

[145] Ibid.
[146] Ibid.

Apart from the above conditions triggering the integrated permit reconsideration or update process, a permit is also typically reconsidered during a check at an installation. The operator may subsequently be invited to submit an application for a change to a permit if it is understood there is a need to update it. A permit may also be reconsidered when an application for a change to a permit, submitted by an operator, is assessed.
QUESTION 8 – Site closure (Article 22)
Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
Theoretically, this may concern any such activities. No analyses have been conducted in Slovakia to determine those activities, listed in Annex 1 Directive 2010/75/EU, during which dangerous substances are used.
Question 8.1 (c) - What information are operators required to include in baseline reports (Article 22(2))?
The type of information required by operators to include in their baseline reports is not specified in Slovakia's response. In general terms, a baseline report must contain the information necessary to determine the state of soil and groundwater contamination so that the operator can make a quantified comparison with the state upon definitive cessation of activities carried out at the installation to ensure that the installation does not pose any significant risk to human health or the environment due to the contamination of soil and groundwater (Section 8(4) and (6) of Act No 39/2013). If existing information about the previous use of a site and measurements taken is available, the baseline report also includes that information. The operator draws up a baseline report on the basis of the underlying documentation of a professionally competent person defined in the Geology Act (Section 8(4) and (5) of Act No 39/2013). The possibility of contamination is also taken into account in those cases where the operator is not required to prepare a baseline report.
Question 8.1 (d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?
The Ministry of the Environment recommended making full use of the Commission's guidance on the preparation of baseline reports, although no detail is provided to describe how the guidance has been used.
Question 8.2 (a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
The operator assesses the state of soil and groundwater contamination by reference to the underlying documentation of a professionally competent person defined in the Geology Act, or on the basis of a comparison of information on the state of the site prior to the start of activities at the installation and upon cessation of such activities. Information on the state of the environment at the installation site must be presented by the operator in the application for an integrated permit. Therefore, upon cessation of activities at the installation, it should be simple to compare the situation before and after the cessation of activities at the installation (Sections 7(1) and 8(5) of Act No 39/2013).
Question 8.2 (b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
There has been no case in practice deciding whether an installation has caused significant pollution in Slovakia since the Act No 39/2013 on IPPC entered into force. Information on the state of the environment at the installation site must be presented by the operator in the application for an integrated permit to enable a comparison between the situation before and after the cessation of activities at the installation (Sections 7(1) and 8(5) of Act No 39/2013). Slovakia's response does not include any further detail concerning this process.

Question 8.2 (c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
This decision is based on information provided by the operator in their baseline report (Section 8(4) and (5) of Act No 39/2013). No further detail regarding how the decision is made is provided by Slovakia in their response.
Question 8.2 (d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
A description of the measures or actions required of operators upon cessation of activities at an installation and closure of the site of an installation with a view to returning the site to its original condition is provided in the integrated permit issued for the given installation. The operator notifies the intention to cease activities at an installation. This is regarded as a change in operation and, further to the submission of an application, the Inspectorate issues an integrated permit defining which measures must be carried out by the operator and to what extent in order to return the site of the installation to its original condition. When entering conditions and measures in such a permit, the Inspectorate draws on the description of the method for the definitive cessation of the installation's activities which is part of the application for an integrated permit, or uses the baseline report containing such necessary information as a basis (Sections 7(1) and 8(4) and (5) of Act No 39/2013). An operator notifies the Inspectorate of the results of a quantified assessment of the state of water and soil contamination compared with the baseline report upon cessation of activities at an installation. The Inspectorate considers whether the results of the quantified assessment by the operator reflect the current state of water and soil contamination compared to the baseline report, and measures adopted by the operator; where necessary, the Inspectorate imposes further measures to remove contamination in accordance with Section 26(3) and (4) of Act No 39/2013 on IPPC (Section 28(1) and (2) of Act No 39/2013).
QUESTION 9 – Environmental inspections (Article 23)
Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
Environmental inspection plans have been drawn up in Slovakia on a quarterly, annual and triennial basis and contain all of the information set out in Article 23(3) IED. However, these are not published and are therefore not publicly available. Programmes for routine environmental inspections are drawn up at the beginning of the year, for each quarter of the calendar year. These provide a schedule of planned inspections by the relevant inspectorates and list the installations that have been inspected. While operators are notified of inspections in advance, the programme of inspections is not publicly available.
Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of environmental risks is based on the criteria set out in Article 23(4) IED, which is transposed by Act No 39/2013 (http://enviroportal.sk/uploads/assets/13-z039.pdf). The Slovakian response also referred to the criterion of certification under ISO 14001. However, as ISO 14001 is an integral part of EMAS, which sets out additional requirements for an environmental management system, this falls within the criteria set out in Article 23(4) IED. No further guidance is provided.
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED. The Inspectorate may also carry out 'special inspections by any means', which

appears to give a broad, general power to the Inspectorate to carry out inspections.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
An inspection report provides basic information on the installation and the operator, a list of the documents submitted, an evaluation of compliance with permit conditions, and any measures that require to be taken. It is a legislative requirement that the inspection report is sent to the operator of the installation within two months of the inspection, although in practice this is sent immediately after completion of the inspection. Within two months of the inspection, the Inspectorate will send the inspection report to the Slovak Environment Agency, which arranges for it to be published in electronic format using the IPPC information system. There have been no cases in which the reports have not been made publicly available during the reporting period.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
To ensure compliance with any 'necessary actions' identified in the inspection report, the Inspectorate can issue a decision ordering that action be taken within a specified timescale, and where the operator fails to comply, can impose a fine for non-implementation.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Slovakian response refers to the provisions of Act No 39/2013, which provide the public with the opportunity to participate in the procedures listed in Article 24(1) IED. The national legislation requires public participation early in the procedure for taking decisions as the public may become a participant of the administrative procedure by registering as parties to the proceedings or submitting an application to participate in the decision-making procedure. The Inspectorate is required to inform the public, via its website, the municipality's website, the IPPC Information system, or the Inspectorate's or municipality's noticeboard for a minimum 15-day period, of where and how to apply to be a part of the proceedings. Thereafter the public have a period of 30 days to comment on the application and request a verbal hearing in certain circumstances.
Question 10.2 – 10.3 - How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public by the Slovak Environment Agency using the IPPC information system. All relevant information is therefore made available on the internet (http://www.enviroportal.sk/environmentalne-temy/starostlivost-o-zp/ipkz-integrovana-prevencia-a-kontrola-znecistovania/informacny-system-ipkz-1)
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
In the 2012–13 reporting period, no organisation was tasked with the monitoring of developments in or the application of emerging techniques in Slovakia. Nevertheless, a procedure related to activities under the document Sequence for the Implementation of the Environmental Technologies Action Plan (ETAP), adopted by the Slovak Government on 21 December 2005, is followed in the support of environmental technologies and eco-innovations. Slovakia regularly evaluates the fulfilment of tasks laid down in this document. However, emerging BAT-related techniques are not separately delineated, defined and, hence, monitored

within the scope of activities and various types of environmental technologies, the support of which is enshrined in this document. Even so, within the scope of the support and application of environmental technologies via the ETAP, the development and application of emerging BAT-related techniques are also supported.

Slovenia

Analysis of the completeness of the report

Table A48: Completeness assessment of answers reported by Slovenia – IED

Question title	Question number(s)	Slovenia	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		**The response includes limited information on defining the main activity**
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.49.4		

Question title	Question number(s)	Slovenia	Comments
	9.5 (a) to (c)		
	9.6		
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		
Emerging techniques (Article 27)	11		

Slovenia provided an almost complete response to the questionnaire. The only gap identified was in response to question 7.2, where Slovenia indicated that the main activity of an installation is 'mostly' determined according to the activity with the greatest economic or environmental impact. However, this gap has been identified as minor and has not prevented the full analysis of the implementation of the IED in Slovenia.

Analysis of Slovenia responses

The table below contains the detailed analysis of the responses provided by Slovenia to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers provided.

Table A49: Slovenia – Response analysis table

Slovenia
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The approach described by Slovenia seem to indicate a combination of fixed criteria and expert judgement. The criteria used for deciding whether a breach of permit conditions poses an immediate danger to human health and the environment are included in the national legislation. Slovenian legislation states values described as limits, warning or alarm thresholds and other requirements and rules (e.g. prohibition of specific practices), that if omitted, constitute a breach of conditions and a human health or environmental risk. The response indicated that for detecting breaches and determining whether these have significant adverse effect, the expertise of inspectors is a key component.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
The national legislation (Article 74(1),(2) and (3) of the Environment Protection Act ZVO-1) requires that permits are issued on the basis of the requirements included in the BAT conclusions and the BREFs.
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
The Slovenian legislation states that where, in view of the prescribed requirements in

connection with the preservation or improvement of the quality of the environment at the location of the installation, stricter conditions are required for its operation than those attainable through the use of best available techniques, the ministry may also lay down additional measures and conditions in the permit. Emissions to air and water are governed by two separate decrees (. If necessary, more stringent emission limit values than those set in the Decree can be selected, in particular to prevent a significant increase in the level of a specified pollutant in surface waters or to reduce the impact of indirect discharge into ground water to an acceptable level. The response included links toward the legislation foreseeing the possibility to set more stringent limits.
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Slovenia indicated that the limit values included in the BAT conclusions have been transposed in its national legislation. Their response indicates that ELVs set in individual permits are either equivalent to, or more stringent than, those in BAT conclusions. Slovenia added that in the absence of a BAT conclusion for a specific sector, then the ELVs from the relevant BREF are used.
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Slovenia indicated that derogations have not been granted because the provision provided by article 15(4) of the IED have not yet been transposed into national legislation. The response indicated that this mechanism is expected to be transposed with the next amendment of the Environmental Protection Law which is planned to undergo public consultations and parliamentary procedure in late 2015.
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
One of the reasons provided to explain the delays in transposition of the provision are uncertainties regarding the criteria to use in such a cost benefit assessment due to a lack of experience with similar circumstances in Slovenia. As a result, Slovenia has indicated following closely the development of the IMPEL project on 'Sharing of draft proposal between Member States for implementing derogations from BAT-AELs under article 15(4) and article 15(5)'.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Considering that the derogation procedure has not been adopted in Slovenia, this question is not applicable.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
The ZVO-1 legislation foresees that, on request of the operator, the competent authority can amend a permit for the purpose of testing or using an emerging techniques. However this is possible only if the testing or the use does not entail deterioration of the environment or area of the installation. Criteria have been defined to determine the sensitivity, vulnerability or burden of the environment. The environment is then classified in classes or levels in accordance with those criteria. Temporary derogations are only allowed where they cause no deterioration in the classification of an area in an individual class or level.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining

monitoring requirements in permits (Article 16(1))?
The legislation states the monitoring requirements that the competent authorities must apply when issuing, amending or updating permits. The legislation (Article 101(5) of ZVO-1) states that when stating monitoring methods, frequency and conditions, the BAT conclusions on monitoring shall be adhered to.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
Slovenia indicated that this provision of the IED was not yet transposed in its national legislation in 2013.
Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?
Slovenia indicated that this provision of the IED was not yet transposed in its national legislation in 2013.
QUESTION 5 – General Binding Rules (Article 17)
Slovenia has not adopted any General Binding Rules for the implementation of the IED.
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The Slovenian competent authority (ARSO) follows development concerning BAT conclusions. The response indicated that ARSO's staff are members of technical working groups engaged in updating BREFs and drawing up conclusions, and they cooperate in the terminological review of BAT conclusions prior to their publication in the Official Journal. The ministry informs the competent authority when conclusions are published in the Official Journal.
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
Slovenia indicated that ARSO publishes a link to the new BAT conclusions on its website when new information is available. ARSO's website is accessible to the public.
Question 6.3 – Links to where the information can be found
Slovenia's response included a link to where the information can be found: http://okolje.arso.gov.si/ippc/vsebine/zakljucki-o-nrt
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
Slovenia indicated that the reconsideration procedure is conducted by the competent authority 'ex officio'. Operators are invited to submit the necessary data, which includes monitoring results and data enabling the installation's operation to be compared with the BAT described in BAT conclusions with the BAT-AELs. A written notice is sent to the operator on the start of the reconsideration procedure. The response included a link toward the relevant legislative provisions.
Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?
In Slovenia, the main activity of the installation is typically the activity with the greatest economic or environmental impact.
Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

