

COMMON IMPLEMENTATION STRATEGY FOR THE WATER FRAMEWORK DIRECTIVE AND THE FLOODS DIRECTIVE



Guidance Document No. 36 Exemptions to the Environmental Objectives according to Article 4(7)

New modifications to the physical characteristics of surface water bodies, alterations to the level of groundwater, or new sustainable human development activities

Document endorsed by EU Water Directors at their meeting in Tallinn on 4-5 December 2017

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Table of Contents

- 1 INTRODUCTION..... 1
 - 1.1 A Guidance Document: What for?..... 1
 - 1.2 WFD and the Common Implementation Strategy (CIS) process 2
 - 1.3 Setting Article 4(7) into context..... 3
- 2 INTEGRATION OF SECTOR POLICIES AS PREREQUISITE FOR POLICY COHERENCE 5
 - 2.1 Transport policy 5
 - 2.2 Energy policies including renewable energy policy 6
 - 2.3 EU Raw Materials Strategy and Extractive Waste Directive 7
 - 2.4 Directive 2007/60/EC on the assessment and management of flood risks..... 8
 - 2.5 Marine Strategy Framework and Maritime Spatial Planning Directives 9
 - 2.6 European Funding Instruments 10
 - 2.6.1 European Structural and Investment Funds 10
 - 2.6.2 Connecting Europe Facility (CEF) 11
 - 2.6.3 Instrument for Pre-Accession 11
 - 2.7 Climate change policy including adaptation and mitigation as a cross-cutting issue..... 12
 - 2.8 Other environmental policies 12
 - 2.8.1 Strategic Environmental Assessment (SEA) Directive 13
 - 2.8.2 Environmental Impact Assessment (EIA) Directive 14
 - 2.8.3 Birds and Habitats Directives 14
- 3 GENERAL CONSIDERATIONS AND SCOPE OF ARTICLE 4(7) 16
 - 3.1 Principle relationship between assessments..... 16
 - 3.2 Recap of the WFD Environmental Objectives and Article 4(7) 17
 - 3.3 Scope of Article 4(7) 19
 - 3.3.1 Considerations regarding the time-span of effects on water body status/potential 21
 - 3.3.2 Considerations regarding the size of a modification and water body delineation 23
 - 3.3.3 Projects outside the scope of Article 4(7) 24
 - 3.4 Conditions triggering an Article 4(7) Test 24
 - 3.4.1 Practical considerations and examples for surface water bodies 25
 - 3.4.2 Practical considerations and examples for groundwater bodies 31
 - 3.5 Effects on other water bodies 34
 - 3.6 Cumulative effects 35
 - 3.7 Managing uncertainty 36
- 4 ARTICLE 4(7) APPLICABILITY ASSESSMENT AND STREAMLINING WITH OTHER DIRECTIVES 38

4.1	Approach for an Article 4(7) Applicability Assessment.....	38
4.2	Streamlining of assessments with the EIA and Habitats Directive	44
5	ARTICLE 4(7) TEST AND RELATIONSHIP TO THE RBMPs.....	49
5.1	Step-wise approach for an Article 4(7) Test	49
5.2	Taking all practicable steps to mitigate adverse impacts	51
5.3	Assessing significantly better environmental options	56
5.3.1	Strategic level	56
5.3.2	Project level	58
5.4	Weighing interests: Overriding public interest / benefits versus impacts	58
5.4.1	Overriding public interest.....	59
5.4.2	Weighing benefits of the modification versus foregone benefits and opportunities	60
5.5	Relationship to the River Basin Management Plans	63
5.5.1	Reporting in the River Basin Management Plans.....	63
5.5.2	Article 4(7) and the designation of heavily modified water bodies (HMWB)	65
5.5.3	Relationship of Article 4(7) to Article 4(4) and 4(5)	66
5.5.4	Change in water body delineation and/or typology due to an Article 4(7) exemption	67
5.5.5	Article 4(7) in a transboundary context.....	68
6	OUTLOOK AND FOLLOW-UP.....	69
ANNEX A:	Comparative overview table WFD, HD, EIA and SEA Directive	70
ANNEX B:	Collection of flow-charts	73
	Principle relationship between Article 4(7) Applicability Assessment and Article 4(7) Test.....	73
	Step-wise approach for an Article 4(7) Applicability Assessment	74
	Streamlining of assessments under the WFD, HD and EIA Directive.....	75
	Step-wise approach for an Article 4(7) Test.....	76
	Article 6(3) and 6(4) procedure of the Habitats Directive	77

List of Tables

Table 1: Overview CIS activities relevant for WFD Article 4(7)	2
Table 2: Modifications according to Article 4(7), quality elements and possible effects	21
Table 3: Example 1 - Deterioration of overall status	25
Table 4: Example 2 – Overall status remains but deterioration of a biological quality element.....	25
Table 5: Example 3 - Deterioration from high status to good status	26
Table 6: Example 4 – Deterioration of a quality element of a surface water body which is already in the lowest class	27
Table 7: Example 5 – Deterioration of overall groundwater quantitative status from "good" to "poor"	32
Table 8: Example 6 – Groundwater body which is already classified as "poor" and one further criterion does not meet the conditions.....	32
Table 9: Example 7 – Further deterioration of a criterion which is already classified as "poor" leading to failure of achieving "good"	33

List of Figures

Figure 1: Principle relationship between "Article 4(7) Applicability Assessment" and "Article 4(7) Test"	17
Figure 2: Example for effects beyond one surface water body	34
Figure 3: Example for effects beyond one water body in relation to groundwater	34
Figure 4: Outline for a step-wise approach for an Article 4(7) Applicability Assessment.....	39
Figure 5: Streamlining of assessments under the WFD, HD and EIA Directive	45
Figure 6: Example for a step-wise approach for an Article 4(7) Test and the iterative relationship with the Article 4(7) Applicability Assessment.....	50
Figure 7: Changing water body designation due to the application of Article 4(7)	67

List of Practical Case Studies

Case study 1: How hydromorphological standards are used to prevent deterioration of status.....	29
Case study 2: Cumulative impact of reservoirs on the aquatic environment. Joint scientific appraisal	36
Case study 3: A WFD compliance assessment checklist tool developed for JASPERS.....	42
Case study 4: High Speed 2 Rail Construction scheme – Phase 1 (London to West Midlands).....	42
Case study 5: Flood Risk Management Plan (FRMP) measures' impact evaluation for the assessment of Art. 4(7).....	43
Case study 6: Development of an Article 4(7) assessment framework and linkage to EIA	47
Case study 7: City water supply development and mitigation	55
Case study 8: ICPDR Guiding Principles on Sustainable Hydropower Development	57
Case study 9: Criteria Catalogue for Hydropower.....	62
Case study 10: Instruction of the Spanish Water Director in relation to Article 4(7)	65

1 INTRODUCTION

1.1 A Guidance Document: What for?

This document aims at guiding experts and stakeholders in the implementation of the Directive 2000/60/EC establishing a framework for Community action in the field of water policy - the Water Framework Directive (WFD)¹. It focuses on exemptions under Article 4(7) of the WFD. Article 4(7) only applies to new modifications to the physical characteristics of a surface water body, alterations to the level of bodies of groundwater and new sustainable human development activities, which can lead to failure of achieving the WFD objectives. In case the conditions as outlined under Article 4(7) are met exemptions can be granted.

The document is based on and further specifies the issues already outlined in Guidance Document No. 20 on exemptions to the environmental objectives². It was developed in the frame of the WFD Common Implementation Strategy (CIS)³ process 2016-2018 and aims to provide complementary information and further clarification by taking into account the latest experiences with the implementation of the WFD and case laws related to Article 4(7).

The document constitutes guidance and good practice. Member States are not legally required to follow the recommendations contained in it. Member States are, however, required to use methods and approaches compliant with the requirements of the WFD.

The guidance is specifically addressed towards:

- Water managers and river basin authorities developing river basin management plans;
- Authorities responsible for taking decisions on the granting of permissions for new activities or projects that might have an impact on water;
- Decision makers at different levels who are responsible for the development, promotion and approval of sectorial strategies (e.g. rural development and agriculture, flood risk management, transport policy, energy policy, etc.);
- Experts which are performing assessments under related legislation like Environmental Impact Assessments (EIA), Strategic Environmental Assessments (SEA), assessments under the Habitats Directive (HD), etc.;
- Project developers and representatives from a wide range of economic sectors, the activities of which have the potential to impact on ground or surface water bodies⁴;
- Interested stakeholders and representatives from civil society organisations.

The guidance inter alia recalls the requirements of the WFD related to environmental objectives and the exemptions with a focus on Article 4(7). Chapter 2 reflects on horizontal issues and addresses the importance of policy coherence for the sustainable management of water resources and for assessments under Article 4(7). Chapter 3 outlines the scope and conditions triggering an Article 4(7) Test and chapter 4 provides guidance on a potential assessment approach for determining whether an

¹ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060>

² CIS Guidance Document No. 20 – Exemptions to the Environmental Objectives: https://circabc.europa.eu/sd/a/2a3ec00a-d0e6-405f-bf66-60e212555db1/Guidance_documentN%C2%B020_Mars09.pdf

³ Common Implementation Strategy (CIS) for the Water Framework Directive: http://ec.europa.eu/environment/water/water-framework/objectives/implementation_en.htm

⁴ This can also include activities which are not directly related to water management. A road or railway project, for example, might be planned along a surface water body or require the realignment of that water body. The construction of a road or rail tunnel might impact on groundwater levels.

36 Article 4(7) Test has to be performed for a certain activity or project. Chapter 5 provides clarification on
 37 the different steps which have to be performed under an Article 4(7) Test towards a decision whether
 38 a certain activity or project can be approved or not. Finally, chapter 6 provides an outlook on potential
 39 follow-up activities for the benefit of a coherent implementation of the WFD and Article 4(7). Practical
 40 examples and approaches are illustrated via case studies and inter-linkages with other relevant EU
 41 legislation and policies are addressed within the different chapters of the document.

42 In summary, the document aims at clarifying a number of aspects in relation to the application of WFD
 43 Article 4(7). However, this is not a detailed manual on application. Further methodological guidance is
 44 likely necessary at Member State level that is adapted to the legal, administrative and technical reality
 45 of each Member State.

46 1.2 WFD and the Common Implementation Strategy (CIS) process

47 The implementation of the WFD raises a number of shared technical challenges for the Member
 48 States, the Commission, the Candidate and EEA Countries as well as stakeholders and NGOs. In
 49 addition, many of the European river basins are international, crossing administrative and territorial
 50 borders and therefore a common understanding and approach is crucial to the successful and
 51 effective implementation of the Directive.

52 In order to address the challenges in a co-operative and coordinated way, the Member States, Norway
 53 and the Commission agreed on a Common Implementation Strategy (CIS). Since 2001 the activities in
 54 the frame of the CIS are aiming at a coherent and harmonious implementation of the WFD. The focus
 55 is on methodological questions related to a common understanding of the technical and scientific
 56 implications. In this context a series of working groups and joint activities have been undertaken
 57 during the last years. While Member States have gained valuable practical experience in the use of
 58 exemptions, the implementation of Article 4(7) has shown concrete issues that would greatly benefit
 59 from this updated guidance. For that purpose a specific Ad-hoc Task Group (ATG) has been
 60 established in the frame of the CIS. The following table provides an overview on those main CIS
 61 activities relevant for Article 4(7) since the adoption of the Directive. More detailed information can be
 62 obtained from the related documents.

63 **Table 1: Overview CIS activities relevant for WFD Article 4(7)**

When	Who	Output
2003	Water Directors	WATECO guidance ⁵ which outlines a basic concept of Article 4(7).
2003	Water Directors	Guidance document No. 4 on the identification and designation of Heavily Modified and Artificial Water Bodies.
2006	CIS process	Policy paper on WFD and hydro-morphological pressures ⁶ with a focus on hydropower, navigation and flood defence activities. It includes recommendations for better policy integration.
2007	CIS process	Workshop on WFD & Hydropower ⁷ . As a result some first key principles for hydropower under the WFD have been formulated.
2008	Water Directors	CIS Guidance number 20 on Environmental Objectives and Exemptions ⁸ discusses basic concepts under Article 4(7).
2009	CIS process	Workshop on Heavily Modified Water Bodies (HMWB) delivered several recommendations ⁹ relevant to hydropower and the WFD, such as on the interpretation of "significant adverse effects on the use", good ecological potential and ecological continuum.
2009	Water Directors	CIS Guidance number 24 – River Basin Management in a changing

⁵ <http://ec.europa.eu/environment/water/water-framework/economics/pdf/Guidance%201%20-%20Economics%20-%20WATECO.pdf>

⁶ https://circabc.europa.eu/sd/a/bcba0b09-a2d3-4762-a1f6-5ac664beaa15/HyMo_Political_Paper_FINAL.pdf

⁷ <https://circabc.europa.eu/w/browse/a839626e-9806-4fee-8a93-678a086c0ab3>

⁸ https://circabc.europa.eu/sd/a/2a3ec00a-d0e6-405f-bf66-60e212555db1/Guidance_documentN%C2%B020_Mars09.pdf

⁹ <https://circabc.europa.eu/sd/a/651417d8-46d6-4120-8c59-54f2bbcf422d/FinalHMWBConclusions.pdf>

When	Who	Output
		climate addresses some aspects related to Article 4(7).
2010	Water Directors	Statement on "Hydropower Development under the Water Framework Directive" ¹⁰ summarising key principles and recommendations. A key clarification was that the size of the project is not the relevant criteria to trigger Article 4(7).
2011	CIS process	2 nd CIS workshop on Water Management, WFD & Hydropower made good practice recommendations on the application of WFD Article 4(7) ¹¹ .
2016	CIS process	Establishment of Ad-hoc Task Group for guidance on the implementation of Article 4(7).

64

65 Further guidance documents are available with more general WFD relevance and linking aspects
66 related to Article 4(7).¹²

67 1.3 Setting Article 4(7) into context

68 The **environmental objectives of the WFD**, outlined in Article 4, are the core of this EU legislation
69 providing for a long-term sustainable water management on the basis of a high level of protection of
70 the aquatic environment. Article 4(1) sets out the environmental objectives for natural surface and
71 groundwater bodies and artificial and heavily modified water bodies (HMWBs). Natural surface water
72 bodies must, by 2015, adhere to good ecological and chemical status and groundwater bodies to good
73 quantitative and chemical status. Artificial and HMWBs must achieve good ecological potential and
74 good chemical status. In Article 4(3) the criteria for the designation of artificial or heavily modified
75 water bodies are described. One **further key objective** of the WFD, outlined in Article 4(1), is to
76 implement the necessary measures to **prevent deterioration of the status of all water bodies** - the
77 so-called "**non-deterioration principle**", which is of particular relevance in the context of Article 4(7).
78 Finally, the WFD objective of good status may need to be complemented by additional objectives in
79 order to ensure that conservation objectives for protected areas are achieved (Article 4(1)(c) and
80 Article 4(2)).

81 **Exemptions from these objectives** are defined within Article 4, outlining the conditions under which
82 the achievement of good status or potential may be phased or not be achieved, or under which
83 deterioration may be allowed. Article 4(4), 4(5), 4(6) and 4(7) describe the conditions and the process
84 in which they can be applied. They include the following:

- 85 • Extension of the deadline, in other words, good status/potential must be achieved by 2021 or
86 2027 at the latest (Article 4(4)) or as soon as natural conditions permit after 2027;
- 87 • Achievement of less stringent objectives under certain conditions (Article 4(5));
- 88 • Temporary deterioration of the status/potential in case of natural causes or "force majeure"
89 (Article 4(6));
- 90 • Deterioration or failure to achieve good status/potential as a result of new modifications to the
91 physical characteristics of a surface water body or alterations to the level of bodies of
92 groundwater, or status deterioration of a body of surface water from high status to good status
93 as a result of new sustainable human development activities (Article 4(7)).

94 All these exemptions contain distinct conditions to be met and have to be set out and explained in the
95 River Basin Management Plan.

¹⁰ <https://circabc.europa.eu/sd/a/4e0cb9d2-c268-4d67-ac56-f1977c1b85fc/WD%20statement%20May%202010-%20Hydropower%20Development%20under%20the%20Water%20Framework%20Directive.pdf>

¹¹ https://circabc.europa.eu/sd/a/23d94d2d-6b9c-4f17-9e15-14045cd541f3/Issue%20Paper_final.pdf

¹² http://ec.europa.eu/environment/water/water-framework/facts_figures/guidance_docs_en.htm

96 Paragraphs 8 and 9 of Article 4 introduce two principles applicable to all exemptions,

- 97 • first, exemptions for one water body must not permanently exclude or compromise the
- 98 achievement of the environmental objectives in other water bodies (see chapter 3.5);
- 99 • second, at least the same level of protection must be achieved as provided for by existing
- 100 Community law (including those elements to be repealed).

101 **This Guidance focuses on the exemptions under Article 4(7), which sets out the conditions for**

102 **exemption in the event of new modifications to the physical characteristics of a body of**

103 **surface water, alterations to the level of bodies of groundwater or new sustainable human**

104 **development activities.**

105 Integration with other sector policies is a key issue in this context. The Guidance contributes to the

106 "further integration of protection and sustainable management of water into other Community policy

107 areas such as energy, transport, agriculture, fisheries, regional policy and tourism" with a "continued

108 dialogue and for the development of strategies towards a further integration of policy areas"¹³. It also

109 contributes to the "Better Regulation Initiative"¹⁴.

110 This to comply with the precautionary principle and with the principle of sustainable development,

111 which is a fundamental objective of the European Union, laid down in the Treaty¹⁵ and applicable to all

112 EU activities and policies and in the context that "a high level of environmental protection and the

113 improvement of the quality of the environment must be integrated into the policies of the Union and

114 ensured in accordance with the principle of sustainable development"¹⁶.

¹³ WFD preamble, paragraph 16.

¹⁴ Commission Communication Better Regulation: Delivering better results for a stronger Union (COM(2016) 615 final)

¹⁵ Treaty on European Union

¹⁶ Laid down in Article 37 of the Charter of Fundamental Rights of the European Union

115 2 INTEGRATION OF SECTOR POLICIES AS PREREQUISITE FOR POLICY 116 COHERENCE

117 Integrated approaches and policy coherence play a central role for the implementation of the WFD
118 and for informed assessments in relation to Article 4(7). New physical modifications, alterations, or
119 new sustainable human development activities, potentially causing deterioration, are frequently linked
120 with the achievement of the objectives of other EU policies such as energy, transport, flood protection,
121 coastal defence, water supply and wastewater treatment, irrigation, etc., next to relevant national
122 policies. Integration of the WFD and its links with the implementation of such policies therefore
123 strongly calls for a coordinated approach and a better streamlining of authorisation processes in
124 relation to Article 4(7).

125 Some of the relevant EU policies and programs include *inter alia* the following:

- 126 • Trans-European transport network (TEN-T)¹⁷
- 127 • Energy policy including renewable energy policy and its renewable energy action plans
- 128 • Industry policies such as the EU Raw Materials Strategy
- 129 • The flood risk management plans under the EU Floods Directive
- 130 • Marine Strategy Framework Directive and Maritime Spatial Planning Directive
- 131 • European Funding Instruments and the Common Agricultural Policy (CAP)
- 132 • Climate change policies including adaptation and mitigation
- 133 • Other environmental directives and policies, in particular the SEA, EIA, Birds and Habitats
134 Directives and the Urban Wastewater Treatment Directive

135 Involvement and consultation of authorities and stakeholders concerned with the implementation of
136 the WFD in the design and implementation of these policies allows integrating the objectives of the
137 WFD from the beginning and might even reduce the need for new modifications and hence the
138 possibility of deterioration of water bodies status due to increased transparency for decision makers
139 on expectable impacts.

140 Furthermore, assessments under Directive 2001/42/EC on the assessment of the effects of certain
141 plans and programmes on the environment (SEA Directive) can contribute to the integration of
142 environmental considerations into the preparation of certain plans and programmes as listed above,
143 which might be subject to an SEA. Assessments under the SEA Directive can help to fully take
144 significant effects on the environment into account, including effects on water.

145 The results of such integrated approaches can also provide valuable information for assessments
146 required in the context of Article 4(7), in particular when it comes to the strategic dimension of
147 overriding public interest, weighing benefits and impacts of modifications or for the assessment of
148 better environmental options (see chapters 5.3 and 5.4).

149 2.1 Transport policy

150 The TEN-T programme was established to support the construction and upgrade of transport
151 infrastructure across the European Union. The programme consists of projects – defined as studies or
152 works – whose purpose is to ensure the cohesion, interconnection and interoperability of the trans-
153 European transport network, as well as access to it.

¹⁷ For more information see http://ec.europa.eu/transport/themes/infrastructure_en

154 TEN-T projects, which are located in every EU Member State¹⁸, include different modes of transport¹⁹
155 which can be relevant in terms of their potential effects on water. This can for instance be the case for
156 projects related to the construction and upgrade of railway infrastructure or roads, but can be of
157 particular relevance for navigation covering inland waterways and several coastal and inland water
158 ports. The inland waterways dimension of the TEN-T covers all major rivers, canals and lakes used
159 traditionally for transport purposes in the EU (waterways of European dimension, following the
160 classification of the United Nations Economic Commission for Europe - UNECE). Articles 15 and 39 of
161 the TEN-T Guidelines²⁰ set the following requirements:

- 162 • Rivers, canals and lakes comply with the minimum requirements for class IV waterways as
163 laid down in the new classification of inland waterways established by the European
164 Conference of Ministers of Transport (ECMT) and that there is continuous bridge clearance. At
165 the request of a Member State, in duly justified cases, exemptions shall be granted by the
166 Commission from the minimum requirements on draught (less than 2.50 m) and on minimum
167 height under bridges (less than 5.25 m);
- 168 • Rivers, canals and lakes are maintained so as to preserve "good navigation status", while
169 respecting the applicable environmental law.

170 Article 16 of the TEN-T Guidelines establishes priorities for inland waterway infrastructure
171 development, whereas Article 16(e) outlines that priority should *inter alia* be given to "paying particular
172 attention to the free-flowing rivers which are close to their natural state and which can therefore be the
173 subject of specific measures".

174 Due to the potential need for modifications to the hydromorphological conditions of water bodies for
175 meeting these objectives, navigation infrastructure projects may cause deterioration or failure to
176 achieve good status/potential and therefore trigger an Article 4(7) Test to assess whether a project
177 can be authorised under the WFD. Since both, the WFD as well as the TEN-T regulations allow for the
178 application of exemptions, and since there is no hierarchical relationship between these two policies, it
179 is important to follow an integrated approach for a coherent implementation of both, water and
180 transport policy. Further guidance on the concept of "good navigation status", addressing also the
181 relationship with the WFD and other environmental legislation, is planned to be made available²¹.

182 **2.2 Energy policies including renewable energy policy**

183 The focus of the EU Energy Strategy is to make energy supply more secure, affordable and
184 sustainable. Conventional energy generation installations are expected to still play an important role
185 for energy supply in the foreseeable future. However, renewables play an increasingly central role to
186 achieve these targets. The EU's Renewable Energy Directive (2009/28/EC)²² sets a binding target of
187 20% final energy consumption from renewable sources by 2020. Renewables will continue to play a
188 key role in helping the EU meet its energy needs beyond 2020. EU countries have agreed on a new
189 renewable energy target of at least 27% of final energy consumption in the EU as a whole by 2030 as

¹⁸ For more information see <https://ec.europa.eu/inea/ten-t/ten-t-projects/projects-by-country>

¹⁹ For more information see <https://ec.europa.eu/inea/ten-t/ten-t-projects/projects-by-transport-mode>

²⁰ Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU; See: <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013R1315>

²¹ During the drafting process of this document work was ongoing on guidelines towards achieving 'good navigation status', addressing also the linkage to the WFD. Related documents will be made available as soon as finalised.

²² Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC; See: <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32009L0028>

190 part of the EU's energy and climate goals for 2030²³. On 30 November 2016 the Commission
191 published a proposal for a revised Renewable Energy Directive towards meeting these targets²⁴. The
192 long-term goal is to reduce greenhouse gas emissions by 80-95% until 2050.

193 A number of measures are required to achieve these targets, including the increase of energy
194 efficiency and the increase of energy production from renewable sources. EU countries have
195 committed to reaching their own national renewables targets which are varying amongst Member
196 States. Renewable energy can be produced from different sources including wind, solar, hydropower,
197 geothermal, biomass and also tidal. All EU countries have adopted national renewable energy action
198 plans²⁵ under the Renewable Energy Directive. These action plans outline how Member States want
199 to achieve their Renewable Energy targets. Beside others these plans cover:

- 200 • individual renewable energy trajectories for electricity, heating and cooling, and transport
201 sectors;
- 202 • the planned mix of different renewables technologies.

203 Hydropower constitutes an important renewable energy source, although the share of contribution
204 from other sources of renewable energy is increasing. Specific hydropower facilities with balancing
205 capability can also play an important role to integrate other sources of variable renewables, such as
206 wind and solar. By impacting on hydromorphology new hydropower plants or new modifications at
207 existing facilities altering hydromorphology are likely to be subject to an Article 4(7) Test by causing
208 deterioration of water status.

209 **2.3 EU Raw Materials Strategy and Extractive Waste Directive**

210 In 2008, the Commission adopted the Raw Materials Initiative²⁶ which set out a strategy for tackling
211 the issue of access to raw materials in the EU. This strategy has three pillars which aim to ensure i)
212 fair and sustainable supply of raw materials from global markets, ii) sustainable supply of raw
213 materials within the EU²⁷, and iii) resource efficiency and supply of "secondary raw materials" through
214 recycling. The strategy covers all raw materials used by European industry except materials from
215 agricultural production and materials used as fuel.

216 Waste from extractive operations (i.e. waste from extraction and processing of mineral resources) is
217 one of the largest waste streams in the EU. It involves materials that must be removed to gain access
218 to the mineral resource, such as topsoil, overburden and waste rock, as well as tailings remaining after
219 minerals have been largely extracted from the ore.

220 Directive 2006/21/EC²⁸ provides for measures, procedures and guidance to prevent or reduce as far
221 as possible any adverse effects on the environment²⁹, in particular water, air, soil, fauna and flora and

²³ European Council (23 and 24 October 2014) Conclusions on 2030 Climate and Energy Policy Framework; See: <http://data.consilium.europa.eu/doc/document/ST-169-2014-INIT/en/pdf>

²⁴ Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources COM/2016/0767 final - 2016/0382 (COD); See: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016PC0767>

²⁵ See <https://ec.europa.eu/energy/node/71>

²⁶ Communication from the Commission to the European Parliament and the Council - The raw materials initiative — meeting our critical needs for growth and jobs in Europe COM(2008) 699 final; See: https://ec.europa.eu/growth/sectors/raw-materials/policy-strategy_en

²⁷ More information on the sustainable supply of raw materials from EU sources can be obtained under the following link: http://ec.europa.eu/growth/sectors/raw-materials/policy-strategy/sustainable-supply-eu_en

²⁸ Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC; See: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02006L0021-20090807>

²⁹ The directive does not apply for injection of water and re-injection of pumped ground-water as defined in the first and second indents of Article 11(3)(j) of Directive 2000/60/EC, to the extent authorised by that Article.

222 landscape, and any resultant risks to human health, brought about as a result of the management of
223 waste from the extractive industries. In regard to water the construction and management of waste
224 facilities need to meet the conditions in the short and long-term perspectives for preventing pollution of
225 the soil, air, groundwater or surface water, in accordance with the groundwater directive and the WFD.

226 Article 13(1) of the directive outlines that the operator of such a facility has to take the necessary
227 measures in order to meet Community environmental standards, in particular to prevent, in
228 accordance with Directive 2000/60/EC, the deterioration of current water status, inter alia, by a)
229 evaluating the leachate generation potential, including contaminant content of the leachate, of the
230 deposited waste during both the operational and after-closure phase of the waste facility, and
231 determining the water balance of the waste facility; b) preventing or minimising leachate generation
232 and surface water or groundwater and soil from being contaminated by the waste; and c) collecting
233 and treating contaminated water and leachate from the waste facility to the appropriate standard
234 required for their discharge. The requirement for such measures can only be reduced if an
235 assessment of environmental risks shows that the waste facility poses no potential hazard to soil,
236 groundwater or surface water (Article 13(3)).

237 Further according to Article 13(5) when placing extractive waste back into excavation voids, whether
238 created through surface or underground extraction, which will be allowed to flood after closure, the
239 operator shall take the necessary measures to prevent or minimise water status deterioration and soil
240 pollution in accordance, mutatis mutandis, with paragraphs (1) and (3). The operator shall provide the
241 competent authority with the information necessary to ensure compliance with Community obligations,
242 in particular those in the WFD.

243 **2.4 Directive 2007/60/EC on the assessment and management of flood risks**

244 In 2007, the EU Floods Directive (FD)³⁰ entered into force with the aim to reduce the adverse
245 consequences on human health, the environment, cultural heritage and economic activity associated
246 with floods in the Community. Under Article 9 the FD requires Member States to develop flood risk
247 management plans focusing on protection, prevention and awareness. These shall be reviewed and
248 updated every six years and have to include a summary of measures and their prioritisation aiming to
249 achieving the appropriate objectives of flood risk management (FD Article 7). The first flood risk
250 management plans have been adopted for the 2016-2021 cycle.

251 Furthermore, Member States shall take appropriate steps to coordinate the application of all aspects
252 of implementation focusing on opportunities for improving efficiency, information exchange and for
253 achieving common synergies and benefits (FD Article 9) and more specifically:

- 254 • The flood maps and the reviews of the characterisation analysis required under WFD Article
255 5(2) and the information in the flood maps shall be consistent with relevant information
256 presented under the WFD (FD Article 9(1));
- 257 • The development and review of the FRMPs and RBMPs shall be coordinated, and may be
258 integrated (FD Article 9(2));
- 259 • The active involvement of all stakeholders under both Directives shall be coordinated, as
260 appropriate (FD Article 9(3)).

³⁰ Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks; See: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32007L0060>

261 The implementation of both the WFD and FD would benefit from Member States taking an integrated
262 approach to maximise the synergies between the two policies (e.g. via natural water retention
263 measures³¹) and minimise conflicts between them. When designing programmes of measures under
264 both directives it is important to be clear on what synergies are being taken advantage of and what
265 potential conflicts there may be. New flood risk management projects triggered by the FD could result
266 in changes to the hydromorphology, e.g. hard defence systems. Such planned changes can require
267 being subject to Article 4(7) assessments.

268 **2.5 Marine Strategy Framework and Maritime Spatial Planning Directives**

269 The *Marine Strategy Framework Directive* (Marine Directive or MSFD, 2008/56/EC) aims at achieving
270 the 'good environmental status' of European marine waters by the year 2020 through the
271 implementation of two overarching principles: the ecosystem-based approach to the management of
272 human activities and an integrated, coordinated approach at regional and sub-regional level.

273 In the context of exemptions, it is important to consider the scope and differences of the MSFD and
274 the WFD in defining environmental objectives:

- 275 • Both the MSFD and the WFD address coastal water bodies but the MSFD clarifies its scope in
276 covering coastal water bodies to those particular aspects of the environmental status of the
277 marine environment which are not already addressed through the WFD. The MSFD
278 consequently applies to WFD coastal water bodies for additional topics such as birds,
279 cetaceans, fish, litter, underwater noise and other aspects not already addressed by the WFD.
- 280 • Both the WFD and the MSFD use similar concepts for their environmental objectives. Good
281 Ecological Status in coastal water bodies under the WFD refers to defined pelagic and benthic
282 biological objectives taking into account physico-chemical and hydromorphological
283 parameters. Good Environmental Status under the MSFD is broader and covers 11 qualitative
284 descriptors, including all aspects of biodiversity (birds, mammals, reptiles, fish, cephalopods,
285 pelagic and benthic habitats, food webs) and a number of pressure-based descriptors (non-
286 indigenous species, eutrophication, hydrographical changes, contaminants, litter and energy).
287 There are overlaps between the definitions of good status under the WFD and MSFD,
288 particularly for eutrophication and contamination issues.

289 Article 14 of the MSFD provides for certain exceptions to achieving good status in its coastal and
290 marine waters (Note: not to confuse with the WFD's "exemptions"). Among other reasons, Article 14(1)
291 (d) provides that Member States must notify the Commission in case it identifies an instance where it
292 cannot achieve good status due to modifications or alterations to the physical characteristics of marine
293 waters brought about by actions taken for reasons of overriding public interest which outweigh the
294 negative impact on the environment, including any transboundary impact. Member States have to take
295 appropriate ad-hoc measures aiming to continue pursuing their environmental targets, to prevent
296 further deterioration in the environmental status and to mitigate the adverse impact at the level of the
297 marine region or sub-region concerned or in the marine waters of other Member States. In addition
298 Article 14(1)(2) specifies that Member States shall ensure that the modifications or alterations do not
299 permanently preclude or compromise the achievement of good environmental status at the level of the
300 marine region or sub-region concerned or in the marine waters of other Member States.

³¹ For more information see: <http://ec.europa.eu/environment/water/adaptation/ecosystemstorage.htm>

301 As the WFD covers all coastal waters out to one nautical mile beyond the baseline from which
302 territorial waters are drawn, new physical modifications, like dredging, port construction, drainage or
303 flood protection taking place within this area or with an impact on this area must be assessed for WFD
304 compliance and the possible application of Article 4(7) requirements.

305 The *Maritime Spatial Planning Directive* 2014/89/EU (MSP) creates a common framework for maritime
306 spatial planning in Europe. This since competition for maritime space – for renewable energy
307 equipment, aquaculture and other growth areas – has highlighted the need for efficient management,
308 to avoid potential conflict and create synergies between different activities. Several marine activities
309 (even if offshore) might trigger a modification of the coast (e.g. oil and wind platforms require landing
310 of cables and pipelines).

311 Engaging at an early stage with marine planners can help to reach improved policy coherence and
312 might reduce the need for Article 4(7) cases in coastal water bodies.

313 **2.6 European Funding Instruments**

314 The European Funding Instruments promote the implementation of specific policies. Each instrument
315 has a dedicated focus and targets certain actors and activities. Proposed operations and investments
316 for new projects, which might require assessments in relation to WFD Article 4(7), are frequently
317 linked with investments financed under these instruments and *inter alia* need to meet the requirements
318 of EU legislation, including the WFD. In the following, some of the main European Funding
319 Instruments related to water are briefly described.

320 **2.6.1 European Structural and Investment Funds**

321 The European Structural and Investment Funds (ESIF) are the European Regional Development Fund
322 (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund
323 for Rural Development (EAFRD), and the European Maritime and Fisheries Fund (EMFF), aiming to
324 invest in job creation and a sustainable and healthy European economy³². The ESIF is also the main
325 EU funding instrument for water related projects.

326 Member States were required to submit strategic level Partnership Agreements to the European
327 Commission setting out how the funds will be used during the current funding period at national level.
328 Specific investment programmes then detail how funds will be spent in the different regions and
329 through projects in policy areas concerned.