The response provided by Slovenia indicated that all the reconsideration cases follow the ex officio procedure. However, the link included in the response to the relevant legislation showed that significant pollution, operational safety concerns or meeting an EQS trigger the reconsideration of the permit.
QUESTION 8 – Site closure (Article 22)
Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation
Slovenia indicated that, in 2013, the provisions of the IED concerning the baseline report were not transposed yet.
It provided information on activities which are considered to involve the use of hazardous substances which include all activities under group 1, 2, 3, 4 and 5.
Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?
Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?
Slovenia indicated that in 2013, the provision of the IED concerning the baseline report was not transposed yet.
Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?
Assessment of the soil contamination is made on the basis of the measurements of the concentrations of substances in the soil. For water, the assessment consists of a validation of the measurements results with the limit values included in the Decree on groundwater status.
Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
Slovenia considers that pollution has been caused when there is excessive environmental burden. This is a burden that exceeds emission limit values, environmental quality standards, rules of conduct or the permitted use of a natural asset.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
Slovenia considers that pollution has been caused when there is excessive environmental burden. This is a burden that exceeds emission limit values, environmental quality standards, rules of conduct or the permitted use of a natural asset.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
Legislation has been adopted on environmental damage that may be caused by excessive pollution. In Slovenia, the operator has a duty to prevent environmental damage or to take specific action in the event of causing it. The response included the article numbers which are relevant in relation to remediation and liability.
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
The Slovenian response states that an environmental inspection plan and programmes for

routine environmental inspections were only drawn up for the first time in 2014. These are in accordance with Article 156a of the Environment Protection Act, which requires the plan to contain all of the information set out in Article 23(3) IED. The 2014 plan and programme are publicly available on the Inspectorate's website as part of the Work Programme for 2014.
Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of environmental risks is based on the IMPEL Integrated Risk Assessment Method (IRAM) tool. Eight criteria are taken into consideration for the assessment: five 'impact criteria' (releases to air, releases to water, noise, risk of accidents and sensitivity of the local environment) and three 'operator performance criteria' (compliance, attitude of operator and environmental management system).
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports contain the name of the installation and operator, the location and date of the inspection, the environmental permit number, a description of the non-compliance with requirements of the environmental permit, the inspector's conclusions and an indication of any necessary follow-up action and timescales for this. The site visit report is delivered to the operator, who is given a deadline to submit comments. Thereafter, the reports are published on the Inspectorate's website. It is stated that there are no limitations on access to the reports. It is presumed therefore that any decisions on withholding certain information in accordance with Directive 2003/4/EC would be made prior to publication of the report.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
In order to ensure that any 'necessary actions' identified in the report are completed, the Inspectorate can issue a decision ordering that any non-compliance is remedied within a specified timescale, failing which, offence proceedings can be raised, leading to a fine.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Slovenian response refers to the provisions of the Environmental Protection Act, which requires the competent authority to publish a public notice, at the same time as any application and draft decision, and invites the public to participate in the procedure. While further information is not provided on the timescales for consultation of the public, the responses indicate the process provides an 'early and effective opportunity' to participate in the process.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public by the competent authority by publishing the notice inviting the public to participate in the procedure on its website and making the application and draft permit available to the public at its premises or the premises of the

municipal authority. The Slovenian response states that all relevant information is made available on the internet (http://okolje.arso.gov.si/ippc/tabela/15)
QUESTION 11 – Emerging techniques (Article 27)
Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Slovenia has not adopted any incentive to encourage the development or application of emerging techniques.

Spain

Analysis of the completeness of the report

Table A50: Completeness assessment of answers reported by Spain – IED

Question title	Question number(s)	Spain	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2	**N/A**	
	5.3	**N/A**	
	5.4	**N/A**	
	5.5	**N/A**	
	5.6	**N/A**	
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		**Q 9.1(a): Reference is made to the legislative requirements only.**
	9.2 (a) to (c)		**Q 9.2(a): Reference is made to the legislative requirements only.**
	9.3 (a) to (b)		

Question title	Question number(s)	Spain	Comments
	9.4		
	9.5 (a) to (c)		
	9.6		Reference is made to the legislative requirements only
Access to information and public participation (Article 24)	10.1		
	10.2		
	10.3		
Emerging techniques (Article 27)	11		

Spain provided an almost complete response to the questionnaire. A couple of gaps were identified related to the level of information provided to questions 9.1(a), 9.2(a) and 9.6.

Analysis of the Spain's responses

The table below contains the detailed analysis of the responses provided by the Spain to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers given.

Table A51: Spain – Response analysis table

Spain
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
Spain reported that the criteria are detailed in Article 30 of Law 16/2013, amended by Law 5/2013, which includes, inter alia, the following very serious breaches: ▪ Engaging in the activity or substantially changing the activity without the requisite integrated environmental permit, provided serious damage or deterioration has been caused to the environment or human safety or health has been put at serious risk. ▪ Failure to comply with the conditions set out in the integrated environmental permit, provided serious damage or deterioration has been caused to the environment or human safety or health has been put at serious risk. ▪ Failure to comply with obligations established by the provisional measures laid down in Article 35 of this Law. ▪ Engaging in the activity without fulfilling the obligations set out in the provisions establishing the notification and registration requirements of the Autonomous Communities, in accordance with Final Provision five, provided serious damage or deterioration has been caused to the environment or human safety or health has been put at serious risk. The operators of installations engaging in any industrial activity within the scope of Law 16/2013, amended by Law 5/2013 shall have an integrated environmental permit and fulfil the conditions set out in it. The body responsible for issuing the integrated environmental permit have to be informed immediately of any incident or accident that may affect the environment.
QUESTION 2 – Permit conditions (Article 14)

Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
According to the information reported, it is mandatory by Article 22(4) of Law 16/2002, amended by Law 5/2013 that BAT conclusions, along with any revisions and updates to the conclusions, should be the reference for setting permit conditions. The Ministry of Agriculture, Food and the Environment makes the Commission's decisions on BAT conclusions available in the BAT document section of the National Pollutant Release and Transfer Register website, PRTR-Spain, after they have been published in the Official Journal of the European Union, as one of a number of measures that allow stakeholders and the general public access to BAT conclusions documents. Links provided by Spain: ▪ http://www.boe.es/buscar/pdf/2002/BOE-A-2002-12995-consolidado.pdf ▪ http://www.prtr-es.es/documentos/documentos-mejores-tecnicas-disponibles
Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?
According to the provisions of Article 22(3) of Law 16/2002, amended by Law 5/2013, competent authorities may set stricter conditions than those achievable with BAT in the cases that an environmental quality standard, in accordance with applicable laws, requires stricter conditions than those achievable by the use of the best available techniques. Link provided by Spain to relevant policy: ▪ http://www.boe.es/buscar/pdf/2002/BOE-A-2002-12995-consolidado.pdf
QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)
Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?
Spain provided a reference to the law implementing the IED in Spain. The ELVs are set in accordance with the provisions of Article 7 of Law 16/2002, amended by Law 5/2013 and in particular paragraph 4. The competent authority shall establish ELVs that ensure that, under normal operating conditions, emissions do not exceed the levels associated with the BAT as laid down in the decisions on BAT conclusions through either of the following: (a) Setting ELVs that do not exceed emission levels associated with the BAT. Those ELVs shall be expressed for the same or shorter periods of time and under the same reference conditions as those emission levels associated with the BAT. (b) Setting emission limit values which are different from those referred to under point (a) in terms of values, periods of time and reference conditions. Where point (b) is applied, the competent authority shall, at least annually, assess the results of emission monitoring in order to ensure that emissions under normal operating conditions have not exceeded the emission levels associated with the BAT. A link for a relevant document was provided by Spain: ▪ http://www.boe.es/buscar/pdf/2002/BOE-A-2002-12995-consolidado.pdf
Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?
Referring to the law implementing the IED in Spain, the derogations are granted in accordance with Article 7 of Law 16/2002, amended by Law 5/2013 and in particular paragraph 5: By way of derogation, the competent authority may, in specific cases, set less strict emission limit values. Such a derogation may apply only where an assessment shows that the achievement of the emission levels associated with the best available techniques as described in BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to: (a) The geographical location or the local environmental conditions of the installation concerned; or

(b) The technical characteristics of the installation concerned. The competent authority shall document in an annex to the conditions of the permit the reasons for the application of the first subparagraph including the result of the assessment and the justification for the conditions imposed. The emission limit values set in accordance with the first subparagraph shall, however, not exceed the emission limit values set out in the implementing legislation of the Law[147], where applicable. The competent authorities shall in any case ensure that no significant pollution is caused and that a high level of protection of the environment as a whole is achieved and also shall re-assess the application as part of each reconsideration of the permit conditions pursuant to Article 25 of the abovementioned law. A link for the relevant law was provided by Spain (see previous question).
Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?
Spain reported that no general criteria for cost-benefit assessment have been set yet. Also it was reported that the assessment will be undertaken case-by-case and in any event will take the cross-media BREF into account. A link to the Spanish law implementing the IED (see previous question) was provided.
Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?
Spain provided a reference to question 3.2 which provided a magnitude limitation of the derogations. According to the law, the emission limit values under the derogations shall not exceed the emission limit values set out in the implementing legislation. Even though this part of the law is not very clear, it is our understanding that Spain could set for derogations minimum ELVs in implementing legislation that the ELVs in the permits could not go beyond these levels.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
Spain reported that temporary derogations are granted in accordance with the provisions of Article 7 of Law 16/2002, amended by Law 5/2013 and in particular paragraph 6. The competent authority may grant temporary derogations for the testing and use of emerging techniques for a total period of time not exceeding nine months, provided that after the period specified, either the technique is stopped or the activity achieves at least the emission levels associated with the best available techniques.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
According to the reported information, the definition of monitoring requirements are set out in the provisions of Article 10 of Royal Decree 815/2013 approving the Regulations for industrial emissions and for the implementation of Law 16/2002 of 1 July 2002 on integrated prevention and control of pollution, amended by Law 5/2013. According to this legislation, the monitoring requirements shall be based on the conclusions on monitoring as described in the BAT conclusions, and the frequency of the periodic measuring shall be determined by the competent authority in a permit for each individual installation or at sector level in the relevant rules applicable to each industrial sector.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined

[147] This part of the law is not very clear. Based on our understanding of the legislation, it seems that Spain could set out for derogations minimum ELVs in implementing law that the ELVs in the permits could not go beyond these levels.

(Article 16(2))?

Spain reported that the frequency of periodic monitoring (including monitoring of soil and groundwater) is determined in accordance with the provisions of Article 10 of Royal Decree 815/2013 approving the Regulations for industrial emissions and for the implementation of Law 16/2002 of 1 July 2002 on integrated prevention and control of pollution, amended by Law 5/2013. According to this legislation, periodic monitoring shall be carried out at least once every five years for groundwater and ten years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination. The competent authority shall submit the results of the periodic monitoring of groundwater described in the preceding subparagraph to the river basin administrations, in the case of river basins managed by central government.

Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?

According to the reported information, In addition to the provisions of Article 10(2) of Royal Decree 815/2013, the provisions of subparagraphs 3 and 4 are relevant:

'3. The competent authority shall take into account that by fulfilling the monitoring obligations arising from the Community Eco-Management and Audit Scheme (EMAS), EMAS-certified installations may demonstrate effective fulfilment of the monitoring obligations arising from these regulations and Law 16/2002 of 1 July 2002.

4. The competent authorities may require that emission limit values for intensive poultry or pig rearing installations covered by Annex 1(9)(3) of Law 16/2002 of 1 July 2002 be replaced by BAT ensuring an equivalent level of environmental protection, in accordance with the provisions of Article 22(1)(a).

The competent authority shall also take animal welfare legislation into account when determining the conditions of the integrated environmental permit and any waste management and control requirements established in the permit shall consider the practical aspects of these activities, taking into account the costs and benefits of the measures to be adopted.'

Finally Spain reported that the competent authorities are also examining ways to develop tools to ensure that the Autonomous Communities apply coordinated criteria. However, the provisions of Spanish legislation on contaminated soil are fully applicable in matters of risk appraisal (Law 22/2011, Royal Decree 9/2005, especially Annexes III to VIII, and Royal Decree 1514/2009 regulating the protection of groundwater against pollution and deterioration).

Links to the relevant legislation were also provided by Spain:

- http://www.boe.es/boe/dias/2013/10/19/pdfs/BOE-A-2013-10949.pdf
- http://www.boe.es/buscar/pdf/2011/BOE-A-2011-13046-consolidado.pdf
- http://www.boe.es/boe/dias/2005/01/18/pdfs/A01833-01843.pdf
- http://www.boe.es/boe/dias/2009/10/22/pdfs/BOE-A-2009-16772.pdf

QUESTION 5 – General Binding Rules (Article 17)

Spain reported that they do not use General Binding Rules for implementing the IED.

QUESTION 6 – Developments in BAT (Article 19)

Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?

Spain reported that according to Spanish legislation, the central government shall provide the Autonomous Communities with any information it has on best available techniques, monitoring requirements and developments in BAT and on the publication of any new or updated BAT conclusions and shall make that information available to the public concerned.

Question 6.2 – How do competent authorities make that information available to the public concerned?

According to the information in the report, and without prejudice to any measures carried out by the competent authorities in the Autonomous Communities to inform the public and other stakeholders, the Ministry informs the authorities and other stakeholders at a national level of

any information it receives on the publication of the Commission's decisions on sector-specific BAT conclusions, usually by email and by posting notifications/news on its website. The meeting of the IED/IPPC/PRTR working group that is set up is generally informed previously about the current situation and the likely adoption/approval/publication of those BAT conclusions.

Question 6.3 – Links to where the information can be found

In addition to the information provided in question 6.2, Spain reported that all the Commission's decisions on BAT conclusions published in the Official Journal of the EU are made available to the general public in the PRTR-Spain document section:

- http://www.prtr-es.es/documentos/documentos-mejores-tecnicas-disponibles

The website currently features the decisions on BAT conclusions for the following sectors:

- Decision 2013/732/EU BAT conclusions - Production of chlor-alkali;
- Decision 2013/163/EU BAT conclusions - Production of cement, lime and magnesium oxide;
- Decision 2013/84/EU BAT conclusions - Tanning of hides and skins (ES) Decision 2013/84/EU;
- Decision 2012/135/EU BAT conclusions - Iron and steel production;
- Decision 2012/134/EU BAT conclusions - Glass sector; and
- Decision 2012/119/EU Guidance for producing BREFs and BAT.

Spanish and English versions are available whenever possible.

QUESTION 7 – Reconsideration and updating of permits (Article 21)

Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?