330 The ERDF and CF (which form together with the European Social Fund the so-called Cohesion Policy)
331 are managed through Operational Programmes, which cover an entire Member State or regions
332 therein. Cohesion Policy³³ is an important source of funding for technical flood defence infrastructure
333 like dykes, dams, retention walls, etc., or investments in the water, energy or transport sectors. The
334 EAFRD is administered through Rural Development Programmes. Member States have the possibility
335 to request co-financing for the construction of new irrigation networks including reservoirs, drainage of
336 agriculture land and flood risk prevention measures like dykes and dams.

³² The funds have a total EU budget of EUR 454,446,693 implemented in the framework of 533 programmes for the period 2014-2020. More information: <https://cohesiondata.ec.europa.eu/overview>.

³³ 11 investment priorities or "thematic objectives" are supported in the 2014-2020 programming period. Thematic objective 6 applies to water.

337 Projects financed by ESI funds *inter alia* need to meet the requirements of EU legislation, including the
 338 WFD, and its exemptions. As an example, Article 6 of Regulation 1303/2013 points out that
 339 "Operations supported by the ESI Funds shall comply with applicable Union law and the national law
 340 relating to its application ('applicable law')"³⁴. More specifically, Annex 1 of Regulation 1303/2013
 341 requests that investments shall be in line with the water management hierarchy in line with the WFD³⁵
 342 and contains a specific ex-ante-conditionality related to the WFD³⁶. Therefore, ensuring compliance,
 343 also with Article 4(7), is a compulsory prerequisite and an obligation for a project proposal in order to
 344 be selected and subsequently eligible.³⁷

345 2.6.2 Connecting Europe Facility (CEF)

346 The Connecting Europe Facility³⁸ (CEF) is a key EU funding instrument, financed by the Cohesion
 347 Fund, to promote growth, jobs and competitiveness through targeted infrastructure investment at
 348 European level. It supports the development of interconnected trans-European networks in the fields
 349 of transport (TEN-T), energy and digital services. CEF investments fill the missing links in Europe's
 350 energy, transport and digital backbone. The CEF is divided into three sectors: CEF Energy, CEF
 351 Transport and CEF Telecom. The CEF is implemented through direct management by the European
 352 Commission (direct grants). Article 23 of Regulation 1316/2013³⁹ calls for compliance of projects
 353 proposed to be financed under CEF with EU legislation, including the WFD and Article 4(7), as a
 354 prerequisite for eligibility.

355 2.6.3 Instrument for Pre-Accession

356 The Instrument for Pre-accession Assistance⁴⁰ (IPA) is the means by which the EU supports reforms
 357 in the 'enlargement countries' with financial and technical help. The IPA funds build up the capacities
 358 of the countries throughout the accession process. The EU operates comprehensive approval
 359 procedures to ensure new members are admitted only when they can demonstrate they will be able to
 360 play their part fully as members, namely by complying with all the EU's standards and rules. The
 361 conditions and timing of the candidate's adoption, implementation and enforcement of all current EU
 362 rules (the "acquis") are negotiated between the EU and the respective candidate country.

363 Chapter 27 is "Environment". The acquis comprises over 200 major legal acts including the WFD
 364 covering horizontal legislation, water and air quality, waste management, nature protection, industrial
 365 pollution control and risk management, chemicals and genetically modified organisms (GMOs), noise
 366 and forestry. Compliance with the acquis, including the application and enforcement of the WFD in the
 367 IPA countries, requires significant investment.

³⁴ Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006; see: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R1303>

³⁵ Annex 1 "Common Strategic Framework", Point 5.2.3 of EU Regulation (No 1303/2013); <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R1303>

³⁶ Annex XI to CPR 1303/2013, ex-ante-conditionality for Thematic Objective 6, p.123: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:347:0320:0469:en:PDF>

³⁷ Commission Implementing Regulation 2015/207 of 20 January 2015 lays down detailed rules for major projects related to the WFD; <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32015R0207>

³⁸ Art. 5 of Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010. The total EU Budget is EUR 33,242,259,000 for the period 2014 to 2020.

³⁹ Art. 23 EU Regulation 1316/2013 Compliance with Union policies and Union law: "Only actions which are in conformity with Union law and which are in line with the relevant Union policies shall be financed under this Regulation".

⁴⁰ Regulation (EU) No 231/2014 of the European Parliament and of the Council of 11 March 2014 establishing an Instrument for Pre-accession Assistance (IPA II). IPA II dedicates EUR 11.7 billion for the period 2014-2020.

368 **2.7 Climate change policy including adaptation and mitigation as a cross-** 369 **cutting issue**

370 At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever
371 universal, legally binding global climate deal. The agreement set a framework for mitigation and
372 adaptation framing also the EU climate policy.

373 Climate change adaptation and mitigation strategies respectively plans have been and are developed
374 at different administrative levels. The main aim is to reduce the vulnerabilities to climate change or to
375 mitigate greenhouse gas emission. They can therefore trigger a set of measures, such as flood
376 defence infrastructure, reallocation of existing infrastructure, water storage (incl. hydropower) and
377 water abstraction, but also investments in green infrastructure like natural water retention measures.

378 CIS Guidance Document No. 24 on River Basin Management in a changing climate⁴¹ points out that
379 *"the implementation of specific adaptation measures, for instance infrastructure projects (like for flood*
380 *risk management), might invoke exemptions according to Article 4(7) of the WFD more often".* And
381 further that *"certain adaptation measures to climate change can be counterproductive to WFD aims,*
382 *e.g. storage basins. Such measures need to meet the conditions set in Article 4(7) of the WFD on new*
383 *modifications"*.

384 The elaboration and implementation of climate adaptation and mitigation plans would benefit from an
385 integrated approach by taking WFD requirements into account in order to maximise the synergies
386 between the two policies and minimise conflicts between them.

387 **2.8 Other environmental policies**

388 The WFD is strongly linked with other environmental directives and policies. WFD Article 4(9)
389 indicates that steps must be taken to ensure that the application of Article 4(7) (as well as Article 4(3)
390 to 4(6)) guarantees at least the same level of protection as existing Community legislation. In other
391 words, compliance with other environmental legislation must be ensured despite the application of
392 exemptions under the WFD.

393 Ensuring compliance also provides the opportunity to utilise synergies and reduce the work load in the
394 assessments required for a proposed project under different legislation. As such grouping of
395 assessments and streamlining can be efficient (e.g. in terms of data collection and public
396 participation)⁴².

397 In the following, key environmental directives are described, including the Strategic Environmental
398 Assessment (SEA Directive), Environmental Impact Assessment (EIA) Directive and the Habitats
399 Directive (HD). The specific linkages and potentials for streamlining of assessments are addressed in
400 more detail in the subsequent chapters of the Guidance. A comparative overview table summarising
401 relevant requirements of these directives is provided in Annex A.

⁴¹ https://circabc.europa.eu/sd/a/a88369ef-df4d-43b1-8c8c-306ac7c2d6e1/Guidance%20document%20n%2024%20-%20River%20Basin%20Management%20in%20a%20Changing%20Climate_FINAL.pdf

⁴² For more detailed information of such approaches see e.g. Guidance on Streamlining environmental assessment procedures for energy infrastructure Projects of Common Interest (PCIs), http://ec.europa.eu/environment/eia/pdf/PCI_guidance.pdf; Commission guidance document on streamlining environmental assessments conducted under Article 2(3) of the EIA Directive <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2016:273:FULL&from=DE>

402 **2.8.1 Strategic Environmental Assessment (SEA) Directive**

403 Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the
404 environment (SEA Directive)⁴³ aims to provide a high level of protection of the environment and to
405 contribute to the integration of environmental considerations into the preparation of certain plans and
406 programmes with a view to promote sustainable development. The SEA Directive seeks to protect the
407 environment by laying down requirements with respect to the procedures to be followed by the
408 Member States when identifying, recording and assessing the environmental effects of certain plans
409 and programmes which are likely to have significant effects on the environment.

410 The SEA Directive applies to plans and programmes which meet all four criteria:

- 411 (i) the plan or programme should be subject to preparation and/or adoption by an authority at
412 national, regional or local level;
- 413 (ii) the plan and programme is required by legislative, regulatory or administrative provisions;
- 414 (iii) it is prepared for any of the sectors listed in Article 3(2)(a) of the SEA Directive (e.g.
415 agriculture, fisheries, energy, industry, transport, water management, town and country
416 planning or land use); and
- 417 (iv) sets the framework for future development consent of projects listed under Directive
418 85/337/EEC, or which, in view of the likely effect on sites, have been determined to require an
419 assessment pursuant to Article 6 or 7 of Directive 92/43/EEC.

420 Therefore, plans and programs as described in the previous chapters might, prior to their adoption, be
421 required to be subject to an assessment of their environmental effects under the SEA Directive.

422 Also CIS Guidance Document Nr 11 on the planning process⁴⁴ points out that land use planning and
423 water planning should support each other as far as possible and that, where applicable, the SEA
424 should be taken into account as well. The collection of baseline data, the identification and
425 assessment of the reasonable alternatives and cumulative effects, the mitigation measures, the
426 development of monitoring procedures, the development of consultation and public participation
427 procedures are potential issues to consider for synergies between the SEA process and Article 4(7)
428 related assessments. If the plans and programmes are expected to affect water bodies, it is
429 recommended that the assessment under SEA includes a chapter on the WFD and Article 4(7). This
430 can result in the saving of resources, strengthening of the assessment procedures and generation of a
431 more holistic approach in management planning⁴⁵.

432 The application of the SEA procedure can in particular:

- 433 • be used as a first indication if Article 4(7) assessments might be required;
- 434 • help to assess cumulative effects of a number of individual projects in their entirety;
- 435 • facilitate relevant assessments on overriding public interest / weighing of interests and the
436 assessment of better environmental options in case an Article 4(7) Test is required.

⁴³ Directive 2001/42/EC of the European Parliament and the Council on the assessment of the effects of certain plans and programmes on the environment, OJ L 197, 21.7.2001, p. 30–37.

⁴⁴ CIS Guidance Document No. 11 – Planning process; See: [https://circabc.europa.eu/sd/a/4de11d70-5ce1-48f7-994d-65017a862218/Guidance%20No%2011%20-%20Planning%20Process%20\(WG%202.9\).pdf](https://circabc.europa.eu/sd/a/4de11d70-5ce1-48f7-994d-65017a862218/Guidance%20No%2011%20-%20Planning%20Process%20(WG%202.9).pdf)

⁴⁵ Carter, J.; Howe, J. (2006): The Water Framework Directive and the Strategic Environmental Assessment Directive: Exploring the linkages, Environmental Impact Assessment Review 26(3):287-300

437 Therefore, to ensure the effectiveness and the efficiency of the two assessments (SEA and Article
438 4(7)), it is recommended that competent authorities coordinate and closely cooperate with each other
439 throughout the process, e.g. by gathering of environmental information, assessing the likely significant
440 impact of the particular activity on the environment including on water status, providing access to
441 information, consultation and participation to the concerned stakeholders and the public.

442 **2.8.2 Environmental Impact Assessment (EIA) Directive**

443 Directive 2011/92/EU⁴⁶ on the assessment of the effects of certain public and private projects on the
444 environment (EIA Directive) as amended by Directive 2014/52/EU aims to ensure that projects which
445 are likely to have a significant effect on the environment are adequately assessed before they are
446 approved. Hence, before any decision is taken to allow such a project to proceed, the possible
447 impacts it may have on the environment (both from its construction, operation or demolition) need to
448 be identified and assessed.

449 An assessment is obligatory for projects listed in Annex I of the Directive, which are considered as
450 having significant effects on the environment. Other projects, listed in Annex II of the Directive, are not
451 automatically subject to an EIA procedure. For Annex II projects, the Member States have a margin of
452 discretion to decide on a case-by-case basis or according to thresholds or certain criteria whether the
453 project is to be made subject to an assessment because of its likely significant effects on the
454 environment taking into account the relevant selection criteria set out in Annex III of the Directive. In
455 the case where the Member State decides that the project will have significant effects on the
456 environment an environmental impact assessment has to be carried out.

457 The relevance and potentials for synergies and streamlining of assessments required under the EIA
458 and Article 4(7) are specified in more detail in the subsequent chapters of the Guidance (see in
459 particular chapter 4.2 and Annex A).

460 **2.8.3 Birds and Habitats Directives**

461 Directive 92/43/EEC⁴⁷ on the conservation of natural habitats and of wild fauna and flora aims to
462 ensure the survival of Europe's most endangered and vulnerable species. Together with the Birds
463 Directive 2009/147/EC, it sets the standard for nature conservation across the EU and enables
464 Member States to work together within the same legislative framework in order to protect the most
465 vulnerable species and habitat types across their entire natural range within the EU. The protected
466 areas designated under these directives form the Natura 2000 network.

467 Together with the Directives' species protection requirements the establishment and management of
468 Natura 2000 sites⁴⁸ are the key tool for maintaining or bringing protected species and habitats into a
469 favourable conservation status. The Birds Directive protects around 500 bird species naturally
470 occurring in Europe. The Habitats Directive protects around 1,200 European species other than birds
471 which are considered to be endangered, vulnerable, rare and/or endemic. Included in the Directive are
472 sites hosting the natural habitat types listed in Annex I (e.g. coastal and halophytic habitats, fresh
473 water habitats) and habitats of the species listed in Annex II such as mammals, reptiles, fish,
474 crustaceans, insects, molluscs, bivalves and plants.

⁴⁶ Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, OJ L 26, 28.1.2012, pp.1-21, as amended by Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014, OJ L 124, 25.4.2014, pp. 1-18

⁴⁷ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

⁴⁸ Special Areas of Conservation under the Habitats Directive and Special Protection Areas under the Birds Directive.

475 The key requirements for the protection and management of Natura 2000 sites are set out in Article 6
476 of the Habitats Directive. In particular, any plan or project likely to damage a Natura 2000 site has to
477 be subject to an appropriate assessment within the meaning of Article 6(3) of the Habitats Directive
478 and can only be authorised if it does not affect the integrity of the site, or if it fulfils the conditions for
479 derogations under Article 6(4) of the Habitats Directive⁴⁹. A proposed project affecting a water body
480 might therefore not only require assessments related to Article 4(7) of WFD; it might also lead to the
481 need for assessments in relation to a Natura 2000 site hosting such a water body under Article 6(3)
482 and 6(4) of the Habitats Directive⁵⁰.

483 Thus, both the WFD and the Habitats Directive allow for the use of exemptions under certain
484 conditions, although there are some differences in the procedures and conditions. In both cases
485 authorities need to carry out the relevant procedures and tests under each Directive. However, there
486 are also potentials for synergies and streamlining of the related data collection and assessments,
487 which are outlined in more detail in the subsequent chapters of the Guidance.

⁴⁹ For more detailed information see Guidance documents on Article of the 'Habitats Directive' 92/43/EEC at:
http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm
http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/new_guidance_art6_4_en.pdf

⁵⁰ For more detailed information on links between those assessments see the relevant document, section 4.3, at:
<http://ec.europa.eu/environment/nature/natura2000/management/docs/FAQ-WFD%20final.pdf>

488 3 GENERAL CONSIDERATIONS AND SCOPE OF ARTICLE 4(7)

489 3.1 Principle relationship between assessments

490 The following sections provide a recapitulation of the WFD environmental objectives and clarification
491 on the scope of Article 4(7), its applicability and examples for conditions under which an Article 4(7)
492 Test is triggered.

493 The process for determining whether a

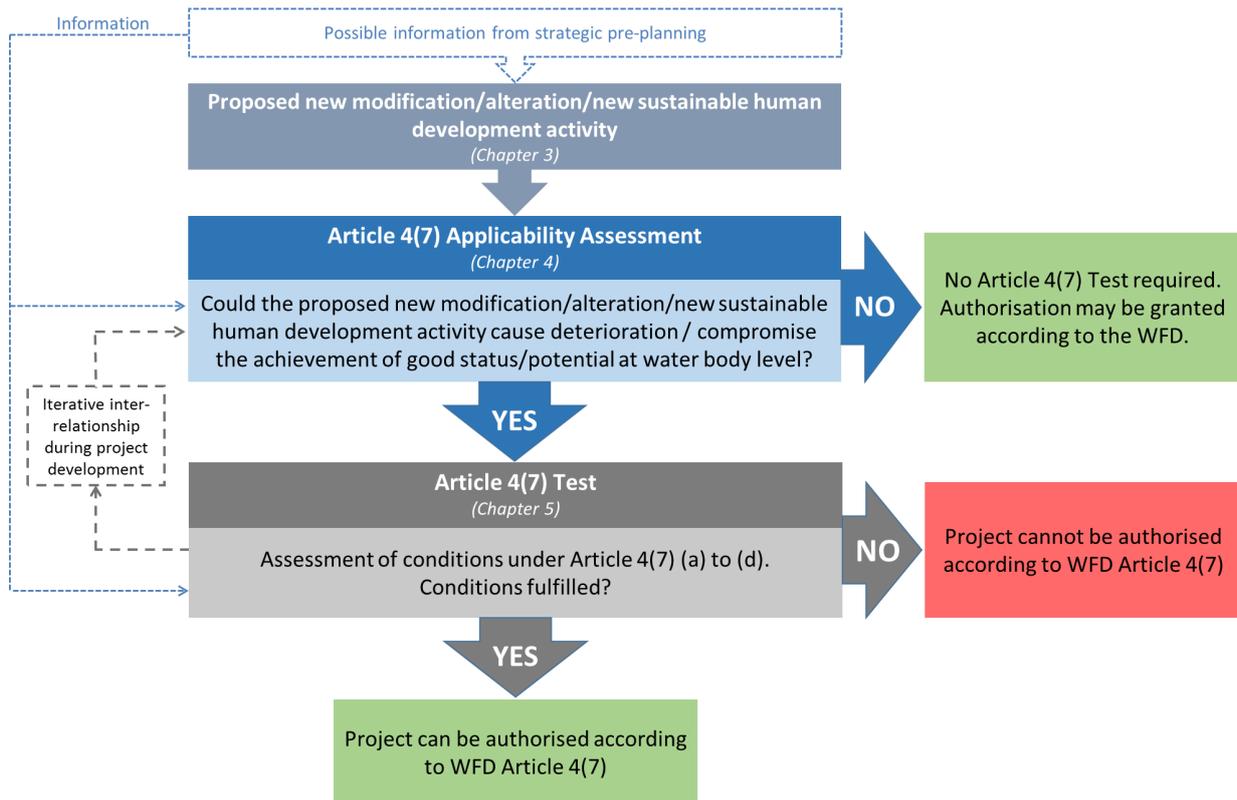
- 494 • new modification to the physical characteristics of a body of surface water / alterations to the
495 level of bodies of groundwater might lead to deterioration / non-achievement of good status /
496 potential, or
- 497 • a new sustainable human development activity might lead to deterioration from high status to
498 good status

499 is a first step in an authorisation or licensing process and needs to be accomplished in advance. This
500 process is called in this context "Applicability Assessment" in relation to Article 4(7) (see chapter 4).
501 This step is necessary to give effect to the obligations of the Directive as it is essential to assess how
502 a proposed project⁵¹ is expected to affect the environmental objectives of the affected water bodies. It
503 is an important first step to determine whether an "Article 4(7) Test" is required (see chapter 5). The
504 "Applicability Assessment" needs to be distinguished from the "Article 4(7) Test". If a project is
505 expected not to cause deterioration, or compromising the achievement of good status/potential (e.g.
506 due to the application of mitigation measures which should be an inherent element of a project), then
507 no Article 4(7) Test is required and the project can be authorised under the WFD.

508 On the other hand, if the project may cause deterioration / compromising the achievement of good
509 status/potential, then it can only be authorised in case the conditions as outlined under Article 4(7) (a)
510 to (d) are fulfilled, and hence the "Article 4(7) Test" is passed. It follows that if the conditions are not
511 fulfilled and the Article 4(7) Test fails, the project cannot be authorised under the WFD.

512 Figure 1 illustrates the principle relationship between the "Article 4(7) Applicability Assessment" and
513 the "Article 4(7) Test". Both are later on specified in more detail, including the iterative inter-
514 relationship between "Applicability Assessment" and "Article 4(7) Test" during project development.
515 Strategic pre-planning (e.g. for specific sectorial development plans) may inform the elaboration and
516 selection of projects, WFD related assessments and overall the decision making process.

⁵¹ Note that Article 4(7) does not specify the term "project". The term is therefore used for illustration purposes. It cannot be excluded that other types of activities with potential effects on the status or potential of water bodies come within the scope of Article 4(7).

517 **Figure 1: Principle relationship between "Article 4(7) Applicability Assessment" and "Article 4(7) Test"**

518

519 Note that next to the conditions of Article 4(7) it needs to be ensured that other relevant WFD
 520 requirements are fulfilled (e.g. Article 4(8) and 4(9), specified later in the document). The
 521 investigations undertaken during the "Applicability Assessment" phase but also the "Article 4(7) Test"
 522 provide the opportunity to utilise synergies with assessments when they are required under other EU
 523 environmental legislation, in particular the Environmental Impact Assessment (EIA) Directive, the
 524 Habitats Directive (HD) and the Strategic Environmental Assessment Directive (SEA). The
 525 relationships are described later on in more detail.

526 3.2 Recap of the WFD Environmental Objectives and Article 4(7)

527 The objective of the Water Framework Directive is - amongst others - to 1) achieve good
 528 status/potential of all water bodies by 2015 and 2) prevent further deterioration of any water body.
 529 These objectives apply to both surface water bodies (including natural, artificial and heavily modified)
 530 and groundwater bodies in accordance to Article 4(1).

531 For natural surface water bodies, ecological status is defined through biological quality elements
 532 (BQEs) as well as the hydromorphological, chemical and physico-chemical elements supporting the
 533 biological elements (see WFD Annex V). Chemical status is defined by the environmental quality
 534 standards for chemicals set at EU level in Directive 2008/105/EC amended by Directive 2013/39/EU
 535 (priority substances and certain other pollutants)⁵².

536 MS are allowed, under certain conditions, to designate surface water bodies as artificial or heavily
 537 modified water bodies (HMWBs). Artificial water bodies are surface water bodies created by human

⁵² The concentrations of these substances should only be taken into account in the classification of surface water chemical status and not in the classification of ecological status/potential. However, if any of the biological quality elements are found, from biological monitoring, to be showing adverse effects from exposure to these substances (e.g. direct ecotoxicological effects), these effects must be taken into account when classifying ecological status/potential. For further details see CIS Guidance Document No. 13.

538 activity. HMWBs are surface water bodies which, as a result of physical alterations by human activity,
 539 are substantially changed in character (Article 4(3)). The environmental objective for artificial and
 540 heavily modified water bodies is to achieve good ecological *potential* rather than good ecological
 541 status (Article 4(3)), and good chemical status.

542 Groundwater status consists of both quantitative and chemical components. Quantitative status is
 543 defined by the available groundwater resource not exceeded by the long-term annual average rate of
 544 abstraction; and the groundwater levels and flows are sufficient to meet environmental objectives for
 545 associated surface waters and groundwater dependent terrestrial ecosystems; and anthropogenic
 546 alterations to flow direction resulting from level change does not cause saline or other intrusion.
 547 Elements defining groundwater chemical status include quality standards set at EU level (pesticides
 548 and nitrates) and at national level (threshold values), and the absence of negative effects on
 549 depending aquatic and terrestrial ecosystems (for details see WFD Annex V 2.3.2, Directive
 550 2006/118/EC and relevant CIS guidance documents and technical reports⁵³).

551 These objectives established by the WFD are legally binding. Article 4(7) sets out circumstances in
 552 which failure to achieve certain of the WFD objectives are permitted.

WFD Article 4(7):

Member States will not be in breach of this Directive when:

- *failure to achieve good groundwater status, good ecological status or, where relevant, good ecological potential or to prevent deterioration in the status of a body of surface water or groundwater is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater, or*
- *failure to prevent deterioration from high status to good status of a body of surface water is the result of new sustainable human development activities*

and all the following conditions are met:

- a) *All practicable steps are taken to mitigate the adverse impact on the status of the body of water;*
- b) *The reasons for those modifications or alterations are specifically set out and explained in the river basin management plan required under Article 13 and the objectives are reviewed every six years;*
- c) *The reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives set out in paragraph 1 are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development, and*
- d) *The beneficial objectives served by those modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option.*

553

554 Member States are required — unless an exemption under Article 4(7) is granted — to refuse
 555 authorisation for an individual project where it may cause deterioration of a water body or failure to
 556 achieve good status or potential⁵⁴. The decisive governing factor on whether an Article 4(7) Test
 557 needs to be applied is the potential effect of the new modification/alteration or new sustainable
 558 development activity on the water body status (see chapter 3.4), irrespectively of whether it is an
 559 entirely new activity (new modification/alteration or new sustainable development activity) or

⁵³ See for instance CIS Guidance Document No. 18 on groundwater status and trend assessment: https://circabc.europa.eu/sd/a/ff303ad4-8783-43d3-989a-55b65ca03afc/Guidance_document_N%C2%B018.pdf

⁵⁴ See Case Ruling C-461/13 Bund für Umwelt und Naturschutz Deutschland e.V. versus Bundesrepublik Deutschland: <http://curia.europa.eu/juris/document/document.jsf?text=&docid=165446&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=1112450>

560 amendments (e.g. expansions) to already existing activities or infrastructure (e.g. modifications or
561 extensions at an existing dam or weir). In this context, note that also the renewal of an existing
562 authorisation or licensed activity, e.g. a water abstraction permit, can require an Article 4(7) Test - if
563 the conditions of the permit are changed and the change of activities undertaken according to the
564 renewed permit could cause deterioration. For pressures on water bodies stemming from activities
565 authorised under existing permits, a timely review, and potential amendment, is important for the
566 achievement of the WFD objectives.

567 As outlined in Article 4(7), Member states will not be in breach of the Directive if a new
568 modification/alteration/new sustainable human development activity leads to deterioration or
569 compromising the achievement of good status/potential at water body level, and the conditions as
570 outlined under Article 4(7) (a) to (d) are met. Following a precautionary approach, competent
571 authorities may authorise a project in absence of an Article 4(7) Test only if there is sufficient certainty
572 that it will not cause deterioration or compromise the achievement of good status / potential (see
573 chapter 4.1 for further considerations). The evidence on which this decision is based should be
574 documented.

575 It follows that assessments as to whether a new modification/alteration may lead to deterioration or
576 compromise the achievement of good status / potential need to be determined in advance (*ex-ante*),
577 representing the Article 4(7) "Applicability Assessment" phase.

578 In this context it is important to bear in mind that the designation of artificial or HMWBs in accordance
579 with Article 4(3) is not considered as a type of exemption. Artificial and HMWBs are considered as a
580 specific water body category with its own classification scheme and objectives. Therefore, also for
581 water bodies designated as artificial or heavily modified, non-achievement of good ecological potential
582 or deterioration due to a new modification can only be allowed in case the conditions under Article 4(7)
583 are met.

584 **3.3 Scope of Article 4(7)**

585 Under the first limb of Article 4(7), failure to achieve good groundwater status, good ecological status
586 or, where relevant, good ecological potential, or to prevent deterioration in the status of a body of
587 surface water or groundwater is addressed as the result of new modifications to the physical
588 characteristics of a surface water body or alterations to the level of a groundwater body. Furthermore,
589 under the second limb of Article 4(7), failure to prevent deterioration from high status to good status of
590 a body of surface water is addressed as the result of new sustainable human development activities.

591 In the following, clarification on the above terms is provided⁵⁵:

- 592 • New modifications: Modifications to the physical characteristics of surface water bodies mean
593 modifications to their hydro-morphological characteristics (hydrological regime, river continuity,
594 morphological conditions, tidal regime). There is no requirement here regarding the size or spatial
595 extent of the modifications brought about by the project. Also small modifications are covered by
596 this provision. The effects on status may result directly from the modification or alteration or may
597 result from changes in the quality of water brought about by the modification or alteration. Non-
598 exhaustive examples can include hydropower plants, flood protection schemes, future navigation
599 projects or abstractions which are covered by this provision. Also the hydro-morphological

⁵⁵ See also CIS Guidance No 20: http://ec.europa.eu/environment/water/water-framework/economics/pdf/Guidance_document%2020.pdf

600 characteristics of impoundment created for hydropower and water supply can dictate the oxygen
601 and temperature conditions resulting in a deterioration of ecological status in the impounded
602 water and in the downstream river (see also chapter 3.5). These may be different from those in
603 an unmodified water body.

604 The effects on status of those modifications and alterations may be limited to the water bodies in
605 which modification works are undertaken; or extend to water bodies beyond those in which the
606 modification works are undertaken. For example, the abstraction of water from a body of
607 groundwater may cause adverse effects in an associated surface water body and then an Article
608 4(7) Test might also be required in such an associated surface water body (see chapter 3.5).

609

610 • Alterations to the level of groundwater: These can result from new groundwater abstractions via
611 new boreholes or increased abstractions from existing boreholes. Also modifications to surface
612 waters can lead to alterations to the level of groundwater.

613

614 • New sustainable human development activities: The Directive does not give a definition of those
615 activities; however, sustainability includes economic, social and environmental aspects. In
616 general, such activities cannot be defined per se through a set of criteria or policies but are
617 framed by the relevant decision making process requirements within an open ended and iterative
618 procedure. The exact definition for an activity falling under sustainable development will thus
619 depend on aspects such as time, scale, involved stakeholders and information available.
620 Relevant process requirements are provided in the WFD itself, the Strategic Environment
621 Assessment, Environmental Impact Assessment and "Aarhus" Directives and should be guided
622 by the principles of the EC Treaty, being the polluter pays principle, the precautionary principle
623 and preventive action, the principle of rectification of pollution at source and the principle of
624 sustainability.

625 Guidance on sustainable development can be found in the UN Sustainable Development Goals
626 as articulated, for example via the Communication on next steps for a sustainable European
627 future and the related staff working document, which was adopted by the European Commission
628 on 22 November 2016⁵⁶. Furthermore, the decision making process should follow the principles of
629 "good governance", including policy coherence, social inclusion and transparency and make best
630 use of the availability of alternatives. A generic approach for small business developments
631 affecting the same water body may be considered when applying the second point of 4(7).

632 Table 2 provides an overview on the modifications and activities covered by Article 4(7) and the
633 relationship and potential effects on the different quality elements of surface and groundwater bodies.

634 1. New modifications to the physical characteristics of surface water bodies (hydromorphological
635 alterations) can have potential direct and/or indirect effects on the biological quality elements and
636 relevant supporting quality elements of surface water bodies, as well as potential indirect effects
637 on groundwater quantitative status (e.g. changes in surface water hydrology or morphology might
638 lead to alterations to the levels of groundwater). There are also potential indirect effects on the
639 chemical status of surface or groundwater bodies (e.g. abstraction might reduce dilution capacity
640 and therefore increase concentrations).

641

642 2. Alterations to the level of groundwater can have potential direct effects on groundwater
643 quantitative status but in some cases also indirect effects on quality elements determining surface
644 water ecological status and/or the chemical status of groundwater (see also chapter 3.4.2).

⁵⁶ Available at: http://ec.europa.eu/environment/sustainable-development/SDGs/implementation/index_en.htm

645 3. The second point of Article 4(7) relates to deterioration of surface water bodies from high status
 646 to good status as a result of new sustainable human development activities. Deterioration of
 647 groundwater is not covered by this point (neither quantitative nor chemical status), and neither
 648 are heavily modified or artificial water bodies due to the direct reference to "status". It is also not
 649 relevant for surface water chemical status since the quality classes for chemical status only cover
 650 "good" or "failing to achieve good" (WFD Annex V 1.4.3), but not "high". An example where the
 651 second point of Article 4(7) could be relevant is a new urban waste water treatment plant (if it can
 652 be judged as a new sustainable human development activity) discharging into a high status
 653 surface water body, where deterioration from high to good ecological status (but not below) would
 654 only be allowed in case 4(7) criteria are met.

655 **Note that Article 4(7) does not provide an exemption if deterioration caused by inputs of**
 656 **pollutants from point or diffuse sources drives the water body to a status below good⁵⁷.** This
 657 because the first limb of Article 4(7) only addresses new modifications to the physical characteristics
 658 of a surface water body or alterations to the level of bodies of groundwater, but not point or diffuse
 659 sources of pollution. Input of pollutants is therefore potentially only covered under the second limb of
 660 Article 4(7) - new sustainable human development activities - which only relates to deterioration of
 661 surface water bodies from high status to good status.

662 **Table 2: Modifications according to Article 4(7), quality elements and possible effects**

Modification / alteration / sustainable human development activity according to Article 4(7)	Surface water bodies			Groundwater bodies		
	Ecological status / potential			Chemical status	Quantitative status	Chemical status
	Biological quality elements	Supporting elements				
		Hydro-morphological quality elements	Chemical and physico-chemical quality elements			
1) Modification to the physical characteristics of a body of surface water	Possible direct and/or indirect effects	Possible direct and/or indirect effects	Possible direct and/or indirect effects	Possible indirect effects	Possible indirect effects	Possible indirect effects
2) Alterations to the level of bodies of groundwater	Possible indirect effects	Possible indirect effects	Possible indirect effects	Possible indirect effects	Possible direct effects	Possible indirect effects
3) New sustainable human development activities*	Possible direct and/or indirect effects	Possible direct and/or indirect effects	Possible direct and/or indirect effects	Not applicable (because no definition of high status)	Not applicable (because not addressed in this specific context)	

663 * Not further defined, potential effects could therefore be direct or indirect. Groundwater not addressed, only deterioration of
 664 surface waters from high to good, therefore not relevant for surface water chemical status since no definition for high chemical
 665 status for surface waters. Also not relevant for artificial or heavily modified water bodies and therefore the ecological potential
 666 since "new sustainable human development activities" only address deterioration of surface water bodies from high to good.

667 3.3.1 Considerations regarding the time-span of effects on water body status/potential

668 An issue to be considered is the time-span with regard to the effects of proposed activities on water
 669 body status/potential. Proposed activities can lead to

⁵⁷ CIS Guidance Document No. 20: https://circabc.europa.eu/sd/a/2a3ec00a-d0e6-405f-bf66-60e212555db1/Guidance_documentN%C2%B020_Mars09.pdf

- 670 i. Temporary effects on quality elements, allowing water body status/potential to recover within a
671 short period of time;
- 672 ii. Long-term effects, where water body status/potential is changed permanently or over a long
673 period of time, and is not expected to recover.

674 If the status or potential of an element is affected only temporarily over a short period of time and is
675 expected to recover within a short period of time, either naturally or as a result of mitigation, and there
676 will be no long-term adverse consequences, such fluctuations do not constitute deterioration of
677 status/potential and the application of an Article 4(7) Test will not be required. If the effects on water
678 body status/potential are expected to be permanent or over a long period of time, such activities
679 should be subject to an Article 4(7) Test.

680 No definition will be given of "short period of time" or "long period of time". However, the frequencies
681 mentioned for the monitoring programmes⁵⁸ can serve as an indication.

682 The time-span of effects depends on the nature of the proposed activity. Permanent or long-term
683 effects can occur as a result of permanent or ongoing modifications or activities (e.g. deterioration due
684 to substantial hydromorphological changes, deterioration from high to good status due to the
685 continuous discharge of pollutants, deterioration of groundwater status due to continuous groundwater
686 abstraction).