The information requested from operators for permit reconsideration or updating is set out in Article 25 of Law 16/2002, amended by Law 5/2013, in particular paragraph 1. The information, where applicable, shall include the results of emission monitoring and other data that enables a comparison of the operation of the installation with the best available techniques described in the applicable BAT conclusions and with the emission levels associated with the best available techniques. When reconsidering permit conditions, the competent authority shall use any information resulting from monitoring or inspections. The application for an integrated environmental permit shall contain at least the following documentation, without prejudice to any requirements established by the Autonomous Communities:

- Description of the project including at least the following:
  - Detailed description and scope of the activity and installations, production processes and product type.
  - Documentation submitted by the applicant to the competent public authority to monitor activities that have an impact on safety, human health or the environment in accordance with the applicable regulations.
  - Environmental conditions of the site of the installation and any foreseeable impacts, including any that may arise upon definitive cessation of activities.
  - Natural resources, raw and auxiliary materials, substances, water and energy used in or generated by the installation.
  - Sources of emissions from the installation.
  - Nature and quantity of foreseeable emissions from the installation into the air, water and soil as well as identification of significant effects of the emissions on the environment and, where applicable, nature and quantity of waste to be generated.
  - Proposed technology and other techniques for preventing and avoiding or, where this is not possible, reducing emissions from the installation, indicating which are considered the best available techniques in accordance with the BAT conclusions.
  - Measures relating to the application of the priorities of the waste hierarchy set out in Article 4(1)(b) for waste generated by the installation.

- Measures planned to monitor emissions into the environment.
- Further measures planned to comply with the principles set out in Article 4.
- The main alternatives to the proposed technology, techniques and measures studied by the applicant in outline, if applicable.
- The last validated environmental statement and any updates (if the installation participates in a Community eco-management and audit scheme).

- Planning report by the Council, certifying the compatibility of the project with urban planning
- The documentation authorising discharges into continental waters or the sea, if applicable.
- Identification of the data the applicant considers to be confidential.
- Any other information and documentation certifying compliance with the requirements of applicable legislation.
- Where the activity involves the use, production or release of relevant hazardous substances and having regard to the possibility of soil and groundwater contamination at the site of the installation, a baseline report shall be required before starting operation of the installation or before the permit is updated. This report shall contain the information necessary to determine the state of soil and groundwater so as to make a quantitative comparison with the state upon definitive cessation of activities.

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

Spain reported that the 'main activity' is defined as the main contaminating activity carried out in the installation in accordance with the categories listed in Annex 1 of Law 16/2002, amended by Law 5/2013., IPPC/IED installations are those which carry out any of the industrial activities listed in Annex 1 of Law 16/2002, amended by Law 5/2013, regardless of whether they are their main industrial or economic activities and they need an integrated environmental permit in order to operate.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

Spain indicated that the reconsideration or update process is triggered in accordance with Article 25(4) of Law 16/2002, amended by Law 5/2013, which states amongst others that a permit shall be reconsidered when:

- The pollution caused by the installation makes it necessary to revise the emission limit values imposed or new values need to be included in the permit.
- The operational safety of the process or activity requires other techniques to be used.
- If so required by the sector-specific legislation applicable to the installation or where it is necessary to comply with a new or revised environmental quality standard in accordance with Article 22(3).

Furthermore, Spain reported that Article 22(3) states that where applicable laws state that an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures must be included in the integrated environmental permit, without prejudice to other measures which may be taken to comply with environmental quality standards.

QUESTION 8 – Site closure (Article 22)

Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

According to the reported information, Spain decides which activities require a baseline report in accordance with the provisions of Article 12(1)(f) of Law 16/2002, amended by Law 5/2013. Article 12(1)(f) states that where the activity involves the use, production or release of relevant

hazardous substances and having regard to the possibility of soil and groundwater contamination at the site of the installation, a baseline report shall be required before starting operation of the installation or before the permit is updated.

Where information produced pursuant to other national, regional or Union law fulfils the requirements of abovementioned paragraph that information may be included in, or attached to, the submitted baseline report.

The Annex I activities reported by Spain reported as having typically been found to involve the 'use, production or release of relevant hazardous substances' include Activities 1.1 – 1.4, 2.1 – 2.6, 3,1, 3.3 – 3.5, 4.1 – 4.6, 5.1 – 5.6, 6.1 – 6.5, 6.7 – 6.8, 6.10 – 6.11.

Additionally Spain provided links to relevant law that is applicable in Spain were provided:

- Law 16/2002, amended by Law 5/2013 (see previous questions for link).
- Law 22/2011 on waste and contaminated soils (https://www.boe.com/buscar/pdf/2011/BOE-A-2011-13046-consolidado.pdf).
- Royal Decree 9/2005 establishing the list of potentially soil-contaminating activities and the criteria and standards for the declaration of contaminated soils (http://www.boe.es/boe/dias/2005/01/18/pdfs/A01833-01843.pdf).
- Royal Decree 1514/2009 of 2 October 2009 regulating the protection of groundwater against pollution and deterioration (http://www.boe.es/boe/dias/2009/10/22/pdfs/BOE-A-2009-16772.pdf).

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

Spain reported that the baseline report shall contain the information necessary to determine the state of soil and groundwater so as to make a quantitative comparison with the state upon definitive cessation of activities and at least the following information:

1. Information on the present use and, where available, on past uses of the site.

2. Where available, risk appraisals and existing legally regulated reports on contaminated soil relative to soil and groundwater measurements that reflect the state at the time the report is drawn up or, alternatively, new soil and groundwater measurements having regard to the possibility of soil and groundwater contamination by those hazardous substances to be used, produced or released by the installation concerned.

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

Spain reported that they have no experience of the application of the Commission's Guidance as it was not available during the reporting period.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

Spain reported that the state of soil and groundwater contamination will be assessed according to the provisions of Article 22(a)(2) of Law 16/2002, amended by Law 5/2013. The reported Article transposes Article 22(3) into the Spanish legislation.

Furthermore Spain provided reference and links to the relevant Spanish legislation regarding contaminated soil and protection of groundwater without providing further information in the report:

- Law 26/2007 (http://www.boe.es/boe/dias/2007/10/24/pdfs/A43229-43250.pdf).
- Law 16/2002, amended by Law 5/2013 relating to contaminated soil.
- Law 22/2011 on waste and contaminated soils (https: //www.boe.com/buscar/pdf/2011/BOE-A-2011-13046-consolidado.pdf)Royal Decree 9/2005 establishing the list of potentially soil-contaminating activities and the criteria and standards for the declaration of contaminated soils (http://www.boe.es/boe/dias/2005/01/18/pdfs/A01833-01843.pdf). The degree sets the rules for establishing soil and groundwater contamination including specific reference concentration levels in order to assess if certain pollutants can cause

'significant pollution of soil or groundwater' or 'poses a significant risk to human health or the environment'.

- Royal Decree 1514/2009 of 2 October 2009 regulating the protection of groundwater against pollution and deterioration (http://www.boe.es/boe/dias/2009/10/22/pdfs/BOE-A-2009-16772.pdf).

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

Same reply as in question 8.2.a was provided by Spain (see summary above).

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

Same reply as in question 8.2.a was provided by Spain (see summary above).

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

The state of soil and groundwater contamination will be assessed according to the provisions of Article 22(a)(2) and 3 of Law 16/2002, amended by Law 5/2013 which transposes Article 22(3) and (4) of the IED .

From the links provided in question 8.2.a, it seems that the Royal Decree 9/2005 includes provisions about soil decontamination and the principals that should be followed. More specifically:

- The declaration of soil as contaminated will force the completion of the necessary measures in the terms and deadlines dictated by the competent authorities;
- The scope and implementation of the action will be such as to ensure that the remaining contamination is within acceptable risk levels for the specific land use;
- The recovery of the contaminated soil shall be made by applying the best available techniques depending on the characteristics of each case;
- The recovery actions must ensure that permanent solutions take place, prioritizing, on the extent possible, in situ treatment techniques that avoid generation, transfer and disposal;
- Whenever possible, the recovery should focus on eliminating the pollution source and reduce the concentration of pollutants in the soil. If that is not possible due to technical, economic or environmental reasons, then solutions designed to reduce the exposure can be accepted, provided that they include measure for the confinement or containment of the affected soil.

QUESTION 9 – Environmental inspections (Article 23)

Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?

The Spanish response states that the Regional Governments and Autonomous Communities are responsible for drawing up environmental inspection plans from 2014 onwards in accordance with the requirements of Royal Decree 815/2013, which requires the plan to contain all of the information set out in Article 23(3) IED. Information on the environmental inspection plans is publicly available on the websites of the Environment Ministries of the Regional Governments (for example, for Andalusia: http://www.juntadeandalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnextoid=a1cae06a0d337310VgnVCM2000000624e50aRCRD&vgnextchannel=a44f887b35427310VgnVCM2000000624e50aRCRD&lr=lang_es), although the current links are to the latest plans for 2015.

Based on the inspection plans, the Regional Governments and Autonomous Communities are also responsible for drawing up programmes for environmental inspections, which set out the frequency of site visits. Information on the programmes for environmental inspections (sectoral

plans) is available on the websites of the Environment Ministries of the Regional Governments (for example, for Andalusia: http://www.juntadeandalucia.es/medioambiente/site/portalweb/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnextoid=3e7f8f156298e310VgnVCM1000001325e50aRCRD&vgnextchannel=a44f887b35427310VgnVCM2000000624e50aRCRD&lr=lang_es#apartado3ea08f156298e310VgnVCM1000001325e50a____).

Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

The systematic appraisal of environmental risks is based on the criteria set out in Article 23(4) IED, which is transposed by Royal Decree 815/2013 (a link is provided to the national legislation). The Spanish response does not refer to any further relevant guidance.

Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED. In addition, the Spanish response refers to 'other' circumstances but does not specify what these are.

Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?

Site visit reports contain a number of sections, covering general information, details of the inspection (date, type, scope and any observations), a summary of compliance with the permit conditions, and conclusions of the inspection. Annexes to the report also set out a description of the process, details of compliance with the permit conditions, criteria for grading any non-compliances and the legal basis for the inspection).

On completion of the site visit, the operator is asked to sign the inspection log, have the opportunity to enter any comments, and will be provided with a copy of this. Thereafter, the competent authority will prepare a site visit report which will be notified to the operator within 2 months of the inspection, and made publicly available, including by electronic media, within 4 months of the inspection. Any confidential or commercially sensitive information will be withheld in accordance with Law 27/2006. No information is available for the reporting period on cases in which reports have not been made publicly available under Directive 2003/4/EC.

Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?

Where further measures require to be taken following an inspection, the competent authority is to ensure that the operator takes all necessary actions, and may take enforcement proceedings where the operator does not comply.

QUESTION 10 – Access to information and public participation (Article 24)

Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?

The Spanish response refers to the provisions of Law 16/2002, as amended, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. Public authorities are to ensure that participation occurs from the first stages of each procedure. The competent authority of each Autonomous Community is therefore to inform the public of certain information early in the procedure, before taking a decision, or at the latest as soon as the information can reasonably be provided. The authorities should provide:

- Details of the documentation relating to the application for an environmental permit or

the amendment; ▪ Details of the authorities responsible for taking the decision and from which information can be obtained; ▪ Details of the authorities to which comments or questions can be submitted; ▪ The deadlines for transmitting comments or questions; ▪ The arrangements for public participation and consultation. The public concerned are entitled to express comments and opinions to the competent authority before a decision is taken and the results of the consultations must be taken into due account by the competent authority in the taking of a decision. Reasonable time-frames are to be provided for the public concerned to prepare and participate effectively in the environmental decision-making process.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is made available to the public on the websites of the competent authority, in the relevant official gazettes and on the internet. All relevant information is made available on the internet (for example, for Andalusia: http://www.juntadeandalucia.es/medioambiente/site/portalweb/menuitem.220de8226575045b25f09a105510e1ca/?vgnextoid=18d0e9762819d310VgnVCM2000000624e50aRCRD).
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Spain reported that according to Article 3 of Royal Decree 815/2013, public authorities, shall encourage the development and application of emerging techniques, in particular for those emerging techniques identified in best available techniques (BAT) reference documents. No further information was provided about specific actions.

Sweden

Analysis of the completeness of the report

Table A52: Completeness assessment of answers reported by Sweden – IED

Question title	Question number(s)	Sweden	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.1		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.4		
	9.5 (a) to (c)		

Question title	Question number(s)	Sweden	Comments
	9.6		
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

Sweden submitted a complete answer to the IED questionnaire.

Analysis of Sweden's response

The table below contains the detailed analysis of the responses provided by Sweden to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers provided.

Table A53: Sweden – Response analysis table

SWEDEN
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The assessment to decide whether or not there has been a breach is taken on a case-by-case basis. The process for determining whether or not there has been a breach has been described in detail by Sweden. Sweden considers that there is no difference between the expression "significant adverse effect upon the environment" in IED, and "allvarlig skada på miljön" [serious damage to the environment] in its national Environmental Code. No amendment to Swedish law was therefore necessary to implement this provision of the IED. In accordance with chapter 2, section 3 of the Environmental Code, damage or detriment to human health or the environment must be forestalled, prevented or counteracted. Detriment to human health is defined in chapter 9, section 3 of the Environmental Code as any disturbance that is liable to have adverse effects on health in medical or hygienic terms which are not minor or temporary. The supervisory authority should normally have no difficulty establishing what an immediate danger for human health entails. Damage to the environment not only means an impact due to an emission, but also impoverishment of valuable natural and cultural environments or biological diversity. Sweden added that the competent authority should have no difficulty deciding whether the damage to the environment threatens to immediately become significant.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?
The use of the BAT conclusions as a reference in the establishment of permit conditions is

included in chapter 1, section 13 of the industriutsläppsförordningen (2013:250), IUF [Industrial Emissions Ordinance][148] which states that the appraisal authority, when appraising permit conditions, must use the following as a reference for its assessment:

1. the emission values and the descriptions of other safety precautions existing in the conclusions on the best available techniques that are set out the legislation; and
2. the descriptions of safety precautions in a BAT reference document that, in accordance with article 13(7) of Directive 2010/75/EU, was adopted by the European Commission prior to 7 January 2011, if
   a) the descriptions relate to something other than the emission values, and
   b) the BAT reference document has not been replaced with the conclusions on best available techniques.