687 Temporary short-term effects can occur as a result of short-duration human activities, such as
688 construction or maintenance works. For example, temporary effects due to the establishment of the
689 modification during the building phase are not required to be addressed as long as there is no long-
690 term adverse consequence and no deterioration in the status or potential of the element could be
691 expected thereafter in the water body.

692 With regard to maintenance, the frequency can have an influence on the effects on the status or
693 potential of a water body. A shift from frequent maintenance actions to more observing practice and
694 action on demand with only short-term effects can reduce impacts while allowing preserving the use.
695 However, in other cases if maintenance has not been carried out regularly or recently, it might also
696 have the same effects on ecological status/potential as completely new works. In other words, if water
697 body status/potential has recovered/stabilised since the last time maintenance was carried out, the
698 fact it is considered to be 'maintenance' from an engineering perspective does not necessarily mean
699 that it cannot affect water body status. In such cases, 'maintenance' activity should be assessed in the
700 same way as a proposed new physical modification and the Article 4(7) Test may need to be applied.

701 Note that regular maintenance works (e.g. maintenance dredging) can potentially contribute to a
702 failure to achieve good ecological status. However, whilst discontinued maintenance could enable the
703 water body to reach good status, stopping or constraining maintenance activities in designated heavily
704 modified water bodies could also result in a "significant adverse effect on the use" in the meaning of
705 Article 4(3), for which the designation has been made. In such cases, maintenance works could be
706 taken into account in the process of defining "good ecological potential" and would therefore not be
707 subject to an Article 4(7) Test.

⁵⁸ See WFD Annex V 1.3.4 and 2.2.3

708 In specific cases temporary negative effects on quality elements might also occur as a result of the
709 implementation of measures according to the Program of Measures meant for the improvement of
710 water body status or potential (e.g. morphological restoration measures). This due to the fact that
711 nature might require time to recover or measures might need time to reach full ecological
712 effectiveness following the intervention to the ecosystem. Such cases might be subject to exemptions
713 according to Article 4(4) based on 'natural conditions' (see chapter 5.5.3) but should not require an
714 Article 4(7) Test.

715 Finally, the above time-span considerations with regard to effects in the context of Article 4(7) need to
716 be distinguished from 'temporary deterioration' in the meaning of Article 4(6), which is restricted to
717 *natural cause or force majeure* which are exceptional or could not reasonably have been foreseen
718 (e.g. deterioration due to extreme floods or prolonged droughts).

719 **3.3.2 Considerations regarding the size of a modification and water body delineation**

720 The size of a modification, or the obligation to carry out an EIA, is not necessarily a relevant criterion
721 to answer the question whether an Article 4(7) Test is required. The relevant approach is to assess if a
722 given project, whatever its importance is, may result in deterioration of the status/potential of a water
723 body or prevent the achievement of good status/potential. Thus, projects of any size may fall under
724 Article 4(7).

725 Potential effects of modifications on status/potential of the water body might differ, independently from
726 the size of a proposed modification but depending e.g. whether important habitats for the status of a
727 water body are affected. Therefore, effects might be different for modifications in sections of a water
728 body without significant importance for the ecosystem, compared to very sensitive stretches hosting
729 key habitats e.g. for spawning of a certain fish species.

730 Another important aspect in this context is the thorough delineation of water bodies. A “water body”
731 should be a coherent discrete and significant element of surface or ground water in the river basin
732 (district) to which the environmental objectives of the Directive must apply. Hence, the main purpose
733 of identifying “water bodies” is to enable the status to be accurately described and compared to
734 environmental objectives⁵⁹. The thorough delineation of water bodies is therefore essential. This
735 because the results of an assessment of the effects of a certain project on water body status/potential
736 can differ depending whether the water body is properly delineated.

737 Furthermore, although the size of a modification can be relevant (e.g. the length of a morphological
738 modification or the area where the groundwater level is altered), criteria which are purely considering
739 the share of a water body which is proposed to be modified are not necessarily meaningful. For
740 instance, smaller modifications in a certain sensitive stretch of a water body might have more severe
741 effects compared to larger modifications in a less sensitive stretch of the same water body.

742 Hence, the relevant criterion is whether or not the proposed modification may affect the
743 status/potential of a water body. Otherwise Member States will be unable to apply the Directive's
744 objectives correctly. Drawing from experiences gained during the pressures-impacts assessments of
745 existing modifications can be useful in this context.

⁵⁹ Guidance Document No 2 - Identification of Water Bodies; See: <https://circabc.europa.eu/sd/a/655e3e31-3b5d-4053-be19-15bd22b15ba9/Guidance%20No%20-%20Identification%20of%20water%20bodies.pdf>

746 3.3.3 Projects outside the scope of Article 4(7)

747 The guidance focuses on projects which are within the scope of Article 4(7) and its applicability. For
748 completeness projects which are outside the scope are here also briefly addressed. Projects which
749 are not considered as new modifications to the physical characteristics of surface water bodies,
750 alterations to the level of groundwater, or new sustainable human development activities, and which
751 are therefore outside the scope of Article 4(7), may affect the status/potential of water bodies. The
752 steps as outlined in the "Article 4(7) Applicability Assessment" can be useful in that wider context for
753 the assessment whether such projects may lead to deterioration or compromising the achievement of
754 the WFD objectives.

755 If the assessment concludes that such projects are not expected to lead to deterioration or
756 compromise the achievement of good status/potential of water bodies, authorisation may be granted
757 according to the WFD. Note that if the assessment concludes that deterioration or compromising the
758 achievement of good status/potential is expected and such projects are outside the scope of Article
759 4(7), authorization may not be granted according to the WFD.

760 3.4 Conditions triggering an Article 4(7) Test

761 The environmental objectives of the WFD are set out in Article 4 of the Directive (for a summary see
762 chapter 3.2). The scope of Article 4(7) and potential effects of projects in the meaning of Article 4(7) –
763 1) new modifications to the physical characteristics of a surface water body, 2) alterations to the level
764 of groundwater, and 3) new sustainable human development activities – are explained in chapter 3.3.
765 The two key objectives against which such new developments have to be assessed are whether they
766 cause

- 767 • Deterioration of status (or potential) of a surface or groundwater body, or
- 768 • Preventing the achievement of good groundwater status, good ecological status / potential for
769 water bodies currently failing to achieve this status / potential.

770 The following clarifications have been provided⁶⁰ on the way in which compliance with the Directive's
771 environmental objectives should be interpreted in the assessment of new developments:

- 772 • consent for the development must not be granted by an authorising authority where the project
773 may cause a deterioration in the status of a body of surface water or where it compromises
774 the attainment of good surface water status or of good ecological potential and good surface
775 water chemical status by the date laid down in the directive, unless a derogation is granted;
- 776 • “deterioration of the status” of the relevant body of surface water includes a fall by one class
777 of any element of the “quality elements” within the meaning of Annex V of the WFD even if the
778 fall does not result in a fall of the classification of the body of surface water as a whole;
- 779 • if the quality element is already in the lowest class, any deterioration of that element
780 represents deterioration of status within the meaning of WFD Article 4(1)(a)(i).

781 The following chapters aim to illustrate examples and considerations for the practical application of the
782 above outlined principles for surface and groundwater bodies. Note that the practical application of
783 these principles and related assessments whether a planned project is expected to cause
784 deterioration or compromise the attainment of good status/potential can be more straightforward and

⁶⁰ Case C-461/13 Bund für Umwelt und Naturschutz Deutschland e.V. versus Bundesrepublik Deutschland:
http://curia.europa.eu/juris/document/document.jsf?jsessionid=9ea7d0f130d6146e624bf57c46808158f287aced950b_e34KaxiLc3eQc40LaxqMbN4Pax8Le0?text=&docid=165446&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=11661

785 reliable for some projects, but pose greater challenges for other cases. Related practical
786 considerations are also addressed in chapters 3.7 and 4.1 of the guidance.

787 3.4.1 Practical considerations and examples for surface water bodies

788 Based on the above clarifications the following practical examples are provided for surface water
789 bodies to illustrate the conditions under which an Article 4(7) Test is triggered for taking a decision
790 regarding authorisation of a new modification or new sustainable human development activity.

791 Example 1 illustrates a case, where the overall ecological status of a water body may deteriorate due
792 to a proposed new modification, therefore triggering an Article 4(7) Test.

793 **Table 3: Example 1 - Deterioration of overall status**

Example 1 – Deterioration of overall status									
Starting point: Overall ecological status determined by quality element in worst condition (in this case moderate).									
Effect due to modification: Overall status may deteriorate due to deterioration of individual quality elements (in this example benthic invertebrate and fish fauna as an effect of deterioration of morphology), therefore triggering an Article 4(7) Test. The example includes in this case a change in overall status of the water body from moderate to poor.									
Quality elements	Biological quality elements			Hydromorphological quality elements supporting the biological elements			Chem. and phys. chem. quality elements supporting the biological elements		Overall ecological status
	Aquatic flora	Benthic invertebrate fauna	Fish fauna	Hydrology	Morphology	Continuity	General conditions	River basin specific pollutants	
Starting point	2	2	3	worse than 2**	2*	worse than 2**	2*	2	3
Effect due to modification	2	3	4	worse than 2**	worse than 2**	worse than 2**	2*	2	4

794 1: High; 2: Good; 3: Moderate; 4: Poor; 5: Bad

795 * Conditions consistent with the achievement of the values specified for good status of the biological quality elements

796 ** Conditions not consistent with the achievement of the values specified for good status of the biological quality elements

797 Example 2 illustrates a case, where the overall ecological status is maintained but one biological
798 quality element may deteriorate due to a proposed new modification, therefore triggering an Article
799 4(7) Test.

800 **Table 4: Example 2 – Overall status remains but deterioration of a biological quality element**

Example 2 – Overall status remains but deterioration of a biological quality element									
Starting point: Overall ecological status determined by quality element in worst condition (in this case good).									
Effect due to modification: Overall ecological status maintained as good but one biological quality element may deteriorate, in this example fish fauna due to deterioration of the quality elements hydrology and continuity, therefore triggering an Article 4(7) Test.									
Quality elements	Biological quality elements			Hydromorphological quality elements supporting the biological elements			Chem. and phys. chem. quality elements supporting the biological elements		Overall ecological status
	Aquatic flora	Benthic invertebrate fauna	Fish fauna	Hydrology	Morphology	Continuity	General conditions	River basin specific pollutants	
Starting point	2	1	1	1	1	1	2*	1	2
Effect due to modification	2	1	2	2*	1	2*	2*	1	2

801 1: High; 2: Good; 3: Moderate; 4: Poor; 5: Bad

802 * Conditions consistent with the achievement of the values specified for good status of the biological quality elements

803 Example 3 illustrates a case, where the overall ecological status of a water body may deteriorate from
 804 high to good due to a proposed new modification, therefore triggering an Article 4(7) Test.

805 **Table 5: Example 3 - Deterioration from high status to good status**

Example 3 – Deterioration from high status to good status									
Starting point: Overall ecological status high since all quality elements in high status class.									
Effect due to modification: Individual quality elements may deteriorate (in this example benthic invertebrate fauna, fish fauna and morphology) and hence overall status may deteriorate from high to good, therefore triggering an Article 4(7) Test.									
Quality elements	Biological quality elements			Hydromorphological quality elements supporting the biological elements			Chem. and phys. chem. quality elements supporting the biological elements		Overall ecological status
	Aquatic flora	Benthic invertebrate fauna	Fish fauna	Hydrology	Morphology	Continuity	General conditions	River basin specific pollutants	
Starting point	1	1	1	1	1	1	1	1	1
Effect due to modification	1	2	2	1	2*	1	1	1	2

806 1: High; 2: Good; 3: Moderate; 4: Poor; 5: Bad

807 * Conditions consistent with the achievement of the values specified for good status of the biological quality elements

808 Example 4 illustrates a case, where the quality element which is already in the lowest class (bad) may
 809 further deteriorate. Note that any further deterioration of a quality element which is already in the
 810 lowest class is considered as deterioration, therefore triggering an Article 4(7) Test.

811 In practical terms, considerations with regard to any further deterioration of a quality element which is
 812 already in the lowest class can include aspects whether such further deterioration would be
 813 measurable, or have detectable adverse effects on the structure and function of the water body under
 814 consideration based on a reasonable assessment. Furthermore, the overall context of the WFD and
 815 the specific requirements of Article 4(7) need to be reflected, i.e. that the **Article 4(7) conditions
 816 apply in cases where a proposed modification prevents the achievement of good
 817 status/potential**. Further deterioration of a water body which is currently failing to achieve this status
 818 or potential, and which is actually in the lowest class, drives the water body further away from
 819 achieving the WFD objectives and thus the need to protect, enhance and restore such water bodies. It
 820 follows that authorities should be particularly vigilant with regard to further deterioration of a quality
 821 element which is already in the lowest class.

822 **Table 6: Example 4 – Deterioration of a quality element of a surface water body which is already in the**
 823 **lowest class**

Example 4 – Deterioration of quality element which is already in the lowest class									
Starting point: Overall ecological status bad since one quality element in bad status class (fish fauna).									
Effect due to modification: The quality element which is already in the lowest class (bad) is further deteriorating (in this example e.g. further loss of composition or abundance of fish fauna due to morphological changes), therefore triggering an Article 4(7) test. Note that any further deterioration of a quality element which is already in the lowest class is considered as deterioration and drives the water body further away from achieving the WFD objectives.									
Quality elements	Biological quality elements			Hydromorphological quality elements supporting the biological elements			Chem. and phys. chem. quality elements supporting the biological elements		Overall ecological status
	Aquatic flora	Benthic invertebrate fauna	Fish fauna	Hydrology	Morphology	Continuity	General conditions	River basin specific pollutants	
Starting point	2	3	5	worse than 2**	2*	worse than 2**	worse than 2**	worse than 2**	5
Effect due to modification	2	3	5↓	worse than 2**	worse than 2**	worse than 2**	worse than 2**	worse than 2**	5

824 1: High; 2: Good; 3: Moderate; 4: Poor; 5: Bad

825 * Conditions consistent with the achievement of the values specified for good status of the biological quality elements

826 ** Conditions not consistent with the achievement of the values specified for good status of the biological quality elements

827

828 **Practical considerations for the role of supporting elements**

829 The lists of quality elements for each surface water category are subdivided into 3 groups of
 830 'elements': (1) biological elements, (2) hydromorphological elements supporting the biological
 831 elements; and (3) chemical and physico-chemical elements supporting the biological elements (see
 832 WFD Annex V).

833 *Hydromorphological elements supporting the biological quality elements*

834 As outlined in CIS Guidance Document No. 13⁶¹, the values of the hydromorphological quality
 835 elements must be taken into account when assigning water bodies to the high ecological status class
 836 (and the maximum ecological potential class), i.e. when downgrading from high ecological status (or
 837 maximum ecological potential) to good ecological status (or potential). For the other status/potential
 838 classes, the hydromorphological elements are required to have conditions consistent with the
 839 achievement of the values specified for the biological quality elements. Therefore, the assignment of
 840 water bodies to the good, moderate, poor or bad ecological status/potential classes may be made on
 841 the basis of the conditions of the biological quality elements.

842 Note that the conditions of the supporting elements should be consistent with the achievement of the
 843 values specified for the biological quality elements and the competent authorities should be in a
 844 position to ascertain in a given case whether the supporting quality element has conditions consistent
 845 with the values specified for the biological quality elements. Examples 2 and 3 above illustrate cases
 846 where biological quality elements are expected to deteriorate because of the deterioration of individual
 847 hydromorphological quality elements, supporting the biological elements, due to the proposed
 848 modification, therefore triggering an Article 4(7) Test.

⁶¹ See CIS Guidance Document No. 13, chapter 2 and Figure 1, on the overall approach to the classification of ecological status and ecological potential: [https://circabc.europa.eu/sd/a/06480e87-27a6-41e6-b165-0581c2b046ad/Guidance%20No%2013%20-%20Classification%20of%20Ecological%20Status%20\(WG%20A\).pdf](https://circabc.europa.eu/sd/a/06480e87-27a6-41e6-b165-0581c2b046ad/Guidance%20No%2013%20-%20Classification%20of%20Ecological%20Status%20(WG%20A).pdf)

849 Also the question whether a new modification may compromise the achievement of good
850 status/potential needs to be considered in that context. An example can be a water body which is
851 currently in less than good status/potential, e.g. due to pollution, but the hydromorphological
852 conditions are consistent with the requirements to achieve good status/potential. A planned new
853 modification, which is expected to deteriorate a hydromorphological quality element (e.g. morphology
854 to values consistent only with moderate status/potential), may not immediately deteriorate a biological
855 quality element (which are already in less than good status due to pollution), but may compromise the
856 achievement of good status/potential following the implementation of measures for pollution reduction
857 in line with the Program of Measures of the River Basin Management Plan. In such a case an Article
858 4(7) Test would be required, even though none of the biological quality elements is expected to
859 deteriorate following the execution of the modification.

860 The above presupposes that assessment methods for the biological quality elements should be able
861 to capture modifications in hydromorphological elements in order to determine whether these would be
862 tantamount to deterioration of the status/potential or a failure to achieve good status/potential on the
863 biological quality elements. If not, a more targeted methodology relating specifically to these
864 supporting quality elements is necessary⁶².

865 As pointed out, there is a need that Member States have developed methodologies which allow
866 capturing the expected effects of changed conditions of the supporting quality elements on the
867 biological quality elements. This issue can be of particular relevance for cases where the biological
868 quality elements are for instance in good status/potential, and a hydromorphological quality element is
869 expected to deteriorate from high status to conditions not consistent with the high status class
870 anymore following the execution of the modification. In absence of consistent methodologies it is
871 prudent to follow a precautionary approach, and therefore an Article 4(7) Test should be performed
872 during the authorisation process of the planned modification.

873 Hence, in practical terms, information (i.e. from the monitoring programs) on the existing conditions of
874 the quality elements for a water body, including the supporting elements, and pre-determined
875 hydromorphological standards for different classes (e.g. high, good, moderate, poor, bad) can be
876 instrumental to be able to assess the risk of a proposed new modification to the biology. Deterioration
877 of any of them (hydrology, morphology or continuity) indicates a significant risk to one or more
878 biological quality elements and supports decisions whether a proposed new modification may lead to
879 deterioration and hence require an Article 4(7) Test (see also the respective case study from
880 UK/Scotland).

⁶² The JRC Discussion Paper "European surface water ecological assessment methods – an overview of their sensitivity to pressures" points out that from the intercalibration technical reports, there is not much evidence that the BQE methods currently in use reliably pick up the effects of hydromorphological alterations. To be sure that hydromorphological pressures and their effects do not remain undetected, it is therefore very important to use hymo classification methods alongside the BQEs. See: https://circabc.europa.eu/sd/a/0ce84a75-0988-44c5-b02e-c10e3ceb1363/7%20-%20BQEs_Pressures_sep2017.docx

881

Case study 1: How hydromorphological standards are used to prevent deterioration of status**Country: UK/Scotland**

Under Scotland's [regulatory framework](#), there is a requirement for prior-authorisation for any activity with the potential to adversely affect the water environment, including the abstraction of water; the building of impounding works; and the carrying out of any other building or engineering works in, or in the vicinity of, surface waters.

As a first step in the prior-authorisation process, the regulator ([the Scottish Environment Protection Agency](#)) assesses the risk posed by the proposed activity to the water environment.

This risk assessment involves predicting how:

- (i) the water body's hydromorphological quality elements (hydrology, morphology and continuity) are likely to be altered by the proposed activity; and
- (ii) how those alterations are likely to affect the water body's biological quality elements.

Predicting how the hydromorphological quality elements will be altered requires information on the elements' existing condition. This is provided by SEPA's monitoring and modelling programmes supplemented, if required, by information supplied by the developer. For example, SEPA maintains modelled estimates for all rivers on the degree to which their flows have been altered by existing abstractions, discharges and impoundments.

To assess the risk to the biology, SEPA compares the changes a proposal will cause to the water body's hydromorphology with pre-determined hydromorphological standards for high, good, moderate and poor. These standards have been set such that a breach of any of them (hydrology, morphology or continuity) indicates a significant risk to one or more biological quality elements. Where SEPA considers that a proposal is likely to result in a breach and hence deterioration of status, it can only [authorise the proposal](#) if the requirements of Article 4(7) are met.

The hydromorphological standards are derived, and updated from time to time, via a nationally-coordinated process bringing together research, data and technical experts from across the UK and beyond. The standards are issued to SEPA in the form of [Ministerial Directions](#). Among other things, the Directions list standards for river flows, lake levels and river morphological condition. In 2017, a major review of the standards for the latter will be completed and revised standards issued to reflect improvements in scientific understanding.

The standards allow SEPA to:

- efficiently and consistently assess the risk of deterioration posed by developments, whether that risk is to a water body's overall status or to the status of individual biological quality elements that are in a higher status class than that of the water body overall (e.g. where the water body is in good status overall but some biological elements are in a high status condition);
- in the case of water bodies that are worse than good status (e.g. because of pollution), assess the risk that the development will compromise the future achievement of good status (e.g. by breaching one or more of the hydromorphological standards for good); and
- assist prospective developers by providing information on the scales of development that are likely to be possible in different parts of the water environment without risking deterioration or compromising the future achievement of good status.

882

883 *Chemical and physico-chemical elements supporting the biological elements*

884 The chemical and physico-chemical quality elements supporting the biological elements include the
 885 general conditions and the river basin specific pollutants. The values of the chemical and physico-
 886 chemical quality elements supporting the biological quality elements must be taken into account when
 887 assigning water bodies to the high and good ecological status classes and to the maximum and good
 888 ecological potential classes (i.e. when downgrading from high status/maximum ecological potential to
 889 good ecological status/potential as well as from good to moderate ecological status/potential). For the
 890 other status/potential classes the chemical and physico-chemical elements are required to have
 891 "conditions consistent with the achievement of the values specified for the biological quality elements"
 892 (see WFD Annex V and CIS Guidance Document No. 13).

893

894 The **general conditions** appear to be relevant in the context of Article 4(7) due to the scope of Article
895 4(7) and related effects (see chapter 3.3). Note that the general conditions form a group of conditions.
896 In practical terms the general conditions (transparency, thermal conditions, oxygenation conditions,
897 salinity, acidification status, nutrient conditions) should also be reflected by the status of the biological
898 quality elements and the competent authorities should be in a position to ascertain in a given case
899 whether the supporting quality element has conditions consistent with the values specified for the
900 biological quality elements. Deterioration of any of them indicates a significant risk to one or more
901 biological quality elements and supports decisions whether a proposed modification may lead to
902 deterioration and hence require an Article 4(7) Test. Similar considerations as outlined above for
903 hydromorphological quality elements supporting the biological quality elements may be relevant.

904 Finally, it cannot be ruled out that concentrations of certain river basin specific pollutants might
905 increase due to indirect effects of a proposed project (see chapter 3.3). If this was expected to lead to
906 failure in meeting their (national) environmental quality standards, such failure would be considered as
907 deterioration, thus triggering an Article 4(7) Test. Any further measurable increase in concentrations of
908 pollutants already failing to meet their environmental quality standards would also be considered as
909 deterioration, because it would drive the water body further away from achieving the WFD objectives.
910 Similar considerations apply in relation to the environmental quality standards set for the priority
911 substances and other pollutants at EU level that determine chemical status.

912 In this context, it should be recognised that, for an Article 4(7) exemption to be applicable, the
913 deterioration needs to result from activities within the scope of Article 4(7) (new modifications to the
914 physical characteristics of a surface water body, alterations to the level of groundwater, new
915 sustainable human development activities). Article 4(7) does not provide for exemption if deterioration
916 caused by inputs of pollutants from point or diffuse sources drives the water body to a status below
917 good (see chapter 3.3).

918 **Practical considerations for heavily modified (HMWB) and artificial water bodies (AWB)**

919 A new modification to the physical characteristics of a surface water body might also be planned in
920 water bodies which have been designated as heavily modified or artificial in previous WFD planning
921 cycles (existing HMWB or AWB). In principle, the tables above illustrating examples on the conditions
922 under which an Article 4(7) Test is required for the authorisation of a modification in natural water
923 bodies are also applicable to existing HMWBs and AWBs with reference to their ecological potential
924 and related quality elements.

925 When assessing the impact of a new physical modification on the ecological potential of a HMWB it is
926 important to be able to distinguish this impact from the impact caused by the existing physical
927 modification which led to the HMWB designation. In practice, this distinction should be possible to do,
928 if there is a proper assessment of the hydromorphological and biological quality elements in the
929 current ecological potential.

930 Therefore, a precondition for determining during the Article 4(7) Applicability Assessment whether a
931 new modification could lead to a deterioration or non-achievement of good ecological potential due to
932 a new modification is that the environmental objective of the heavily modified or artificial water body
933 (good ecological potential – GEP) has to be clearly defined according to WFD principles.

934 As explained in chapter 5.5.2, if an Article 4(7) exemption is granted for a new physical modification in
935 an existing HMWB or AWB, the need to re-define the ecological potential of this water body needs to
936 be checked, taking into account the additional physical modification.

937 3.4.2 Practical considerations and examples for groundwater bodies

938 In the following, practical considerations and examples are derived for groundwater bodies based on
939 the above outlined principles described for surface water bodies. If the criteria are met, Article 4(7)
940 exemptions can be applied for alterations to the level of groundwater (a physical characteristic of
941 groundwater bodies) which can result in direct effects on groundwater status. **Alterations to the level
942 of groundwater are particularly relevant for failure to achieve good groundwater quantitative
943 status.** Groundwater quantitative status is defined as being either 'Good' or 'Poor'. The definition of
944 good quantitative status is set out in WFD Annex V 2.1.2. Elements of quantitative status assessment
945 are further specified in CIS Guidance Document No. 18⁶³. For a groundwater body to be of good
946 quantitative status the following criteria (objectives) covered by the definition of good status must be
947 met:

- 948 1) available groundwater resource is not exceeded by the long-term annual average rate of
949 abstraction;
- 950 2) no significant diminution of surface water chemistry and/or ecology resulting from
951 anthropogenic water level alteration or change in flow conditions that would lead to failure of
952 relevant Article 4 objectives for any associated surface water bodies;
- 953 3) no significant damage to groundwater dependent terrestrial ecosystems resulting from an
954 anthropogenic water level alteration;
- 955 4) no saline or other intrusions resulting from anthropogenically induced sustained changes in
956 flow direction.

957 According to Guidance Document No. 18, all relevant tests, considering those elements which are at
958 risk, should be carried out independently of each other, with the results subsequently being combined
959 for an overall assessment of quantitative status. The worst classification among the relevant tests for
960 quantitative status is reported as overall quantitative status, and if any test results in poor status, then
961 this overall classification of the groundwater body will be poor status. It follows that if one (or more) of
962 the relevant groundwater tests could fail as a result of the alteration to the groundwater level,
963 groundwater quantitative status would deteriorate from "good" to "poor" and an Article 4(7) test would
964 be triggered.

965 For a groundwater body which is already in "poor" quantitative status due to existing conditions
966 causing a failure of one or more of the criteria, failure to reach the objective of achieving "good status"
967 due to further alteration to the level of groundwater is possible. Therefore, in case further alteration to
968 the level of groundwater would lead to "*failure to achieve good groundwater status*", an Article 4(7) test
969 would be triggered. Note that in case good status cannot be achieved due to prior and further
970 alteration, exemptions according to Article 4(4) or 4(5) will have to be justified in the river basin
971 management planning process according to their distinct conditions (see also chapter 5.5.3).

972 In the following text, examples are provided to illustrate the conditions under which an Article 4(7) test
973 is required for taking a decision regarding authorisation. The tables are simplified for illustration
974 purposes. CIS Guidance No. 15⁶⁴ should be taken into account for the assessment of the risk for
975 deterioration.

⁶³ For details see Guidance Document No. 18 on Groundwater status and trend assessment: https://circabc.europa.eu/sd/a/ff303ad4-8783-43d3-989a-55b65ca03afc/Guidance_document_N%C2%B018.pdf

⁶⁴ https://circabc.europa.eu/sd/a/e409710d-f1c1-4672-9480-e2b9e93f30ad/Groundwater%20Monitoring%20Guidance%20Nov-2006_FINAL-2.pdf

976 **Table 7: Example 5 – Deterioration of overall groundwater quantitative status from "good" to "poor"**

Example 5					
<p>Starting point: Overall groundwater quantitative status is classified as "good" since each criterion meets the conditions for "good".</p> <p>Effect due to modification: Due to the modification one criterion is expected to deteriorate from "good" to "poor" (in this example due to the damage of a groundwater dependent terrestrial ecosystem), as well as the overall quantitative status, therefore triggering an Article 4(7) test.</p>					
	Criteria				Overall quantitative groundwater status
	1) Available groundwater resource is not exceeded by the long term annual average rate of abstraction	2) No significant diminution of surface water chemistry and/or ecology resulting from anthropogenic water level alteration or change in flow conditions that would lead to failure of relevant Article 4 objectives for any associated surface water bodies	3) No significant damage to groundwater dependent terrestrial ecosystems resulting from an anthropogenic water level alteration;	4) No saline or other intrusions resulting from anthropogenically induced sustained changes in flow direction.	
Starting point	G	G	G	G	G
Effect due to modification	G	G	P	G	P

977 G: Good; P: Poor;

978

979 **Table 8: Example 6 – Groundwater body which is already classified as "poor" and one further criterion**
 980 **does not meet the conditions**

Example 6					
<p>Starting point: Overall groundwater quantitative status is classified as "poor" since one criterion does not meet the conditions for "good" (in this example due to saline intrusions).</p> <p>Effect due to modification: Further alteration to the groundwater level would lead to further deterioration (in this example a terrestrial ecosystem would be damaged) and "<i>failure to achieve good groundwater status</i>", therefore triggering an Article 4(7) test.</p>					
	Criteria				Overall quantitative groundwater status
	1) Available groundwater resource is not exceeded by the long term annual average rate of abstraction	2) No significant diminution of surface water chemistry and/or ecology resulting from anthropogenic water level alteration or change in flow conditions that would lead to failure of relevant Article 4 objectives for any associated surface water bodies	3) No significant damage to groundwater dependent terrestrial ecosystems resulting from an anthropogenic water level alteration;	4) No saline or other intrusions resulting from anthropogenically induced sustained changes in flow direction.	
Starting point	G	G	G	P	P
Effect due to modification	G	G	P	P	P

981 G: Good; P: Poor;

982 **Table 9: Example 7 – Further deterioration of a criterion which is already classified as "poor" leading to**
 983 **failure of achieving "good"**

Example 7					
<p>Starting point: Overall groundwater quantitative status is classified as "poor" since one criterion does not meet the conditions for "good" (in this example due to the damage of a groundwater dependent terrestrial ecosystem).</p> <p>Effect due to modification: Due to the modification the same criterion which is already failing is further deteriorated (e.g. further damages on the same or additional damage of another terrestrial ecosystem) leading to "failure to achieve good groundwater status" and therefore triggering an Article 4(7) test.</p>					
	Criteria				Overall quantitative groundwater status
	1) Available groundwater resource is not exceeded by the long term annual average rate of abstraction	2) No significant diminution of surface water chemistry and/or ecology resulting from anthropogenic water level alteration or change in flow conditions that would lead to failure of relevant Article 4 objectives for any associated surface water bodies	3) No significant damage to groundwater dependent terrestrial ecosystems resulting from an anthropogenic water level alteration;	4) No saline or other intrusions resulting from anthropogenically induced sustained changes in flow direction.	
Starting point	G	G	P	G	P
Effect due to modification	G	G	P↓	G	P

984 G: Good; P: Poor;

985 The consequences for the Article 4(7) case can be very distinct depending on the actual effects of the
 986 alteration to the level of groundwater. For instance, in case the proposed alteration would cause
 987 deterioration of a quality element of an associated surface water body (see criteria no. 2 above), not
 988 only the quantitative status of the groundwater body would deteriorate but also the surface water body.
 989 An Article 4(7) test would in such a case have to address both water bodies (see also chapter 3.5 with
 990 regard to effects on other water bodies).

991 With regard to the groundwater balance test (available groundwater resource is not exceeded by the
 992 long term annual average rate of abstraction - see criteria no. 1 above), failure of meeting this test
 993 indicates over-abstraction and a long-term imbalance, which could lead to a "continuous" lowering of
 994 the groundwater table. If continued in the long-term this could lead to a loss of the resource.

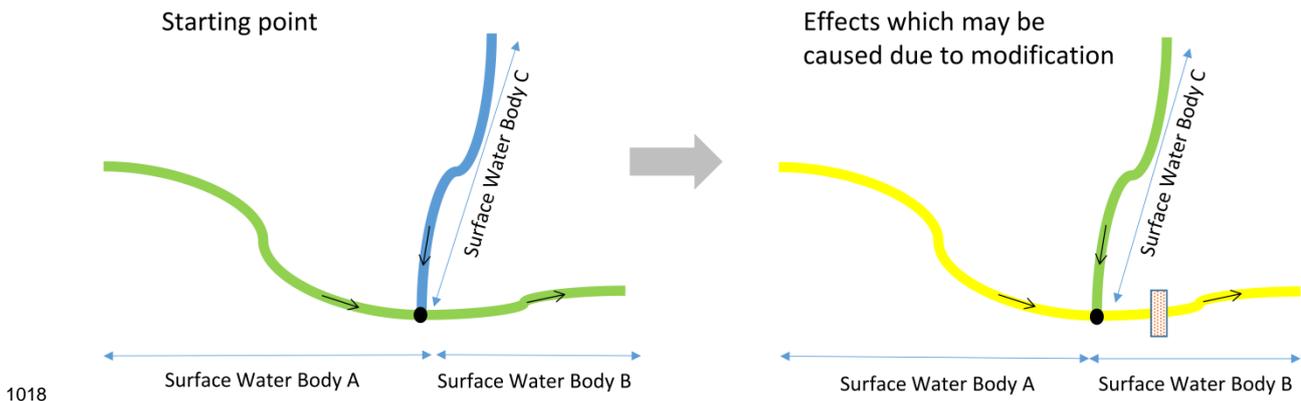
995 Finally, **alterations to the level of groundwater can also cause deterioration of groundwater**
 996 **chemical status**. This can be the case for saline or other intrusion due to groundwater abstraction
 997 (see criterion 4 above), leading to failure of both groundwater quantitative status and groundwater
 998 chemical status. Alterations to the level of groundwater might also cause **indirect effects** and
 999 changes to geochemical processes influencing groundwater chemistry, leading to failure of
 1000 groundwater chemical status (see Guidance No. 18, chapter 5.3.4). In this context, note that Article
 1001 4(7) does not provide an exemption if deterioration caused by inputs of pollutants from point or diffuse
 1002 sources drives the water body to a status below good.