The preamble to the IUF Ordinance (Fm 2013:1 p.31)[149] specifies the reasons for the requirements established and guidance on how the requirements must be implemented.

The IUF and the preamble to the Ordinance are generally considered to be two of the most important sources for obtaining information on how the IED has been implemented in Sweden.

In connection with the Ordinance and the preamble to the Ordinance, Naturvårdsverket [the Swedish Environmental Protection Agency] has published guidance for operators, competent authorities and the general public with regard to the implementation of the IED in Sweden[150]. Within the guidance document one fact sheet (8663) outline how the requirement to use the BAT conclusions as a reference in appraisals must be applied.

Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?

One fundamental requirement contained in chapter 2 of the Environmental Code is that the operators must use the Bästa Möjliga Teknik, BMT [Best Possible Techniques], as long as such is not unreasonable. Sweden considers that the application of the concept of BMT in the Environmental Code is often more far-reaching than the requirement to use BAT. In addition, the requirement to use the BAT conclusions has been transposed to Swedish law by means of general binding regulations.

During the appraisal of an activity, the appraising authority can and must therefore adopt more stringent conditions than those set out in the BAT conclusions if such more stringent requirements derive from the application of BMT. This guarantees that the earlier statutory level of environmental protection is not reduced in Sweden upon the implementation of the IED.

The response from Sweden included a link toward a guidance describing the relationship between BAT and BMT.

QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

The emission values in the BAT conclusions (set out in chapter 2) shall apply as limit values for emissions from activities involving industrial emissions under normal operating circumstances.

In Sweden, following the publication of a BAT conclusion, the BAT conclusions' emission values (BAT-AELs) will be general binding emission limit values in normal operation for the sector in question. These general emission limit values therefore apply in addition to the

[148] http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/_sfs-2013-250

[149] http://rkrattsdb.gov.se/FORdoc/13/130001.PDF

[150] http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-8663-3.pdf

conditions set out in an applicable permit.

However, an operator can apply for "different emission limit values" in accordance with Article 15(3)(b) of the IED or for a "derogation from paragraph 3," in accordance with Article 15(4).

Further guidance on how the emission values associated with BAT will apply as emission limit values are set out in the Swedish Environmental Protection Agency's fact sheet, a link to which was included in Sweden's response[151].

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

The procedure for granting derogations is set out in chapter 1, section 16 of the Industrial Emissions Ordinance (2013:250), IUF. Derogations are applicable taking into account the geographical location, local environmental circumstances and specific technical characteristics. The Swedish Environmental Protection Agency fact sheet provides more information relating to exceptions and derogations in more detail and a link was included in the Swedish response[152].

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

The preamble to the IUF (Fm 2013:1 p. 38-39)[153] discusses how this cost-benefit analysis should be carried out. Sweden indicated that the assessment is to verify the applicability of the derogation. "The rules [...] shall be applicable where compliance cannot be deemed unreasonable. Particular importance shall be attached in this connection to the benefits of protective measures and other precautions in relation to their cost."

The current section 16 of the IUF specifies that only one of three reasons may form a basis for a derogation: where operations are carried on geographically, the local environmental circumstances, or the technical properties of the facility.

Sweden noted that the European Commission, in accordance with Article 15(4) 5th paragraph IED, may clarify the criteria to be taken into consideration in the application of the derogation provision.

Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

The provisions contained in chapter 1, section 17 IUF mean that any derogation granted ceases to apply when a new conclusion on BAT for the sector in question enters into force, i.e. four years after its publication. A derogation will then apply for eight years so that it matches the planned frequency for revision of the BAT conclusions every eight years.

In accordance with chapter 1, section 18, a derogation can be granted for a shorter period than that contemplated in section 17. In accordance with the preamble to the IUF (Fm 2013:1 p. 40-41)[154], a shorter derogation period can be used, for example, if the operator needs to adopt certain changes for which a permit is required in order to adapt its operations to the BAT-AEL values but there is no time to complete the permit process within the four-year period.

Reference to the relevance guidance is included in the Swedish response[155].

Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?

[151] http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-8663-3.pdf
[152] http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-8663-3.pdf
[153] http://rkrattsdb.gov.se/FORdoc/13/130001.PDF
[154] http://rkrattsdb.gov.se/FORdoc/13/130001.PDF
[155] http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-8663-3.pdf

Sweden indicated that temporary derogation can be granted pursuant to chapter 1, section 18 IUF. The response from Sweden includes a reference to the preamble to the Ordinance (Fm 2013:1 p. 40-41)[156] to paragraph 22 of the preamble to the IED and the reasons referred to therein for establishing a derogation to adopt BAT for a period longer than four years from the publication of the BAT conclusions.

Sweden highlights that no specific reference to Article 15(5) IED is made in paragraph 22 of the preamble and neither is any reference made to the nine-month period referred to in Article 15(5). It is unclear whether this specific provision of the IED has been transposed in Swedish national legislation[157].

QUESTION 4 – Monitoring requirements (Article 16)

Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?

Monitoring requirements are established in chapter 1, sections 8, 10 and 13 of the Industrial Emissions Ordinance (2013:250), IUF (see above in sections 2.1 and 3.1). In accordance with section 13, the BAT conclusions are used as a reference in permit appraisal of an activity giving rise to industrial emissions. This also relates to what is specified regarding controls.

Sweden added that it has become the custom to deal with only the most important matters for control in the permit process, e.g. that the frameworks for control of the emission limit values are stated in the conditions. The other control matters are dealt with by the supervisory authority, including in the control programme, and in the operators' own controls. In this way the BAT conclusions apply as general regulations.

Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?

The requirements of Article 16(2) IED have been transposed to Swedish law by chapter 1, sections 21 and 22 of the Industrial Emissions Ordinance (2013:250), IUF.

Section 22 states that controls must be carried out for the first time no later than four years after the BAT conclusions for the main IED activities at the facility have been published. Sweden added that this is because the requirements relating to the BAT conclusions are implemented in Sweden through legally-binding regulations and it is considered that there will be a limited number of reassessments due to IED.

The starting point for the regular controls should be the same with the Swedish system as with a system where the conclusions are made legally binding through permit appraisals. Thereafter, the controls will be carried out at least once every five years on groundwater and at least once every ten years on soil. Under certain conditions, specified in section 22, the controls may take place less often or may even be completely removed[158].

Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?

Sweden referred to Chapter 1, section 22, second paragraph of the UIF which indicates that "the controls may take place more seldom if a systematic assessment of the risk of pollution in accordance with section 6, first paragraph of the Operator Self-monitoring Ordinance (1998:901) shows that controls are not needed or that controls can be carried out at other intervals."

The article goes on to state that the operator must continuously and systematically investigate and assess the risks associated with the activities from a health and

[156] http://rkrattsdb.gov.se/FORdoc/13/130001.PDF
[157] The different approach taken compared to the Directive is likely to be a result of a political matter (as noted in relation to Article 27 on emerging techniques)
[158] http://rkrattsdb.gov.se/FORdoc/13/130001.PDF

environmental point of view. The results of investigations and assessments must be documented[159].

QUESTION 5 – General Binding Rules (Article 17)

Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?

GBRs are used to implement Directive 2010/75/EU in Sweden.

Sweden has an established system of environmental provisions that are contained in the central environmental legislation consisting of the Environmental Code and ordinances adopted pursuant to it.

- Chapter 2 of the Environmental Code contains so-called rules for general consideration that impose requirements on Bästa Möjliga Teknik (BMT) [Best Possible Techniques] in professional activities.
- Chapter 9 governs environmentally hazardous activities by imposing a requirement for a permit or notification.
- Overall, the Environmental Code contains 32 chapters of environmental provisions that together make up an integrated, fully operational system.

Sweden has chosen to mostly implement the IED with a range of ordinances that contain General Binding Rules. The ordinances supplement the existing environmental provisions if they cannot already be considered to derive from the Swedish provisions. The following ordinances have been added during the last year to implement the IED.

- The Industrial Emissions Ordinance (SFS [Svensk författningssamling – Swedish Code of Statutes] 2013:250), IUF, which implements parts of chapters I and II of the IED. General binding rules exist for the implementation of Article 15(3)(a).
- Miljöprövningsförordningen (SFS 2013:251), MPF [the Environmental Inspection Ordinance], which implements Article 4(1).
- Förordningen (SFS 2013:252) om stora förbränningsanläggningar, FSF [the Ordinance on large combustion facilities], which implements Chapter III.
- Förordningen (SFS 2013:253) om förbränning av avfall, FFA, [the Ordinance on combustion of waste], which implements Chapter IV.
- Förordning (SFS 2013:254) om användning av organiska lösningsmedel, VOC-F [the Ordinance on the use of organic solvents], which implements Chapter V.
- Förordningen (SFS 2013:255) om produktion av titandioxid [the Ordinance on the production of titanium dioxide], which implements Chapter VI.

Amendments have also been made to the Environmental Code and existing environmental ordinances.

The General Binding Rules apply to all activities listed in Annex I to the IED (see the definition in chapter 1, section 2 IUF) and also to the activities covered by the requirements contained in the other chapters of the IED, and all pollutants under Annex II to Directive 2010/75/EU.

Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?

GBRs do not replace the obligatory environmental assessment in the case of a new installation or substantial change to an IED activity. The GBRs are minimum requirements that must always be met. Sweden added that the adjustment that the competent authority must always make against the rules for consideration contained in chapter 2 of the Environmental Code can lead to more stringent, but not more lenient requirements.

Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?

159 http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Forordning-1998901-om-verks_sfs-1998-901/

Chapter 2 of the Industrial Emissions Ordinance (2013:250), IUF, contains references to all BAT conclusions with emission limit values (BAT-AELs) that have been published.

Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?

Each time new BAT conclusions for a sector are published, the chapter is updated and completed with the new conclusions. The conclusions must be observed no later than four years after publication, as stated in chapter 1, sections 8 and 10 IUF. During the four year period after the publication of the BAT conclusions for the main activity, the operator must submit to the competent authority a description of how the activity conforms to the BAT conclusions both with and without emission values. Furthermore, a report must be submitted each year on how the activity complies with the BAT-AELs. On the occasion of reconsidering and updating permits, the operator must also describe how the activities conform to the BAT conclusions both with and without emission values. The competent authorities in charge of permitting and inspection must carry out an appraisal of whether the activity fulfils the requirements of the IED.

Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication' of General Binding Rules (Article 17(4))?

When the GBRs are updated to reflect new development in BAT conclusions, a reference is made at the same time to the European Commission's implementation decision for the sector in question. Sweden's response included an example of when the BAT conclusions for iron and steel manufacture were published. The updated GBRs included the following wording:

"Section 4 of the European Commission implementation decision 2012/135/EU of 28 February 2012 on establishment of BAT conclusions regarding iron and steel manufacture, in accordance with Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions, was published in the Official Journal of the European Union on 8 March 2012."

Similarly, all ordinances whose reference was provided by Sweden as part of the questionnaire include a footnote on the first page containing a reference to Directive 2010/75/EU.

Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.

The response submitted by Sweden included the following links to GBRs:

- The Industrial Emissions Ordinance: http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/_sfs-2013-250
- The Ordinance (2013:252) on large combustion facilities: http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/_sfs-2013-252
- Förordningen (2013:253) om förbränning av avfall [the Ordinance on combustion of waste]: http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/_sfs-2013-253
- The Ordinance (2013:254) on use of organic solvents: http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/_sfs-2013-254
- The Ordinance (2013:255) on production of titanium dioxide: http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/_sfs-2013-255

QUESTION 6 – Developments in BAT (Article 19)

Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?

When the BAT conclusions have been adopted, the competent authority (i.e. the Swedish Environmental Protection Agency or, in matters relating to livestock-owning the Swedish

Board of Agriculture), informs the relevant supervisory authorities. In turn, the supervisory authority immediately informs the operators affected by the conclusions. This information is provided by means of a mailing targeted at those affected by the conclusions.

In addition, the Swedish Environmental Protection Agency (or the Swedish Board of Agriculture) must make available on its website:

- judgments and decisions that mean that a permit has been granted for an activity involving industrial emissions or that such a permit has been reassessed or that permit conditions have been changed in accordance;
- derogations granted; and
- information on the measures adopted by the operator.

Question 6.2 – How do competent authorities make that information available to the public concerned?

Competent authorities and the general public can keep themselves informed of the contents of new and updated BAT conclusions on the Swedish Environmental Protection Agency website[160]. The Swedish Environmental Protection Agency has also provided guidance and will provide guidance for competent authorities, both verbally and in writing, on how the more important new or updated BAT conclusions should be implemented in practice.

Question 6.3 – Links to where the information can be found

The following link was included in the Swedish response:

http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledningar/Industriutslappsdirektivet--IED/BAT-slutsatser-for-industriutslapp/

QUESTION 7 – Reconsideration and updating of permits (Article 21)

Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?

As stated above, Sweden has chosen to introduce general binding rules that mean that the operators must fulfil the requirements deriving from the IED within four years from the publication of new or updated BAT conclusions. These requirements therefore begin to apply automatically unless the operator has applied for and received other, at least equivalent, emission limit values in accordance with Article 15(3)(b) or less stringent emission limit values in accordance with Article 15(4).

In accordance with the Swedish Environmental Protection Agency Regulations (NFS 2006:9) on environmental reports[161], an IED operator must provide information in the annual environmental report on how its activity conforms to applicable BAT conclusions. If it is considered that the activities do not yet comply with a conclusion, a report must also be included on what measures are planned to comply with it.

If a permit appraisal becomes necessary, for example because the activities must be changed in order for them to meet the requirements under the BAT conclusions, the operator must submit an environmental impact assessment at the same time as the application in accordance with Chapter 6 of the Environmental Code and the Ordinance (1998:905) on environmental impact assessments[162]. These provisions are based, inter alia, on the EIA Directive.

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

160 http://www.naturvardsverket.se/Stod-i-miljoarbetet/Vagledningar/Industriutslappsdirektivet--IED/BAT-slutsatser-for-industriutslapp/

161 http://www.naturvardsverket.se/Documents/foreskrifter/nfs2006/nfs-2006-09-k2014-01.pdf

162 http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/_sfs-1998-905

Chapter 1, section 2, first paragraph of the Industrial Emissions Ordinance defines all activities listed in Annex 1 to the IED as activities involving industrial emissions. "Main activity" is defined as the main activity involving industrial emissions carried on at a facility.

Furthermore, Sweden added that "the main activity" in this context need not be an activity that is normally considered to be the most extensive at a facility. For example, a relatively small-scale wood impregnation activity can also be carried out at a large sawmill. The sawmill is not covered by the Industrial Emissions Directive but the wood impregnation is covered by it. If the wood impregnation activity is the only activity involving industrial emissions carried out at the sawmill, that is the "main activity" within the meaning of the Ordinance, not the sawmill.

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

In accordance with chapter 24, sections 5 and 7 of the Environmental Code[163] a competent authority can ask the permit authority to alter the permit conditions:

- where the activity is responsible to a significant extent for an infringement of an environmental quality standard;
- if the activity causes any significant damage that was not anticipated when the permit was granted; and
- in order to improve the safety of a facility.

The provisions can be updated, inter alia, if the risks to human health and to the environment have increased, for example because the quantities of pollutants from other sources have increased or because the effect of the pollutants has become more severe due to synergism between different pollutants. The surrounding environment may also have become more sensitive.

QUESTION 8 – Site closure (Article 22)

Questions 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

All Annex I activities to the IED are typically found to involve the use, production or release of relevant hazardous substances and thus require a baseline report.

Sweden added that operators are required to produce a baseline report (referred to by the Member State as a status report) unless the risks of pollution damage are small. Such a report must be prepared when a permit is applied for, and no later than four years after the BAT conclusions for the main activity are published.

In the preamble to the Ordinance (Fm 2013:1 p. 45-46) for chapter 1, section 23 of the IUF, livestock-owning activities are cited as an example of consideration of risk. It is stated that in this sector many hazardous substances are used in small or extremely small quantities and therefore the risk of pollution (of soil and groundwater) is limited. An exemption from the requirement for a status report could therefore apply to these activities.

The Swedish Environmental Protection Agency has published draft guidance for the preparation of status reports[164] which states that "if an activity involves a chemical product in liquid form, there is nevertheless always a risk that an accident, for example, could cause pollution. In the Swedish Environmental Protection Agency's view, a status report should be prepared as soon as it is considered that such a risk exists". Furthermore, it is stated that it is not "excluded that an activity involving industrial emissions that, on one occasion, has been judged not to give rise to a need for the preparation of a status report, may be judged in a

[163] http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/_sfs-1998-808

[164] http://www.naturvardsverket.se/upload/stod-i-miljoarbetet/vagledning/industriutslappsdirektivet/vagledning-om-statusrapport-ied-utkast-2013-10-06.pdf

different way on a later occasion. This may be the case, for example, if the activity undergoes changes that mean that hazardous substances will be included in a process in future. In the event of such planned changes, the need to prepare a status report must be reviewed."

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

The Swedish Environmental Protection Agency's draft guidance provides information on what a status report must contain and how it must be produced. The response from Sweden included a link to the relevant guidance document[165].

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

The Swedish Environmental Protection Agency's draft guidance is based on the Commission's draft guidance. The Swedish draft may be changed somewhat, among other reasons depending on the formulation of the Commission's guidance when it is finally published.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

In accordance with chapter 10, section 5a of the Environmental Code, operators who have recently carried out activities that are subject to a status report must, when the activities have ceased, restore the area where the activities have been carried out to the state it was in according to the status report if:

- the activity caused significant pollution to soil or groundwater in the area; and
- measures for restoration are technically possible.

The Swedish Environmental Protection Agency's draft guidance on status reports stresses the importance of carefully documenting in the status report how it was produced, so that a quantified comparison can be carried out at the time of shut-down.

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?

Sweden has adopted legislation regarding the obligation to adopt measures when an area is verified as polluted (e.g. chapter 10 of the Environmental Code and the ordinances on areas of environmental risk (1998:930), serious environmental damage (2007:667) and remedy of pollution damage and State subsidies for such remedy (2004:100)).

Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?

In Sweden, a systematic procedure is adopted in the work of investigating the scope of pollution. The Swedish Environmental Protection Agency has developed a two-stage method entitled MIFO. (Metodik för inventering av förorenade områden [Method for carrying out inventories of polluted areas].

At MIFO stage 1, a theoretical survey of the pollution situation in an area is carried out using record studies and inspections.

At MIFO stage 2, a simpler technical environmental investigation is carried out to provide an overall picture of the pollution situation.

Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?

On the basis of the theoretical information, a technical environmental investigation is carried out to clarify the actual pollution situation. In order to obtain sufficiently reliable results, it is likely that a more extensive investigation than a MIFO stage 2 investigation will often need to

165 http://www.naturvardsverket.se/upload/stod-i-miljoarbetet/vagledning/industriutslappsdirektivet/vagledning-om-statusrapport-ied-utkast-2013-10-06.pdf

be carried out. The Swedish Environmental Protection Agency has published a large number of guidelines that describe how to design and carry out investigations in order to obtain representative results. All guidance is published on the Swedish Environmental Protection Agency's website and is available for download.
QUESTION 9 – Environmental inspections (Article 23)
Questions 9.1 (a) to 9.2 (c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
In Sweden, the Environment Code requires each operational supervisory authority to draw up an annual environmental inspection plan. There are therefore over 300 environmental supervision plans at national, regional and local level, which set out the inspections planned during the year and the sites to be inspected. The environmental inspection plans appear to contain all of the information set out in Article 23(3) IED. Some plans are publicly available on the website of the supervisory authority[166]. Where not available on the internet, these can be accessed upon request at the offices of the relevant authorities. Programmes for routine environmental inspections are contained in the environmental supervision plans described above and are therefore either available on the internet, or upon request, at the offices of the relevant authorities.
Questions 9.3 to 9.3 (b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?
The systematic appraisal of the environmental risks of installations is carried out in accordance with the Swedish EPA's "Manual (2001:4) Operational Supervision". This manual is based on the criteria set out in Article 23(4) IED and takes into account multiple operating factors, including the size and nature of the activity and its emissions as well as the complexity, general condition and age of the facilities. It also factors in the operators compliance, the scope and quality of the operators self-monitoring, the existence of an environmental management system, local and regional conditions and environmental problems, and any changes in owner. Installations with a significant risk must be inspected at least annually, and otherwise installations are inspected every 3 years. The EPA's guidance is available at the following link[167].
Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?
Non-routine environmental inspections are carried out in each of the circumstances set out in Article 23(5) IED.
Question 9.5 – What information do the site visit reports typically contain? (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?
Site visit reports normally include details of the place, date and those present, the reason for the visit, a brief description of the activity, the conditions, regulations with which the activity must comply, the matters discussed, any deficiencies noted, the advice and information

[166] For example see: http://www.miljoskaraborg.se/globalassets/dokument/organisation/direktion-och-namnd-2011-o-framat/officiell_tillsynsplan_milojobalken_2014.pdf

[167] http://www.naturvardsverket.se/Documents/publikationer/91-620-0114-0.pdf?pid=2551

given, an assessment and agreement on further action required and when this is to be completed, and follow-up actions. The site visit report is sent to the operator within 2 months of the inspection, and is publicly available at the offices of the supervisory authority, except for any confidential information in accordance with Directive 2003/4/EC.
Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?
Where further measures are to be taken, the operator is required to complete these within the specified timescales and report to the supervisory authority, failing which the supervisory authority may issue a formal written order and penalties may be imposed.
QUESTION 10 – Access to information and public participation (Article 24)
Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?
The Swedish response refers to the provisions of Chapter 6 of the Environment Code, which provides the public with an 'early and effective' opportunity to participate in the procedures listed in Article 24(1) IED. The operator is required to consult the authorities and members of the general public prior to the submission of an application. Following submission of an application, the authority must announce the application on its noticeboard, website and in the press or by other suitable means, providing information on where the documents are available and comments on the application can be submitted.
Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?
Information is to be made available to the public on the authority's website and/or the website of the Swedish EPA. All relevant information is made available on the internet. The Swedish response included a link toward the relevant website: http://www.naturvardsverket.se/Stod-i-miljoarbetet/Rattsinformation/Rattsfall/IED-avgoranden/
QUESTION 11 – Emerging techniques (Article 27)
Question 11 - How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?
Sweden indicated that it has not taken particular steps to implement Article 27. In accordance with Article 27(2), the European Commission must draw up guidance to promote the development and application of new technology in accordance with Article 27(1). When such guidance is made available, Sweden will consider whether there are need and possibilities for continuing to promote the development of new technology. Initiatives are in place to support the development of emerging techniques – such as the Research Council for Environment, Agricultural Sciences and Spatial Planning, FORMAS, was formed in 2001, and a special venture in environmental technology to support small Swedish environmental technology enterprises (led by Swedish Trade Counsel since 2011). The latter forms part of the Government's special venture on environmental technology and involves an amount of 48 MSEK in the 2011-2014 period.

UK

Analysis of the completeness of the report

Table A54: Completeness assessment of answers reported by UK – IED

Question title	Question number(s)	United Kingdom	Comments
Non-compliance (Article 8)	**1**		
Permit conditions (Article 14)	**2.1**		
	2.2		
Emission limit values, equivalent parameters and technical measures (Article 15)	**3.1**		
	3.2		
	3.3		
	3.4		
	3.5		
Monitoring requirements (Article 16)	**4.1**		
	4.2		
	4.3		
General Binding Rules (Article 17)	**5.1 (a) to (b)**		
	5.2		
	5.3		
	5.4		
	5.5		
	5.6		
Developments in BAT (Article 19)	**6.1**		
	6.2		
Reconsideration and updating of permits (Article 21)	**7.1**		
	7.2		
	7.3		
Site closure (Article 22)	**8.1 (a) to (d)**		
	8.2 (a) to (d)		
Environmental inspections (Article 23)	**9.1 (a) to (c)**		
	9.2 (a) to (c)		
	9.3 (a) to (b)		
	9.49.4		
	9.5 (a) to (c)		
	9.6		

Question title	Question number(s)	United Kingdom	Comments
Access to information and public participation (Article 24)	**10.1**		
	10.2		
	10.3		
Emerging techniques (Article 27)	**11**		

The UK submitted a complete response to the IED questionnaire.

Analysis of the UK's responses

The table below contains the detailed analysis of the responses provided by the UK to the IED questionnaire. It presents a summary of the responses for each question, as well as further comments and descriptive analysis of the answers provided.

Table A55: UK – Response analysis table

UK
QUESTION 1 – Non-Compliance (Article 8)
Question 1.a – What criteria may be used to decide whether a breach of permit conditions 'poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment'?
The UK provided the relevant information for each of its countries: ▪ In England, the regulator uses a tool named 'Compliance Classification Scheme' (CCS) which classifies non-compliance with permit conditions. The CCS classifies non-compliance events according to their potential impacts, on a scale from 1 to 4, with category 1 event being the most serious. ▪ In Wales, the regulator uses a tool named 'Common Incident Classification Scheme' (CICS). This is a two tier system where the first tier relates to the level of response, the second tier evaluates the impact and potential impact of a breach on all media. If a breach is considered major or significant (corresponding to a Category 1 or 2), the regulator can suspend that part of the operation. Furthermore, the permit states that all breaches of the permit must be reported to the regulator. ▪ In Scotland, the regulator includes, amongst other things, breaches of permit conditions in its internal training on the IED. The training assists the regulator's inspectors to decide on a site by site basis what poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment. ▪ In Northern Ireland, the regulator is not constrained or restricted in how they determine that the operation of an activity poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment. However the content of Article 8(2) is transposed into the relevant legislation (Regulation 28(1)). ▪ Finally, for the offshore sector, atmospheric emissions modelling are used to assess impacts on local air quality at the offshore platform concerned and to investigate any potential transboundary effects.
QUESTION 2 – Permit conditions (Article 14)
Question 2.1 – How is it ensured that BAT conclusions are the reference for setting permit conditions (Article 14(3))?BAT conclusions

The UK provided the relevant information for each of its country:

- In England the regulator has an existing operational instruction that requires BAT to be assessed and used as the basis for setting permit conditions. The operator is also assisted with guidance notes that define BAT. These guidance are based on the existing BREF. It was reported that the regulator is currently updating the operational instruction for permit variations in order to include variations initiated by BREF reviews and associated BAT conclusions. The updated instruction will ensure that permitting authorities use the BAT Conclusions as the reference for setting permit conditions. The latest update of the Environmental Permitting guidance identified was from March 2013 and the competent authority website indicated these are applicable from January 2014.
- In Wales, the operator is required to conduct a BAT gap analysis with the publication of the BREF. An information notice is then served on the operator which is required to explain how it is meeting BAT conclusions. The decision document produced during the permit review links that to the permit. Furthermore the information notice forms part of the permit.
- In Scotland, the permitting process makes reference to the relevant legislation (Pollution Prevention and Control Regulations 2012). In addition, the regulator's practical guide to the regulations includes guidance on setting permit conditions and indicates that BAT conclusions are the basis for setting permit conditions. A link was provided to the relevant guidance in the response[168].
- In Northern Ireland, the requirement that BAT conclusions are the basis for setting permit conditions is transposed in its national legislation (Regulation 11(3)(a) of the Pollution Prevention and Control Regulations 2013). The publication of new BAT conclusions trigger a permit review.
- Finally, the offshore sector must support all permit applications with a BAT assessment which is taken into account when setting permit conditions.