1003 **3.5 Effects on other water bodies**

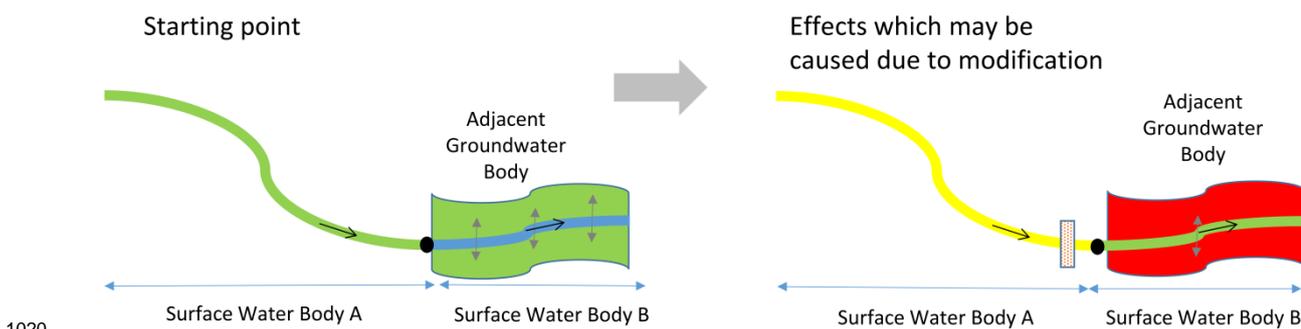
1004 When applying an Article 4(7) exemption to a water body, "a Member State shall ensure that the
 1005 application does not permanently exclude or compromise the achievement of the objectives of this
 1006 Directive in other bodies of water within the same river basin district and is consistent with the
 1007 implementation of other Community environmental legislation" (Article 4(8)).

1008 In practice the modification of a water body might cause impacts in other (adjacent) water bodies, in
 1009 specific cases even in another river basin district (e.g. an artificial water body that connects two river
 1010 basins or an adjacent coastal water body in the neighbouring river basin district). Figure 2 illustrates
 1011 an example for a modification in a water body (e.g. a proposed dam in Surface Water Body B),
 1012 causing deterioration from good to moderate ecological status. The adjacent surface water bodies
 1013 (Surface Water Body A and C) are impacted as well (e.g. due to impacts on continuity and important
 1014 habitats), leading to deterioration of Surface Water Body A and C. Similar other examples can be
 1015 drawn, e.g. impacts of a modification in a surface water body on the adjacent groundwater body, e.g.
 1016 due to reduced flow in the surface water body and related drop of the groundwater table (Figure 3).

1017 **Figure 2: Example for effects beyond one surface water body**



1019 **Figure 3: Example for effects beyond one water body in relation to groundwater**



1021 In the above examples⁶⁵ and as the result of an Applicability Assessment, an Article 4(7) Test needs
 1022 to be applied for all water bodies in which deterioration occurs. Similarly, in case modifications are
 1023 undertaken across several water bodies, an Article 4(7) Test needs to be applied for all water bodies
 1024 concerned. This might increase the need for justification during the Article 4(7) Test. If the conditions
 1025 are fulfilled for all water bodies concerned, the project can be authorised (see also Step 4 in Figure 6).
 1026 Note that the number of water bodies actually requiring an Article 4(7) Test might be lower compared

⁶⁵ Note that the examples are simplified for illustration purposes. Deterioration / non-achievement of good status/potential needs to be understood as outlined in the previous chapters.

1027 to the number of water bodies addressed in the Applicability Assessment. This since as a result of the
1028 Applicability Assessment deterioration might not be expected for all water bodies which were
1029 assessed.

1030 Under certain circumstances it might also be the case that the water body, where the proposed
1031 modification is located, may not deteriorate, but another water body might be affected (to be assessed
1032 in the Applicability Assessment). In such a case an Article 4(7) Test needs to be applied for the water
1033 body which could deteriorate. In this context it is recapitulated that the Article 4(7) exemption needs to
1034 be applied within the limits of its scope, as outlined in chapter 3.3.

1035 Finally, in case other Community environmental legislation is affected (e.g. a Natura 2000 site), it has
1036 to be pointed out that an Article 4(7) exemption does not replace the respective procedures and
1037 assessments which have to be undertaken according to other regulatory requirements under other
1038 Community environmental legislation, although the potential for synergies (i.e. during the Applicability
1039 Assessment procedure) can be utilised (see chapter 4).

1040 **3.6 Cumulative effects**

1041 Whilst a new project might not, on its own, have effects that trigger the application of an Article 4(7)
1042 Test, it is possible that two or more such actions could, cumulatively, or in combination with existing
1043 pressures, cause deterioration or affect the ability of the water body to reach the objective of good
1044 status/potential. Practical examples can include cumulative effects of several modifications to the
1045 morphological features (e.g. flood risk measures) on habitats, multiple transversal structures like dams
1046 or weirs on fish migration and sediment transport, several projects of different nature in the same
1047 water body, widespread maintenance works, or multiple water abstraction points having commonly a
1048 significant effect on groundwater quantitative status. Therefore, in practical terms considering effects
1049 of cumulative modifications can be relevant when using Article 4(7)⁶⁶. The spatial extent of impacts is
1050 a relevant consideration in deciding if this is the case⁶⁷.

1051 The assessment of cumulative effects can be challenging in practical terms due to different reasons,
1052 e.g. due to administrative reasons (permitting authorities are not necessarily the water authorities),
1053 lack of availability of information on planned projects to the permitting authorities, or timing issues (e.g.
1054 simultaneous submission of projects within the same catchment).

1055 A possible entry point for the assessment of cumulative effects of multiple proposed projects can be
1056 the screening stage during the Article 4(7) Applicability Assessment (see chapter 4.1). Data from the
1057 RBMPs, i.e. information on already existing pressures, planned measures and monitoring data on the
1058 current status of water bodies, can shape the starting point for the assessment. In order to be able to
1059 consider cumulative effects of multiple proposed projects, information on such proposed
1060 developments needs to be available to the permitting authority. Relevant sources can include existing
1061 applications for permits, information on planned projects from the flood risk management plans or
1062 sectorial development plans (e.g. for hydropower development or agricultural irrigation).

⁶⁶ See also WFD & Flood Risk Management, Workshop Manchester (UK) 2008: <https://circabc.europa.eu/sd/a/5fedffc5-e4d1-427c-b9d8-b3047f1cb8d2/Key%20Conclusions%20Workshop%20WFD%20%26%20Flood%20Risk%20Management%20-%20Manchester%20-%20February%202008.pdf>

⁶⁷ Key Conclusions Workshop WFD and Hydropower, Brussels 2011: https://circabc.europa.eu/sd/a/23d94d2d-6b9c-4f17-9e15-14045cd541f3/Issue%20Paper_final.pdf

1063 As a result, the permitting authorities can be enabled to come to better informed decisions with regard
 1064 to the need for Article 4(7) Tests for individual projects which, cumulatively, may cause deterioration or
 1065 affect the ability of the water body to reach the objective of good status/potential. Note that making full
 1066 use of the RBMPs as a planning tool - by introducing also potential Article 4(7) cases – can provide
 1067 the opportunity for authorities to take into account not only information on already existing pressures
 1068 but also of in particular the cumulative effects of potential future developments and to carry out an
 1069 assessment of the potential cumulative effects of such developments planned within the respective
 1070 RBD on a particular water body (see chapter 5.5.1). Also the use of information from SEAs can be of
 1071 relevance in that context.

Case study 2: Cumulative impact of reservoirs on the aquatic environment. Joint scientific appraisal

Country: France

The creation of new water storage infrastructure raises a host of environmental concerns, including the impact of reservoirs on the aquatic environment, particularly in areas where there are already a number of reservoirs and water resources are in high demand. By law, building a new reservoir requires a planning application or government authorization, which requires an environmental impact study. Such studies must now assess the cumulative effects of the project together with other known similar projects. The “cumulative” aspect of the impact of water storage infrastructure on a single catchment area is often poorly understood due to a lack of relevant knowledge on assessment methods. Consultants and government services, therefore, face a lack of operational tools for processing new reservoir applications, which raises other problems around water management planning and the supervision of the development of new reservoirs. In this context, the French Ministry of the Environment, Energy and Marine Affairs (MEEM), supported by ONEMA, requested a joint scientific assessment (ESCo) from Irstea, in partnership with INRA, on the cumulative impact of reservoirs on the aquatic environment. The assessment was produced by around fifteen experts from a range of disciplines and research organizations, and is based on analysis of a thousand or so international scientific articles and reports.

The scientific assessment has revealed a lack of knowledge about the cumulative environmental effects of reservoirs. Reservoirs modify all the functional characteristics of a catchment area, so their construction can become problematic when they are built on an already vulnerable river. However, very few studies have addressed the cumulative effects of reservoirs on all the different functional characteristics investigated in the assessment, even though there are strong interactions between them. Assessing the significance of effects on a given catchment, therefore, requires the identification of the issues for a catchment and the characterization of its condition with respect to these issues. A two-pronged approach can be used to characterize the entirety of a catchment area by identifying the most vulnerable sub-basins and associated issues before starting to assess the cumulative effects of new projects on these sub-basins.

By analysing the cumulative effects of reservoirs, the processes involved and the influencing factors, the assessment identified the main interactions between the functional characteristics and the need to take them into account when assessing cumulative effects. The variety of contexts encountered in the scientific literature and the lack of data and knowledge noted here restricts the number of relevant indicators and validated methods for immediate characterization of the influence of a set of reservoirs on a catchment area; this further hinders the ability to forecast the effects of building one or more new reservoirs. The acquisition of knowledge and orders of magnitude in the French context remains necessary. The analysis performed can be used to develop a methodological framework to address the issue of cumulative effects of reservoirs on a given catchment area. This forms the focus of the operational phase, which will follow this scientific appraisal.

1072 3.7 Managing uncertainty

1073 Uncertainty is an inevitable feature of planning in general and also has to be managed in the context
 1074 of Article 4(7). Uncertainty can be an issue in particular with regard to the question whether a
 1075 proposed project is expected to cause deterioration or affect the ability of a water body to reach good
 1076 status/potential since this assessment has to be undertaken ex-ante (before the implementation of the
 1077 modification). It is also of relevance regarding the effects of mitigation measures, which should be an
 1078 inherent element of (the design of) a new project, and the question how far deterioration / non-
 1079 achievement of good status/potential can be avoided in the first instance due to the application of such
 1080 mitigation measures.

1081 Some specific actions can be taken in order to reduce uncertainty, including for instance:

- 1082 • Establishment of a solid baseline regarding the current status/potential (which is essential for
1083 the estimation of effects) by using sensitive methods and monitoring designs but also by
1084 having a sensitive classification system (see respective CIS Guidance Documents on
1085 monitoring and status assessment for surface and groundwater bodies⁶⁸). In case a quality
1086 element is just slightly above a threshold value distinguishing two status classes, deterioration
1087 due to a proposed project can be more likely and/or more difficult to ascertain;
- 1088 • Additional monitoring for the improvement of the baseline regarding the current
1089 status/potential of a water body. This can particularly be an issue for water bodies where
1090 status was assessed based on grouping or where reliable information on certain quality
1091 elements is missing;
- 1092 • Conduction of specific studies or modelling of the expected effects of the proposed project
1093 (e.g. specific studies assessing expected effects on the aquatic biology, application of a
1094 groundwater model for the assessment of the expected effects on groundwater quantitative
1095 status, etc.);
- 1096 • Drawing from experiences on the pressure-impact relationship at existing modifications
1097 (monitoring data at already existing similar modifications);

1098 A proportionate risk-based approach by distinguishing between clear-cut cases (e.g. large
1099 impoundments) from proposed projects where deterioration might be less certain can help to strike a
1100 balance between reducing uncertainty and the required resource input for assessments (e.g. question
1101 how far and which additional studies or modelling is needed – see also chapter 4.1 in that context).

1102 An adaptive approach may also be considered, if applicable in the respective context of the planned
1103 activity, e.g. by issuing time constrained permissions assessed as not likely to cause deterioration.
1104 Any such constrained permission should be supported by an Article 4(7) Applicability Assessment and
1105 measures to control, monitor and assesses effects on water body status/potential from the time
1106 constrained new modification or alteration. Furthermore, follow-up monitoring results (e.g. in the frame
1107 of the project and regular WFD monitoring) can be used to verify effects on water body status/potential
1108 following project execution.

1109 Finally, the application of the precautionary approach (including worst-case considerations) can help
1110 to avoid situations where ex-post evaluations provide evidence that deterioration actually occurred
1111 without applying an Article 4(7) Test. Such situations should be avoided by applying Article 4(7) Tests
1112 also in cases where no reasonable assessment of risk could be made, despite efforts to reduce
1113 uncertainty, and therefore the level of uncertainty about the effects of the planned activity remains
1114 significant. This can also be relevant for such cases in terms of transparency and documenting
1115 evidence which supports decisions by competent authorities whether an Article 4(7) Test needs to be
1116 undertaken.

⁶⁸ http://ec.europa.eu/environment/water/water-framework/facts_figures/guidance_docs_en.htm

1117 **4 ARTICLE 4(7) APPLICABILITY ASSESSMENT AND STREAMLINING WITH** 1118 **OTHER DIRECTIVES**

1119 As outlined above, during the authorisation procedure for a new modification, alteration or new
1120 sustainable human development activity, it needs to be determined prior to authorisation whether the
1121 proposed project may lead to deterioration or affect the ability of a water body to reach good
1122 status/potential. This process is called in this context "Article 4(7) Applicability Assessment" and is an
1123 important step to determine whether an Article 4(7) Test is required (or not) during the permitting
1124 phase of a project.

1125 The WFD does not prescribe specific steps how such an assessment has to be conducted. However,
1126 in the absence of such an assessment the question remains how competent authorities can come to a
1127 decision whether an Article 4(7) Test has to be performed and therefore – as a result - whether
1128 permission for the project can be granted or not. Moreover, the absence of an Applicability
1129 Assessment bears the risk of violating WFD requirements since a project might be authorised which
1130 leads to deterioration / non-achievement of good status / potential, while the Article 4(7) requirements
1131 are not met.

1132 It follows that an "Applicability Assessment" should be an inherent element during the permitting phase
1133 of a new project. It should be as simple and clear as possible but at the same time as detailed and
1134 comprehensive as necessary to reach reasonable results. The outcome needs to be well documented
1135 in both cases, when the conclusion is that an Article 4(7) Test is required during the permitting phase,
1136 but also in case deterioration / non-achievement of good status / potential is not expected and
1137 therefore no Article 4(7) Test has to be conducted. This in particular to ensure transparency of the
1138 decision making process, to demonstrate compliance and to avoid potential problems with
1139 stakeholders or other competent authorities (e.g. during an audit or check of compliance with WFD
1140 requirements).

1141 The investigations undertaken during the "Applicability Assessment" provide the opportunity to utilise
1142 synergies with assessments which might be required under other EU environmental legislation, in
1143 particular the Environmental Impact Assessment (EIA) Directive and the Habitats Directive (HD). Note
1144 that also the provisions of the Aarhus Convention and related EU Directives can be relevant in that
1145 context⁶⁹.

1146 **4.1 Approach for an Article 4(7) Applicability Assessment**

1147 The objective of an Applicability Assessment in relation to Article 4(7) is to determine whether the
1148 proposed project may cause deterioration / non-achievement of good status / potential (see chapter
1149 3.4) and therefore require an Article 4(7) Test (see chapter 5) during the permitting phase. The
1150 Applicability Assessment provides answers to the following questions:

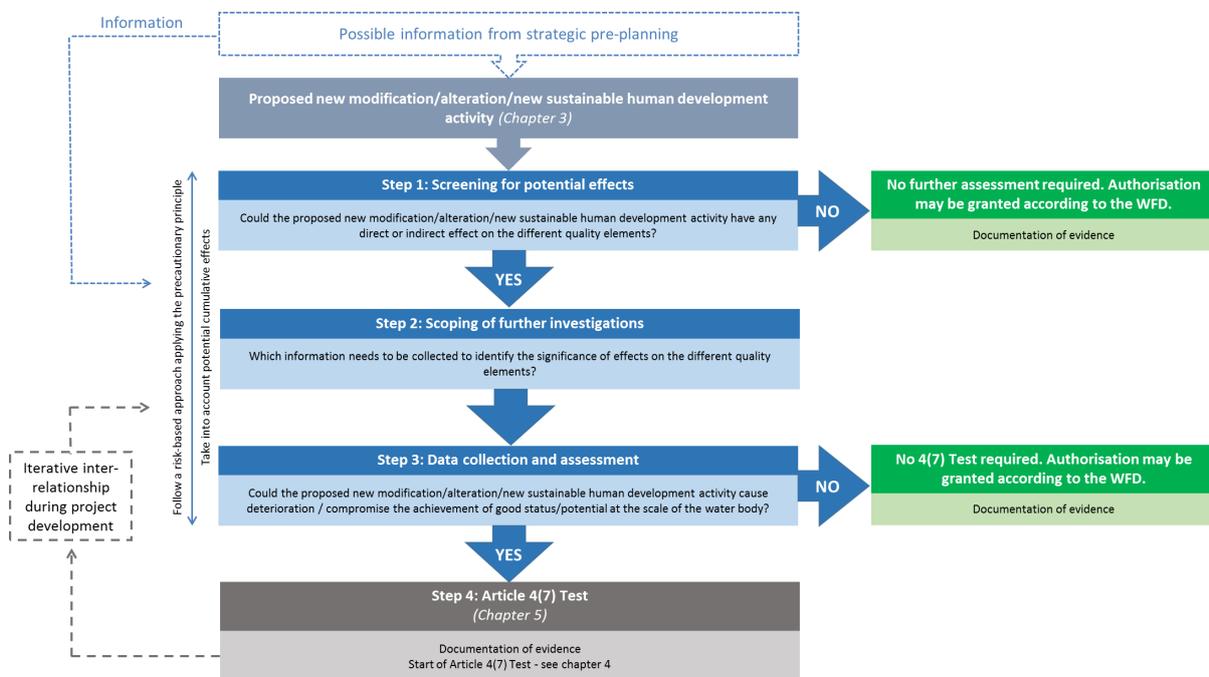
- 1151 • Is the project likely to have effects on water body status / potential?
- 1152 • Is the project expected to cause a deterioration / non-achievement of good status / potential?
- 1153 • Is an Article 4(7) Test required during the authorisation phase?