Question 2.2 – How may competent authorities set stricter permit conditions than those achievable by the use of the best available techniques (BAT) as described in BAT conclusions (Article 14(4))?

The UK provided a detailed response for each of its countries. In all of them, stricter permit conditions can be set in order to satisfy an environmental quality standard (EQS).

- In England, stricter permit conditions than those achievable by BAT may be applied on a case by case basis. The response indicated that impact assessments are conducted for a range of EQS associated with the site, and if appropriate, the permit will include stricter conditions. Reference and a link to a relevant guidance from the Environmental Agency on setting permit conditions was included in the response.
- In Wales, the default position is to set ELVs at the upper end of the BAT-AEL range, unless the current limit is lower, in which case the current limit is maintained. If there is evidence that an EQS is being breached or at risk of being breached, then the regulator can set a protective ELV that may be lower than the BAT-AEL.
- In Scotland, conditions for setting stricter permit are included in Regulations 21 and 23 of the PPC Regulations and relate to satisfying the EQS.
- In Northern Ireland, the legislation provides conditions for setting stricter permit conditions, for example when an air EQS requires stricter emission limits.

QUESTION 3 – Emission limit values, equivalent parameters and technical measures (Article 15)

Question 3.1 – How are emission limit values set in relation to the 'emission levels associated with the best available techniques' set out in the BAT conclusions (Article 15(3))?

The UK provided a detailed response for each of its countries.

168 http://www.gov.scot/Topics/Environment/waste-and-pollution/Pollution-1/Industrial-Pollution/PPC

- In England, at the publication of BAT conclusions, the regulator sends a notice (under Regulation 60 of the Environmental Permitting Regulations) to all the operators for which the specified primary activity is in the BREF. Operators of the Iron and Steel, Cement and Lime and Glass Sectors have already been issued this notice. It requires that operators describe how they will comply with all of the BAT conclusions. The responses are then assessed by the competent authorities who decide whether a variation to the permit is necessary.
- In Wales, the permit review process means automatic changes to the ELVs in the permit to align with the top end of the range of the BAT-AELs unless a derogation is sought by the operator or the current limit is lower during normal operation.
- In Scotland, the use of BAT-AELs to set ELVs in permits is described in its relevant legislation (article 25(6) of the PPC Regulations) which states that where any BAT conclusions contain an emission level associated with the best available techniques described in the conclusions, an emission limit value must ensure that, under normal operating conditions, emissions do not exceed the levels associated with the best available techniques laid down in the BAT conclusions, and be expressed for the same or a shorter period of time, and under the same reference conditions, as for the emission levels associated with the best available techniques.
- In Northern Ireland, the use of BAT-AELs to set ELVs in permits is described in its relevant legislation (Regulation 13(2)(a(j)&(ii). The article states that ELVs shall be based on BAT, without prescribing the use of any technique or specific technology. When setting the emission limit values the chief inspector shall ensure that, under normal operating conditions, emissions do not exceed the emission levels associated with BAT as laid down in the BAT conclusions through either setting emission limit values that do not exceed the emission levels associated with BAT. Those emission limit values shall be expressed for the same or shorter periods of time and under the same reference conditions as those emission levels associated with BAT; or setting different emission limit values in terms of values, periods of time and reference conditions, and at least annually, assessing the results of emission monitoring in order to ensure that emissions under normal operating conditions have not exceeded the emission levels associated with BAT.

Question 3.2 – How are derogations from Article 15(3) granted (Article 15(4))?

The UK provided a detailed response for each of its countries.

- In England, if the Operator's response to the Regulation 60 Notice sent by the regulator includes a request for a derogation, it is assessed by the National Permitting Service. As part of the assessment, a Head Office team of experts with appropriate technical, economic and legal experience is established. Each derogation assessment will be presented to a National Derogation Panel made up of senior managers from the legal, environment and business and economist teams. This panel will consider each derogation request and make recommendations to ensure national consistency of approach .In addition all decisions will be published in a decision document which will be made available to the public.
- The approach taken in Wales for assessing derogations is similar to that of England. Operators requesting a derogation are expected to submit a report detailing the reasons for the derogation and demonstrate compliance with Article 15(4).
- Where the case is clear and there is very little or no environmental benefit compared with the cost of the project, the derogation is assessed with a basic cost benefit analysis.
- Similarly to England, where the cost is comparable to the environmental benefit, a detailed assessment and full cost benefit analysis will be required. The derogation will be assessed by a technical team including regulatory officers, policy advisors and an economist. The regulatory business board is then in charge of examining the recommendation of the technical team. I The Environment Agency has published a revised H1 guidance that includes a new Annex K method for assessing the costs and benefits as part of any derogation.
- Scotland reported that no derogations have been granted yet and that the regulator

(SEPA) is currently working with other UK competent authorities to define a methodology for granting derogation. The key elements of article 15(4) have been transposed in the legislation (Regulation 25 of PPC Regulations).

- For Northern Ireland, the process for derogation in stated in Regulation 13(3) of the PPC Regulations.
- Finally, the Department of Energy and Climate Change (DECC), the competent regulator for the offshore sector, requires that permit holders demonstrate that combustion installations on offshore platforms are run in accordance with BAT, and undertake monitoring of emissions. No information is included on whether offshore installations would be eligible for derogations.

Question 3.3 – How is the cost-benefit assessment to allow such derogations undertaken and what are considered to be 'disproportionately higher costs compared to the environmental benefits'? (Article 15(4))?

The UK provided a detailed response for each of its countries.

- In England, Annex K of the H1 document[169] provides information on cost benefit analysis. The response indicated that there have been consultations undertaken on this document in 2013 which resulted in the re-drafting of the guidance to include cost benefit guidance in relation to derogation assessments which incorporates the UK Government cost benefit assessment approach (included in the Treasury Green Book[170]). In addition, the screening process in England uses damage cost functions for key pollutants aligned with the IGCB damage costs.
- In Wales, the response indicated that the regulator considers the cost is disproportionate when the cost of achieving the BAT-AELs is higher than the cost of harm. The response did not include a link toward guidance and further investigation on how proportionality is assessed would be required. During the assessment, the highest known figures for environmental harm are used. As a result when using this data if it is found that the cost is disproportionate, then no further work is required. If the cost of harm is equal to the cost of the improvement using the lowest figure for environmental harm then this would not be considered disproportionate.
- In Scotland, the issue of cost benefit assessment will be part of the guidance that is currently being prepared on derogations. However, there had not been any derogations determined in 2013.
- Northern Ireland reported that it is yet to determine a derogation involving disproportionately high costs.
- For the offshore sector, the regulator requires energy audits to be supported by a cost-benefit analysis for any identified improvements that are considered to be feasible. Costs provided by the operator include replacement or abatement equipment; shipping offshore; requirement for specialised heavy lift equipment offshore; and specialised manpower to install. They also consider technical feasibility in retro-fitting equipment or introducing abatement techniques where space and weight restriction on the platform would apply.

Question 3.4 – Are there any limitations on the magnitude or duration of derogations (Article 15(4))?

The UK provided a detailed response for each of its countries.

- England indicated that its first derogation requests (from the Iron and Steel sector) are currently being assessed. The response does not include information on are limitations on the magnitude or duration of derogations, however each request will be reviewed on a case by case basis. The response indicated that some the request for derogations received were for a limited time, for example where the operator cannot

[169] https://www.gov.uk/government/publications/h1-environmental-risk-assessment-for-permits-overview

[170] https://www.gov.uk/government/publications/h1-environmental-risk-assessment-for-permits-overview

install equipment within 4 years of the publication of BAT conclusions. ▪ In Wales, the duration and magnitude of the derogation is decided by the cost benefit analysis. It is considered that derogations cannot be allowed beyond the point where the cost of harm and the cost of compliance are the same, or where the latter exceeds the former. Furthermore, derogations cannot be granted beyond the point where the natural lifetime for the plant dictates a rebuild or replacement. ▪ Scotland indicated that no derogation request had been received by the regulator and that the methodology for assessing derogation is being developed. No indication was provided on potential limitations to be included in the methodology. ▪ In Northern Ireland, time limitations are considered as part of each permit review.
Question 3.5 – How are temporary derogations granted, from the requirements of Article 11(a) and (b) and from Article 15(2) and (3), for the testing and use of emerging techniques (Article 15(5))?
The UK has reported that its regulators are yet to receive a request for a derogation linked to emerging techniques. However, information was provided for some countries on the process that would be followed if that was the case: ▪ In England, the derogation would be assessed by the National Permitting Service and considered by the National Derogation Panel. ▪ Scotland is considering whether specific guidance on the implementation of this disposition should be adopted to supplement the existing provision on temporary derogations. ▪ In Northern Ireland, Regulation 13(4) of the PPC includes provision on this issue.
QUESTION 4 – Monitoring requirements (Article 16)
Question 4.1 – How is it ensured that the BAT conclusions are the basis for defining monitoring requirements in permits (Article 16(1))?
The UK provided a response for each of its countries. ▪ In England, BAT conclusions are incorporated into permits where applicable, including monitoring, ▪ In Wales, the monitoring requirement section of a permit reflects the BAT-AELs and any site specific requirement beyond those in the BAT conclusions. ▪ In Scotland and in Northern Ireland, the legislation (Regulation 23(2) and (3) in Scotland and Regulation 11(8) in Northern Ireland) requires that monitoring requirements are based on BAT conclusions. ▪ For the offshore sector, the BAT assessments must demonstrate how the equipment will be operated to achieve the estimated emissions, monitoring is then required to verify the estimates.
Question 4.2 – How is the frequency of periodic monitoring for soil and groundwater determined (Article 16(2))?
The UK provided a response for each of its countries. ▪ In England, the minimum frequencies specified in Article 16 of the IED are applied. In addition, guidance has been published to assist the operators and regulators[171]. In addition, the regulator may accept an alternative frequency if the operator can demonstrate to its satisfaction that this is valid. A link was provided for the guidance, which is part of the site condition report. The response from the UK indicated that the guidance is being reviewed in light of the EC guidance published on 6 May 2014 on baseline reporting. ▪ In Wales, the minimum frequencies indicated in the IED are applied, however the permitting process will assess whether there is a specific reason for increasing the

[171] https://www.gov.uk/government/publications/environmental-permitting-h5-site-condition-report

frequency. Examples were provided such as a site located on a drinking water aquifer would justify an increased frequency for monitoring soil and groundwater.

- In Scotland, the minimum frequency for monitoring soil and groundwater is set in the Regulation (23)(3)(b) and is aligned with the requirements of the IED.
- Northern Ireland indicated that the measures related to monitoring of groundwater and soil are included in Regulation 13(6)(b).
- In all UK countries, the minimum monitoring frequency is 5 years for groundwater and 10 years for soil, in agreement with the IED.

Question 4.3 – How is a 'systematic appraisal of risk of contamination' used to justify the monitoring of soil and groundwater at less than the stipulated frequency (Article 16(2))?

The UK provided a response for each of its countries.

- In England, the assessment of an operator's proposal for monitoring at less than the stipulated frequency would rely on expert judgement. The operator is expected to provide evidence on the risks, taking into account factors such as the nature of the activity, how comprehensive the pollution prevention measures are, their maintenance and monitoring schedule and the sensitivity of the local environment.
- In Wales, lower frequency would be allowed only following the submission of a risk assessment and a permit variation request. The response indicated that guidance is currently being developed to assist with the production of a suitable risk assessment.
- Scotland indicated that its competent authority (SEPA) is currently development guidance on the systematic appraisal of risk and how this is used to determine different frequencies for such monitoring in the future.
- In Northern Ireland, the systematic appraisal is detailed in Regulation 13(6)(b) and is part of the applicant's site report. Guidance Note H5 provides information on this issue.

QUESTION 5 – General Binding Rules (Article 17)

Question 5.1 – Are General Binding Rules (GBRs) used for implementing Directive 2010/75/EU?

The UK indicated that its response to this question only applies to England and Wales and that there are no GBRs in Scotland or Northern Ireland. The UK response indicated that GBRs are only available for a small number of IED activities and out of the 3,300 IED permits in England, approximatively 30 of them are based on GBRs. However this number is expected to increase as the UK permits new IED activities such as, for example, waste recovery operations.

In England, GBRs (known as standard rules) apply only to some waste activities. A link was provided in order to consult a list of these activities and included the following[172] :

- Keeping/transfer of waste
- Biological treatment of waste including treatment of incinerator bottom ash
- Metal recovery/scrap metal
- Materials recovery and recycling
- Recovery or use of waste on land
- Treatment to produce aggregate or construction materials
- Low impact installation
- Water discharges
- Installations
- Onshore oil and gas exploration

[172] https://www.gov.uk/government/collections/standard-rules-environmental-permitting

- Radioactive substances for non-nuclear sites

In Wales, Chapter 4 of the Environmental Permitting Regulations regulates 'standard rules' which are consistent with the GBR provisions. The type of activities covered by the standard rules are:

- an installation;
- a mobile plant;
- a waste operation;
- a mining waste operation;
- a water discharge activity; and
- a groundwater activity.

The UK indicated that the only significant pollutants for GBRs are dust, bio-aerosols and odour to air. Releases to waters and land are not relevant.

Question 5.2 – How do GBRs 'ensure an integrated approach and a high level of environmental protection equivalent to that achievable with individual permit conditions' (Article 17(1))?

The UK indicated that its response to this question only applies to England and Wales.

- In England, the regulator screens out those emissions that can be regarded as insignificant and then secures a BAT assessment in relation to any others. The significance, or otherwise, of emissions is largely considered on a location specific basis - for instance having regard to existing local air quality. To secure an equivalent level of protection under GBRs standard rules either all emissions must be insignificant and/or for any that are not, there must be no local specific circumstances that would affect the BAT assessment. Consequently, the new installation standard rules have a number of location criteria which restrict their use in certain locations.
- In Wales, the approach follows the standard rules. It involves a risk assessment, done prior to the production of the standard rules. If the operator complies with the conditions, a standard rule permits can be issued. These are only currently available for some waste activities. The operator must be able to demonstrate compliance with BAT.

Question 5.3 - How is it ensured that General Binding Rules are 'based on the BAT' (Article 17(2))?

The UK indicated that in England, the standards in the proposed rules have been derived with reference to the IPPC Sector Guidance Note on Recovery and Disposal of Hazardous and Non Hazardous Waste[173] which aims to express the BAT techniques as clear standards. The proposed GBRs have also been framed to reflect Article 14 of IED in relation to requirements for permit conditions.

In Wales, the conditions in the standard rules permits have been derived from the sector guidance notes that are aligned with BAT.

No information was provided for Scotland or Northern Ireland

Question 5.4 – How are General Binding Rules 'updated to take into account developments in BAT' (Article 17(3))?

The information reported indicated that in England, standard rules will be reviewed and updated on a regular basis ensuring it keeps up with developments of the BAT. In Wales, standard rules are updated regularly. The updates are triggered by changes in legislation, BAT or where new evidence means that a change to the rules are required to enhance protection of the environment

Question 5.5 – What references are made to Directive 2010/75/EU in the 'official publication'

[173] https://www.gov.uk/government/publications/sector-guidance-note-s506-recovery-and-disposal-of-hazardous-and-non-hazardous-waste

of General Binding Rules (Article 17(4))?
England indicated that a reference to the IED is made in the core guidance on environmental permitting and in the guidance on 'Part A' installations. The response included links to these two guidance documents[174]. Wales reported that the IED is referenced in the regulator's installations application page.
Question 5.6 – If the General Binding Rules are published on the internet, provide a link to where they can be found.
Both England and Wales provided internet links to consult GBRs. The websites were verified and found to be relevant and functioning at the time of the analysis, however the link provided by Wales is not functional anymore. https://www.gov.uk/government/collections/standard-rules-environmental-permitting http://naturalresourceswales.gov.uk/content/docs/pdfs/apply-and-buy/standard-facilities-permit-guidance.pdf?lang=en
QUESTION 6 – Developments in BAT (Article 19)
Question 6.1 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The UK reported that a number of forums are available for competent authorities where information on BAT conclusions is shared.
Question 6.2 – How do competent authorities follow, or are informed of, the publication of any new or updated BAT conclusions?
The UK indicated that members of the public can request information if needed. In addition, some competent authorities include on their websites a link to the EIPPCB website where the documents relevant to new or updated BAT conclusions are published. Furthermore competent authorities also publish application and decision documents.
Question 6.3 – Links to where the information can be found
The UK has not provided links in response to this question.
QUESTION 7 – Reconsideration and updating of permits (Article 21)
Question 7.1 – What information is typically requested from operators for the purposes of permit reconsideration/updating (Article 21(2))?
The UK provided a response for each of its countries. ▪ In England, when BAT conclusions are published the Environment Agency sends a formal Notice (Regulation 60 Notice under the Environmental Permitting Regulations) to all operators identified as having that BREF as their primary activity. Operators are required to confirm whether they meet the revised standards in the relevant BREF and to provide a justification. This justification may include: o The results of monitoring data; o Reference to monitoring data which has been previously submitted to the regulator; o A description of the techniques employed at the installation which demonstrates that these are the same as the standards in the BREF. ▪ In cases where operators do not currently meet all the revised standards in the BREF they are required to either describe the techniques they will implement by a date four years from the publication of the BREF to meet those standards, or to explain why they will not be able to meet those standards by that date. In the latter case, they

[174] https://www.gov.uk/government/publications/environmental-permitting-guidance-core-guidance--2 and https://www.gov.uk/government/publications/environmental-permitting-regulations-guidance-on-part-a-installations

are also requested to :

- Inform the regulator of the date by which they intend to cease operation of processes where the BAT standards will not be complied with;
- Provide an explanation of why a BAT standard is not applicable to their activities; or
- Provide a full written justification for using an alternative technique that will achieve the same level of environmental protection equivalent to the best available technique as described in the BAT conclusions.

- In cases where the operator is not proposing to meet the BAT standard and there is BAT-AEL in the BAT Conclusion Document, the competent authority would ask the operator to provide sufficient technical and commercial information to allow them to determine if a derogation under Article 15(4) of the IED is valid.
- In Wales, operators are required to demonstrate how they comply with each element of the BAT conclusions. If they do not currently comply then they must demonstrate how they aim to comply within four years of the publication of the BAT conclusions. The permit also require the operator to provide an annual update demonstrating progress towards compliance. Where the operator requires a derogation from a BAT-AEL, a further submission demonstrating that the derogation would comply with the rules of Article 15 (4) is required.
- In Scotland, the regulator uses both results of past monitoring and inspections as well as information obtained through statutory notices issued to operators requesting information in relation to the operation in the installation in comparison with BAT.
- In Northern Ireland, the legislation (Regulation (17(3) and 17(4)(a)) detail the typical information that may be requested from operators. This includes results of emission monitoring and other data that enables a comparison with the BAT described in the applicable BAT conclusions and with the BAT-AELs.
- Finally, for the offshore sector, the regulator requires an Energy Audit (Energy Efficiency Study) to be undertaken for each platform, and the submission of a report of the findings, conclusions and recommended improvements is made. Operators are asked to consider the findings and to undertake a cost benefit analysis on the changes recommended by the audit if that is considered appropriate. The results should be used to inform the regulator of any recommended improvements that will be put into effect. Operators are asked to periodically review the findings of the audit and options to improve energy efficiency.

Question 7.2 – How is the 'main activity' of an installation defined and/or determined (Article 21(3))?

The UK provided a response for each of its countries.

- In England, the primary activity is the one which has the greatest potential risk to the environment and is usually the one triggering the review of the permit. The UK response included a link to a guidance[175].
- In Wales, the main activity is defined in relation to the main purpose of the installation or the operation with the greater potential environmental impact.
- In Scotland, it is expected that the main activity as defined under the IPPC Directive regime will remained unchanged. For new activities, the regulator will consider whether further guidance is required, in particular for waste activities.
- In Northern Ireland, the requirement to review permit following changes to BAT related to the main activity of an installation is included in Regulation 17(4)(b)&(c).

Question 7.3 – How is the permit reconsideration/update triggered in cases of significant pollution, operational safety, or a new/revised environmental quality standard (Article 21(5))?

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http://webarchive.nationalarchives.gov.uk/20140328084622/http://cdn.environment-agency.gov.uk/lit_8284_f4d31e.pdf

The UK provided a response for each of its countries.

- In England, some specific circumstances trigger the review of individual permits outside a planned programme. This includes:
  - when the pollution caused by the permitted activities is found to be so significant that the existing permit conditions need to be revised; or
  - when the operator is persistently poor at complying with existing permit conditions; or
  - when there is a major environmental incident with implications for particular permits and/or major public concerns; or
  - when, for safety reasons, a change in operation is necessary.
- Furthermore, following the introduction of a new EQS, the permit conditions for relevant installations would be reviewed during the next programmed permit review. Review of the permit would also be undertaken if an AEL is identified in the BAT conclusions, if the sector has identified a specific substance requiring review as informed by risk assessment and environmental monitoring or other evidence indicates that an EQS is at risk of being exceeded.
- In Wales, the regulator would assess the suitability of a permit as part of the investigation of pollution. If a new Environmental Quality Standard (EQS) is established, the Competent Authority will assess its impact on the installation. The regulator will only modify permits if there is a risk of a breach of the EQS and, Wales indicated, that there is evidence to show that the installation is a significant contributor to emissions. The response does not include further information on how significance would be assessed.
- In Scotland, there has been no changes to the provisions on permit reconsideration and update in case of pollution, safety or new EQS. The regime established under the IPPC Directive has been extended and is now implemented through Regulation 44.
- In Northern Ireland, Regulation 17(2) of the PPC Regulations provides for a review of a permit where pollution is caused of such significance that existing emission limit values of the permit need to be revised or new emission limit values are needed, the operational safety of the activity requires other techniques to be used, or it necessary to comply with new or revised environmental quality standards.

For the offshore sector, the reconsideration of permit conditions is undertaken to assess continued relevance and changes made.

QUESTION 8 – Site closure (Article 22)

Question 8.1(a), 8.1(b) – Deciding which activities require a baseline report, including identification of those activities that have typically been found to involve the use, production or release of hazardous substances and determining the possibility of soil and groundwater contamination at the site of the installation

The UK provided a response for each of its countries.

- In England, there is no specific list of activities that require a baseline report; the decision is taken on a case by case basis. Furthermore, the operator is required to carry out a partial risk assessment at the application stage to determine whether there is a risk of soil or groundwater contamination.
- In Wales, the decision to require a baseline report is taken on a case by case basis. The response indicated that reviews are currently ongoing for the iron and steel, glass and minerals sectors, all of which were found to involve the use of relevant hazardous substances. In addition, the permit includes information on protection of groundwater and soil
- In Scotland, baseline reports are required for activities involving the use of hazardous substances and the possibility of soil and groundwater contamination. During the

2013 reporting period, baseline reports have been received for activities: 1.1, 5.1, 5.2, 5.3, 5.5 and 6.1.c. A link was provided to the guidelines for baseline reports[176].

- In Northern Ireland, each installation makes its own determination in relation to their relevant hazardous substance. For soil and groundwater contamination, the legislation includes the relevant requirement: Schedule 4(1)(4) for new application and Schedule 7(13) for variations.

Question 8.1(c) – What information are operators required to include in baseline reports (Article 22(2))?

For this question, the UK provided links to the documents listing information requested to be included in baseline reports.

England and Wales	**Guidance H5** **https://www.gov.uk/government/publications/environmental-permitting-h5-site-condition-report**
Scotland	http://www.sepa.org.uk/media/28985/tgo2_site-and-baseline-report-guidance.pdf
Northern Ireland	The content will be detailed in the H5 guidance document

Question 8.1(d) – How has the Commission's guidance on 'the content of the baseline report' (2014/C136/03) been used in this context (Article 22(2))?

England indicated that the competent authority ensured that all parts of the guidance are mirrored in the H5 guidance. Wales indicated that sites which have a site condition report and site protection and monitoring programme under IPPC will be required to present the information in a format that aligns with the EC guidance. Similarly, the regulator will assess baseline reports against the guidance during permit review and application assessment.

Question 8.2(a) – How do operators 'assess the state of soil and groundwater contamination' (Article 22(3))?

For this question, the UK provided links to the relevant documents listing information on assessing state of soil and groundwater contamination.

England	**Guidance H5** **https://www.gov.uk/government/publications/environmental-permitting-h5-site-condition-report**
Wales	Operators required to update the baseline report and compare with the initial report
Scotland	http://www.sepa.org.uk/media/28985/tgo2_site-and-baseline-report-guidance.pdf
Northern Ireland	Regulation 11(3)(e) and 22(4)(c)&(d) of the PPC Regulations Requires that site report is provided identifying in particular any changes in the condition of the site, the baseline report and an assessment of any contamination caused to the soil or groundwater by the relevant hazardous substance.

The response also indicated that these guidance documents include information on deciding whether any contamination of soil or groundwater poses a significant risk to human health or the environment (question 8.2.c). Wales added that public health authorities would be involved in the event of a significant pollution.

[176] http://www.sepa.org.uk/media/28985/tgo2_site-and-baseline-report-guidance.pdf

Question 8.2(b) – How is it decided whether an installation has caused 'significant pollution of soil or groundwater' (Article 22(3))?
▪ In England, significant pollution is determined by requiring the operator to undertake a quantitative comparison of the state of the site at closure with the baseline condition. This comparison is submitted to the Competent Authority along with other evidence in a surrender Site Condition Report. The regulator examines the arguments presented in the site closure report and uses expert judgement to decide whether it agrees that deterioration of soil or groundwater quality has not occurred. It is important to note that Defra and the Environment Agency have applied, a "no deterioration" principle for the last ten years. As a result, any recognisable deterioration is regarded as significant. ▪ In Wales, the regulator uses the updated baseline report and applies the common incidents classification system (CICS) methodology as described in question 1 to assess the significance of the issue. ▪ For Scotland and Northern Ireland, the existing guidance documents listed in response to 8.2(a) provide information on assessing significant pollution of soil or groundwater.
Question 8.2(c) – How is it decided whether any contamination of soil or groundwater 'poses a significant risk to human health or the environment' (Article 22(3))?
The test for determining whether contamination poses a significant risk to human health or the environment is linked to determining whether pollution is significant and the criteria described in response to question 8.2(b) are relevant here.
Question 8.2(d) – How is it decided what necessary 'measures' or 'actions' are required of operators (Article 22(3) and (4))?
▪ In England, remediation measures are described in the guidance document 'Model procedures for the management of land contamination'[177]. ▪ In Wales, operators are required to return the site to the same standard as detailed in the baseline report without prescribing specific techniques. ▪ For Scotland and Northern Ireland, the existing guidance documents listed in response to 8.2.a provide information on assessing significant pollution of soil or groundwater.
QUESTION 9 – Environmental inspections (Article 23)
Question 9.1(a) to 9.2(c) – What environmental inspection plans have been drawn up (Article 23(2))? What do they contain and are they publicly available? What programmes for routine environmental inspection have been drawn up (Article 23(4))? What do they contain and are they publicly available?
The UK provided a response for each of its countries. ▪ In England, a five year sector strategy and action plan has been adopted for each regulated sector. These plans identify key impacts, risks, actions and desired environmental outcomes including performance targets. The key priorities and actions deriving from the sector strategy plans are transposed in Area Action Plans (AAPs) that define the key regulatory activities and resources required. The sector strategy plans are being developed in discussion with the relevant sector trade associations and these plans are not formally published on Internet. ▪ The outputs from both the sector plan and the AAP are used to inform the Compliance Assessment Plan, which is a site focussed plan of compliance assessment work. The response included a link to consultation guidance on CAP, however the link did not function[178]. The response added that CAP are not publicly available and are not

[177] https://www.gov.uk/government/publications/managing-land-contamination

[178] http://intranet.ea.gov/static/documents/Policy/Guidance_on-Completing_CAPs.final.pdf

published on internet. However, under the Freedom of Information Act, they can de disclosed if requested as they do not contain security or commercially confidential elements.

- The AAPs represent regulatory team programmes for routine environmental inspections and are geographically organised, while the site specific details are enclosed in the CAP.
- In Wales, action plans are drafted for each industry sector and reviewed annually. The plan is tailored according to the environmental impacts of the sector it covers. The plans are used as the basis for the site specific compliance action plan. Furthermore, individual localities draw up environmental inspection plans, however these are not made available publicly.
- For Scotland, the response included a link to the regulator's compliance assessment strategy[179]. The website provided information on the national Compliance Assessment Scheme, which drives inspection of installations. The Competent Authority (SEPA) uses a risk-based system to identify sites requiring a site-based inspection in any given year. The results of SEPA sampling, site data returns and desk based inspections are also used to calculate the annual compliance result. Inspection reports are available online.
- In Northern Ireland, an inspection plan has been adopted for 2014-2015 as required by Regulation 26(3) of the PPC Regulations. The plan contains a part on the scope, the assessment of the relevant environmental issues, details on the geographical area covered by inspections, a register of installations and mobile plant covered by the plan, procedures for drawing up programme for routine environmental inspections and the procedures to follow for non-routine environmental inspection. The inspection plan is managed by an accredited ISO9001 quality system. It is available to consult upon request.
- The competent authorities are required to draw up routine inspection programmes at national level which must include the frequency of visits over an inspection year and a systematic appraisal of environment risk and based on potential and actual impacts on human health and the environment taking into account the level and types of emissions, the sensitivity of the local environment, record of compliance with permit conditions and the implementation of a management system accredited to EMAS standards. The programme is kept in the competent authorities' headquarters and can be consulted upon request.
- For the offshore sector, a link to the inspection plans strategy for the sector was provided[180].

Question 9.3 to 9.3(b) – Provide a summary and link to any relevant guidance on how the environmental risks of installations are 'systematically appraised' for the purposes of deciding the site visit frequency (Article 23(4))?

The UK provided a response for each of its countries.

- In England, the environmental risks of installations are appraised through the EP OPRA (Operator Pollution and Risk Appraisal) Scheme, the response included a link toward a webpage with more information on the Scheme[181]. OPRA provides a risk rating that is then used by the Competent Authority (the Environment Agency) to allocate its regulatory resources. The Environment Agency has also published guidance, targeted at operators, on how to comply with the environmental permit. A link to the guidance was included in the response[182]. The regulator has an agreed policy for a minimum of one visit to high risk sites per year and one visit every three years to low risk sites.

[179] http://apps.sepa.org.uk/compliance/

[180] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345116/PPC_Inspection_Plan_2014.pdf

[181] https://www.gov.uk/government/collections/operational-risk-appraisal-opra

[182] https://www.gov.uk/government/collections/operational-risk-appraisal-opra

- Similarly to England, Wales use the EP OPRA Scheme to appraise the risk of the installations and decide on the site visit frequency.
- In Scotland, a risk assessment tool is used by the Competent Authority. The tool is a dynamic regulatory effort assessment model used to capture the inherent hazard of a licensed activity. By combining the pollution hazard appraisal and the compliance assessment scheme, the Competent Authority obtains the level of regulatory effort in terms of inspection numbers for the following year. The highest risk sites and poorly performing sites will receive multiple site-based inspections per year and the lowest risk sites will receive a site-based inspection every five years. The results were not publicly available during the reporting period.
- In Northern Ireland, the competent authorities use the Risk Assessment Model (RAM) to score each site according to the complexity it presents, its impacts on air, surface water, soil, ground water, habitats and accidents and compliance. The RAM is completed annually and a compliance band is allocated to each installation. This is then used to decide on inspection frequency.
- For the offshore sector, the inspection of platforms with eligible combustion installations is prioritised according to estimated risk and based on the annual aggregated mass of the permitted emission limits and other factors such as non-compliance with environmental regulations. Those installations with the highest overall risk will be inspected annually and those installations with a lower risk will be inspected at least once every three years. If an inspection identifies a significant non-compliance with the permit conditions, a subsequent inspection is carried out within six months of the initial inspection.

Question 9.4 – Under what circumstances are 'non-routine environmental inspections' carried out (Article 23(5))?

The UK reported that non-routine environmental inspections are undertaken in the following circumstances:

- Serious environmental complaints
- Serious environmental accidents and/or incidents
- Occurrence of non-compliance

Question 9.5 – What information do the site visit reports typically contain (Article 23(6))? How are site visit reports notified to the operator? How are site visit reports made publicly available? Are there any circumstances under which such reports have not been made publicly available, considering the provisions of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC?

The UK provided a response for each of its countries.

- In England a Compliance Assessment Report (CAR) is completed following each site inspection. It includes details on issues found, advice given and actions required of the operator. These reports are publicly available on request.
- In Wales, site visit reports are issued for all areas of the permit assessed. The reports record the level of compliance of the operator, actions to be taken, enforcement (if required), advice and guidance. The reports are supplied to the operator within 2 months of the visit and put on the public record within 4 months. They are available on request but not currently published. On occasions, commercially sensitive information contained in the report is redacted.
- In Scotland, the CAS (Compliance Assessment Scheme) contains reports on the results of compliance assessment which includes site visits. When a site visit has been completed, the inspecting officer notes the permit conditions that were assessed as part of that visit and the state of compliance with those conditions by the operator. The CAS results are provided to the operator and are available through SEPA's public registers. The response indicated that SEPA is presently developing an online tool to make the results of site visits available online as well as through its public registers.
- In Northern Ireland, the compliance assessment reports describe the relevant findings

of the inspection regarding compliance with the permit conditions and whether further action is necessary. The operator will be notified within 2 months of the report. The reports are available to consult upon request.

- Offshore sector site visit reports include details on the areas inspected, the findings of the visits, conclusions and recommendations including any further action required. The reports are notified by e-mail and hard copy to the operator and are published online. The UK added that there has not been any circumstances under where reports were not made publicly available.

Question 9.6 – What mechanisms exist for ensuring that operators complete the 'necessary actions' identified in the site visit report (Article 23(6))?

The UK provided a response for each of its countries.

- In England, a copy of the site visit CAR is sent to the operator within 14 days. The operator is then required to report against the required actions within a specified deadline. Additional action plans can be drawn up to assist the operator and notices can be served to enforce compliance. The response included a link to the regulator's statement on enforcement policy[183].
- In Wales, follow-up visits are arranged to check that actions are carried out. If the operator fails to comply with the actions prescribed, a legal notice is served which can lead to prosecution.
- In Scotland, enforcement notices will be served when it is believed that an operator has contravened, is contravening or is likely to contravene any permit conditions. The response provided included a link toward the relevant guidance, information on enforcement is included in Section 11 of the regulator's PPC Practical Guide 2012[184].
- In Northern Ireland, a timetable is set during the inspection for actions to be taken by the operator. The actions are then followed up on agreed dates. If they are not completed a non-compliance will be raised and enforcement action will be taken. Information was provided on relevant provisions in legislation (Regulation 26(8)).

For the offshore sector, the regulator will follow up all requested actions to confirm that they have been undertaken and can issue legally-binding enforcement notices if operators do not voluntarily comply with the requirements. The response included an industry recognised enforcement policy[185].

QUESTION 10 – Access to information and public participation (Article 24)

Question 10.1 – How is the public given 'early and effective opportunity' to participate in decision making on the granting/updating of permit conditions, especially where derogations under Article 15(4) are proposed (Article 24(1))?

The UK provided a response for each of its countries.

- England indicated that a variation of a permit in response to the publication of the BAT Conclusions will not undergo public consultation if the standards in the permit are improved as a result of the variation. This does not apply if the installation is classified as a site of high public interest (SHPI). The response included a link toward guidance on determining sites of high public interest[186]. If during the permit review the Competent Authority decides to grant a derogation, then a public consultation would be undertaken of the draft permit and the regulator would be required to

[183] https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement

[184] http://www.sepa.org.uk/media/35880/ppc-technical-guidance-note-guidance-for-part-a-activities.pdf

[185] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/319950/Enforcement_Policy_June_2014.pdf

[186] https://www.gov.uk/government/publications/rgn-6-determinations-involving-sites-of-high-public-interest

include justifications for its decision. In instances where the derogation is related to a SHPI, additional local consultation would be undertaken.

- In Wales, the application and information notice response are placed on the internet and comments are invited. The draft permit and decision document are also placed on the regulator's website and comments taken into account before a permit is issued.
- In Scotland, public participation is governed by the provisions of the PPC Directions and the public participation pages of SEPA. The response included links toward the relevant document[187][188] . The PPC Directions state that any decision taken should be published on the Competent Authority's website. Guidance on public participation on the website details the stages at which input can be made (e.g. new installation application, substantial change, a change to ELVs).
- In Northern Ireland, the legislation states that the public must be given an "early and effective" opportunity to participate in decision making. It also requires that representation received is taken into consideration by the enforcing authority in determining applications. Schedule 7 of the PPC Regulations includes public participation provisions for substantial variation to a permit. These provisions allow public participation in granting or updating a permit including where there is a derogation from BAT ELVs or updating of a permit as a result of significant pollution.
- In the offshore sector, the notification of an application received is made on internet. It also includes information on how to submit comments on the application.

Question 10.2 – 10.3 – How is information made available to the public (Article 24(2) and (3))? Is all relevant information made available on the internet (Article 24(2)(a),(b) and (f) and Article 24(3)(a))?

The response indicated that information relevant is made available on internet in the UK. Detailed information by country is included below.

England	**Information is online** **https://www.gov.uk/government/collections/environmental-permitting-notices-of-applications-made**
Wales	Information is online (regulator's website) Advertisement in local paper Direct contact with interested parties (some cases)
Scotland	The response indicated that the regulator is currently updating its website to enable access to all elements
Northern Ireland	Public access of information, some of which must be on internet (Schedule 16)
Offshore sector	Information published on central government internet site

QUESTION 11 – Emerging techniques (Article 27)

Question 11.1 – How do Member States encourage the development and application of emerging techniques, in particular those identified in BAT reference documents (Article 27(1))?

Information was provided for each of the UK's four countries.

187 http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Pollution-1/Industrial-Pollution/PPC/Directions

188 http://www.sepa.org.uk/media/35880/ppc-technical-guidance-note-guidance-for-part-a-activities.pdf

- England has established sectoral working groups which are focusing on specific sectors defined in the IED. The groups follow developments in their respective sectors and participate in the drafting of sector technical guides. These guides, issued by the Environmental Agency, are to be reviewed with the publication of the relevant BREF. Furthermore, England has an Innovation Panel which steers the reviews on new techniques, however, as a rule, these do not come from IED sectors.
- In Wales, the regulator allows for trials to take place providing sufficient controls are in place. The regulator assists the operator in achieving greater efficiency. In addition, sector working approach is adopted and allows for knowledge to be shared between the sector groups and the regulatory bodies. Emerging techniques are discussed with operators during routine compliance inspections.
- In Scotland, Annex III of the Part A practical guide includes provisions on emerging techniques. The response included a link to the guidance[189]. It states that the development of emerging techniques is allowed and encouraged. Emerging techniques are defined as novel techniques that, if commercially developed, could when compared to existing BAT provide a higher level of protection of the environment, or at least the same level of protection of the environment and lower cost.

In Northern Ireland, provisions for emerging techniques are included in the legislation. The PPC Regulations 2012 foresee that the regulator can provide a temporary derogation from the requirements of the Regulations for the testing and use of emerging techniques for a total period of time not exceeding nine months, provided that after the period specified, either the technique is stopped or the activity achieves at least the emission levels associated with BAT.

[189] http://www.sepa.org.uk/media/35880/ppc-technical-guidance-note-guidance-for-part-a-activities.pdf