⁶⁹ Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention); See: <http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf>

1154 Pre-condition for performing the assessment effectively is the availability of an appropriately sound
 1155 dataset, in particular with regard to monitoring data on water body status, as well as information on the
 1156 proposed project in order to predict the effects on status/potential. Project-related data also needs to
 1157 include information on project-specific mitigation measures, which are an inherent part of the project
 1158 and which need to be taken into account during the assessment since they are aimed towards
 1159 reducing the negative effects.

1160 Figure 4 below outlines a step-wise approach for an Applicability Assessment in relation to Article 4(7)
 1161 which is then described in more detail. If the proposed project is modified (e.g. if it is concluded during
 1162 an Article 4(7) Test that not all practicable steps are taken to mitigate the adverse effects - see
 1163 feedback loop on the iterative inter-relationship during project development in Figure 1), relevant steps
 1164 of the Applicability Assessment might need to be repeated in order to obtain a sound investigation of
 1165 the expected effects of the proposed project. Possible information from strategic pre-planning (e.g. for
 1166 specific sectorial development plans and their impacts) and related SEA's may inform the assessment.

1167 **Figure 4: Outline for a step-wise approach for an Article 4(7) Applicability Assessment**



1168
 1169 Note that for groundwater different criteria are applied to determine the status of the groundwater body (see chapter 3.4.2)

1170 **Step 1: Screening for potential effects**

1171 This is a screening step to determine whether there is a mechanism for any relevant direct and/or
 1172 indirect effects on the different quality elements determining status/potential of the concerned water
 1173 body(ies) (see chapter 3.3). The purpose of this step is to broadly filter and "screen out" projects that
 1174 will clearly not affect water body status/potential and to identify quality elements which require in a
 1175 second step (scoping) further attention for more detailed investigations. It focuses on identifying
 1176 potentially affected elements and supporting elements to help ensuring that subsequent assessments
 1177 are proportionate. Relevant data needs for the screening step can for example include the following:

- 1178 • Information on project design (including any existing information on consideration of
 1179 alternatives) in sufficient detail and mitigation measures which are applied;

- 1180 • Identification of potentially affected water bodies, including up- and downstream, as well as
- 1181 adjacent water bodies (e.g. an adjacent groundwater body next to a surface water body, or
- 1182 vice versa);
- 1183 • Size of each water body;
- 1184 • Existing pressures, current status/potential of relevant surface and groundwater water bodies
- 1185 and related quality elements, including failing elements and information on distance of
- 1186 particular EQRs to threshold values distinguishing two status classes, terrestrial ecosystems
- 1187 directly depending on groundwater, etc.;
- 1188 • WFD objective for the water body / planned mitigation measures / measures under the
- 1189 Program of Measures of the River Basin Management Plan;
- 1190 • Other projects which may cause cumulative effects;
- 1191 • Other legislation which might be concerned (e.g. EIA, Habitats Directive or MSFD).

1192 For small projects not falling within the scope of the EIA Directive (2011/92/EU) a more generic
 1193 approach can be considered in order to reduce the assessment burden⁷⁰. In cases where small
 1194 modifications or alterations, e.g. individually controlled through registration based on general binding
 1195 rules or similar (e.g. self-licensing) initiatives, the possibility of in-combination effects on water body
 1196 status or potential should be considered. This can raise issues when the combination effects from new
 1197 modifications (later applications) could result in an impact on status. Where multiple small new
 1198 modifications or alterations are anticipated in a particular water body, the WFD competent authority or
 1199 the relevant regulator should consider the likelihood and significance of in-combination effects. Where
 1200 such effects could adversely affect the status/potential of the water body, this should be used to
 1201 revise, if needed, the future authorisation procedure or otherwise taken into account when the general
 1202 rule is reviewed in order to ensure an effective Article 4 (7) Applicability Assessment⁷¹.

1203 The result of Step 1 is a conclusion whether the proposed project may affect the status/potential of
 1204 concerned water bodies (i.e. is there a potential cause-and-effect mechanism?). Pre-determined
 1205 standards (e.g. for hydromorphological modifications and their effects on the biological quality
 1206 elements) or checklist tools, elaborated on a sound scientific basis, can help in assessing whether the
 1207 project may have relevant effects.

- 1208 ➔ If no, then evidence supporting this conclusion should be documented in the frame of the
- 1209 authorisation procedure and no further assessments are required;
- 1210 ➔ If yes or uncertain, then continue to Step 2.

1211 **Step 2: Scoping of further investigations**

1212 Step 2 is a scoping step to identify further data needs and to define the necessary assessments which
 1213 are required for determining the significance of the effects on quality elements. It is a preparatory step
 1214 for Step 3 – data collection and assessment – which has the objective to answer the question whether
 1215 the proposed project is expected to cause deterioration or compromising improvement to good status /
 1216 potential.

1217 Step 2 focuses on the necessary investigations for potentially affected quality elements and supporting
 1218 elements (e.g. the different biological and hydromorphological quality elements, chemical and physico-

⁷⁰ See CIS Guidance Document No. 20

⁷¹ As a practical example, the Netherlands use a 'cumulation register' for both, permitted and non-permitted modifications, in order to keep record of cumulative effects. For the assessment of new projects, the register is then used by the competent authority to check for deterioration.

1219 chemical quality elements, criteria determining groundwater quantitative status, etc.). Step 2 also
1220 allows for the identification of existing data gaps (e.g. absent monitoring data for a certain quality
1221 element) requiring additional (ad-hoc) data collection and analysis for the completion of the data set.

1222 For quality elements where potential causal mechanisms were identified, Step 2 allows for a first
1223 differentiation between effects that are expected to be temporary or local in a water body context vs.
1224 longer term or water body scale effects. For quality elements where no possible causal link was
1225 identified under Step 1, no further assessments are required. Where there is uncertainty (e.g. causal
1226 link or temporal/local effects) the element in question should be taken to the next step.

1227 At that point the potential for alignment of data collection and assessments which might be required
1228 under other environmental legislation (e.g. performance of an EIA or necessary assessments under
1229 the Habitats Directive) should be identified, providing the opportunity to gain from synergies (see
1230 chapter 4.2).

1231 **Step 3: Data collection and assessment**

1232 Under Step 3 the necessary data collection and assessments are performed, as defined under Step 2.
1233 The purpose of this step is to determine the expected effect of the project (including its mitigation
1234 measures) on the status or potential of the concerned water bodies at quality element level (i.e. cause
1235 deterioration or compromise expected improvement). A judgment can for instance require
1236 investigations performed by experts and/or modelling in order to determine the effects on quality
1237 elements. The potential for synergies for joint/coordinated data collection and assessments with other
1238 environmental legislation (e.g. EIA or Habitats Directive) is utilised under Step 3.

1239 Investigations of the significance of the effects should not only consider the current status/potential but
1240 also planned improvements due to the implementation of measures from river basin management
1241 planning (e.g. restoration measures) to achieve good status/potential. Therefore, cumulative effects of
1242 other interventions may need to be taken into account (see chapter 3.6). The assessment should also
1243 conclude on the time-span of effects (see chapter 3.3.1).

1244 If the result of Step 3 is that

- 1245 → The proposed project is not expected to cause deterioration of the water body at quality
1246 element level or compromise improvement, or if the effects are expected to be only temporary
1247 short-term, the evidence supporting this conclusion needs to be documented in the frame of
1248 the permitting procedure, no Article 4(7) Test is required and authorisation may be granted
1249 according to the WFD;
- 1250 → If the project is expected to cause deterioration of the water body at quality element level or
1251 compromise improvement, proceed to Step 4.

1252 **Step 4: Article 4(7) Test**

1253 If the project is expected to cause deterioration / compromising the achievement of good
1254 status/potential, then evidence should be documented and the Article 4(7) Test needs to be launched.
1255 The project can only be authorised if the conditions as outlined under Article 4(7) a) to d) are fulfilled,
1256 and hence the Article 4(7) Test is passed. It follows that if the conditions are not fulfilled and the Article
1257 4(7) Test fails, the project cannot be authorised according to the WFD. The conditions and
1258 requirements for the Article 4(7) Test are outlined in chapter 5.

Case study 3: A WFD compliance assessment checklist tool developed for JASPERS**Country: EU28**

JASPERS (Joint Assistance to Support Projects in European Regions – <http://jaspers.eib.org/>) is a partnership between the European Commission and the European Investment Bank aimed at improving the quality of investments supported by ESI funds (European Regional Development Fund, ERDF and Cohesion Fund and IPA Funds). It offers public authorities and beneficiaries a wide range of services, comprising advisory, capacity building and project quality review assistance. JASPERS also provides advisory to the Connecting Europe Facility (CEF).

In order to determine whether the Article 4(7) tests need to be applied, a checklist using a four-step approach to establishing project level WFD compliance has been developed:

1. Understand the context and element-level screening step: Is there a potential causal mechanism for an effect on water body status/potential? If no, keep record for audit but no further assessment required. If yes perform step 2.
2. Determine scope: Consider whether effects are temporary or are not significant at the scale of the water body and whether in-combination effects can be ruled out. WFD assessment is required only for elements that could be affected.
3. Investigations: data collection and evaluation. Consider mitigation measures. Is there a residual effect on WFD status? If yes perform step 4
4. Apply the Article 4(7) tests (as elaborated in the CIS Guidance Nr. 35)

An early version of the checklist tool was used for projects in Poland (for flood protection) and in Latvia (for port development including dredging). JASPERS is currently working on further elaborating and testing the checklist tool on concrete cases, with a view to widen its application on project preparation assistance and future training activities with its counterparts. It will be made available in early 2018 on the library of the JASPERS Knowledge and Learning Centre website. For any further information please contact jaspersnetwork@eib.org.

Links: <http://www.jaspersnetwork.org/plugins/servlet/documentRepository>

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Case study 4: High Speed 2 Rail Construction scheme – Phase 1 (London to West Midlands)**Country: United Kingdom (UK)**

HS2 is a multimillion pound national government scheme to provide a high-speed rail link from London and the south to the north of England. Phase1 covers four River Basin Districts (Thames, Anglian, Severn and Humber) and might have an impact on 61 surface waterbodies and 15 groundwater waterbodies.

Of the 61 surface waterbodies originally assessed, no scheme elements were assessed as certain to result in objective non-compliance for the waterbodies. However, 5 have ultimately been assessed as being at risk from deterioration or prevention of achieving GES/GEP due to the construction of HS2 Phase1. Of the 15 groundwater bodies originally assessed, 4 groundwater waterbodies have been ultimately assessed as being at risk from deterioration or being prevented from achieving GES due to the construction of HS2 Phase1. The remaining surface and groundwater waterbodies were discounted as being assessed as not being at risk, or due to the inclusion of mitigation measures and other measures brought about by ‘Additional Provisions’.

A WFD Compliance Assessment Review document was published in March 2016 providing more details on the reasons why deterioration may occur for each of the waterbodies, along with generic mitigation measures, and providing information on how the four tests for Article 4.7 can be met. The assessment follows a precautionary risk based approach and was advocated by the Environment Agency to ensure that all potential adverse effects were to be reported and detailed, even where the likelihood an effect occurring was very low, or the extent of that effect was limited; the primary driver being to ensure that WFD effects continued to be considered and addressed through the design development and into the consenting phase.

Links:

<https://circabc.europa.eu/sd/a/e9885e5b-9638-4ff6-baee-2815c6300ce8/22 - MS United Kingdom - 4.7 Case Study.pdf>
<https://www.gov.uk/government/publications/water-framework-directive-compliance-assessment-review>

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1262

Case study 5: Flood Risk Management Plan (FRMP) measures' impact evaluation for the assessment of Art. 4(7)

Country: Italy

The case study area is located in the Northern Apennines District (ITC), specifically in the area of the Region of Tuscany (about 20.000 sq.km, 60% of District's surface). The aim is to estimate the impacts of a structural measure of the FRMP on water status/potential.



The procedure has been applied to all surface waterbodies in the area ranging from small rivers with about 10 sq.km to main river channels like the Arno river (downstream reach), about 8.000 sq.km basin area.

The structural measures of the FRMP might cause a physical alteration of water body as it might embrace longitudinal or transversal rivers' modification, including levees' restoration, dams' elevation, diversion spillways, expansion areas with related inlet / outlet culverts, river bank restoration.

In order to pre-asses the possibility of Art. 4(7) application, the 2nd cycle RBMP of Northern Apennines Basin District includes a detailed analysis of FRMP's structural measures. Each intervention based on a physical alteration of river or lakes was georeferenced and related to one or more water bodies. The list of flood defences' interventions is reported in a specific section of WB's reporting sheet in the Executive Information System of RBMP (see below).

Northern Apennines District :: River Basin Management Plan

Waterbody sheet

General Information	WISE code	IT09CI_N002AR579F02
	Name	TORRENTE MARINA VALLE
Location	Subunit	ARNO
	Region	TOSCANA
	Basin	Arno
	Sub-basin	Bisenzio
Characteristics	Category	Fiumi
	Type	10EF7N
	Typology	Fortemente modificato
	Basin area [sq.km]	38.3
	Directly drained area [sq. km]	3.7
Links	Protected areas	-
	Upstream WB	[IT09CI_N002AR537F01], [IT09CI_N002AR580F01], [IT09CI_N002AR579F01]
	Downstream WB	[IT09CI_N002AR083F03]

Geographical localization
RBMP web GIS cartography

ECO

Conf medium :: Updated to 2015

CHIM

Conf medium :: Updated to 2015

Gap contribution

POLLUT	HYDRO	MORPHO
11 %	6%	

Gap ECO

25%

Riferimento ai metodi delle procedure di stima del gap

Extract from EIS – Executive Information System for the ITC RBMP. Top portion of WB's sheet.

Since the linked interventions are mainly planned measures to be defined in terms of hydraulic solutions and structural details, the aim of the proposed list, related to each water body, is to focus the attention on the future potential application of Art. 4(7) for the interested water bodies. This includes the following analytical steps:

- Collection of detailed project's data related to structural characteristics:
 - geometrical dimensions of intervention: length - surface - volume
 - size of impacted WB's portion and comparison with WB's total length / surface
 - geomorphological indexes (i.e. IQM) - ex ante + ex post evaluation
- Comparison with threshold values (defined at district's scale)

The real impact in terms of physical alteration will be tested in the evolution of planned activities, applying common criteria for the evaluation morphological alteration and Art. 4(7) eligibility.

The described procedure has brought general benefits for an effective and coordinated analysis of RBMP and FRMP relationship. Reporting in an official information sheet all structural interventions potentially altering the physical characteristics of WBs allows public and private stakeholders to be aware of potential application of Art. 4(7). The discussion on the real impact of flood defence measures can be applied already in a preliminary project's phase, in order implement a more inclusive process regarding technical solutions' choices, and a specific awareness on the exemption to WFD's objectives.

As critical aspect, financial coverage issues can alter or invalidate technical analysis, bringing to incomplete or only partially useful project choices.

Links. <http://www.appenninosettentrionale.it/eis/>

1263 4.2 Streamlining of assessments with the EIA and Habitats Directive

1264 A proposed project might not only require assessments in the context of WFD Article 4(7) but also,
1265 depending on the size, nature and location of the project, an Environmental Impact Assessment (EIA)
1266 under the EIA Directive or appropriate assessments under the Habitats Directive in relation to Natura
1267 2000 sites affected (see chapter 2.8). Compliance with other relevant legislation must be ensured (see
1268 also WFD Article 4(1)(c)). As such grouping of assessments and streamlining can be efficient (e.g. in
1269 terms of data collection and public participation)⁷², providing the opportunity to utilise synergies and
1270 reduce the work load in the assessments required for a proposed project under different legislation.

1271 While such a streamlining is mandatory – 'where appropriate' – as regards the EIA and the 'appropriate
1272 assessment' under the Habitats Directive, it is up to the individual Member States to decide whether to
1273 apply it to the EIA Directive and the Water Framework Directive⁷³.

1274 Referring to the approach and different steps for an "Applicability Assessment" in relation to WFD
1275 Article 4(7) as described in the previous chapter, equivalent steps are required under the EIA and the
1276 Habitats Directives (where they apply) that could be taken alongside with the steps under the WFD.
1277 This refers particularly to "Screening", "Scoping" and the necessary data collection. Such a
1278 streamlined approach can lead to significant cost and time savings, notably in relation to the data
1279 collection stage which can be jointly performed once the data requirements under each Directive are
1280 clarified during the previous steps.

1281 However, it should be borne in mind that the focus of the various tests is quite distinct in each
1282 Directive, so the various steps of the process should be carried out in accordance with the
1283 requirements for each Directive⁷⁴. If the conditions of one Directive are fulfilled but not of the other,
1284 then the authorities may not authorise the project because in such a case the project would still
1285 infringe EU legal provisions. Instead, it should be examined whether amendments can be made to the
1286 project so that it satisfies the requirements of all relevant directives.

1287 Figure 5 outlines the steps for an "Applicability Assessment" in relation to WFD Article 4(7), and the
1288 equivalent steps under the EIA and Habitats Directives. Following, the main requirements under the
1289 EIA and Habitats Directives, and the relationship and linkages with Article 4(7) are described in more
1290 detail. Further information can also be drawn from chapters 2.8.2 (EIA), 2.8.3 (Habitats Directive) and
1291 Annex A (comparative overview table).

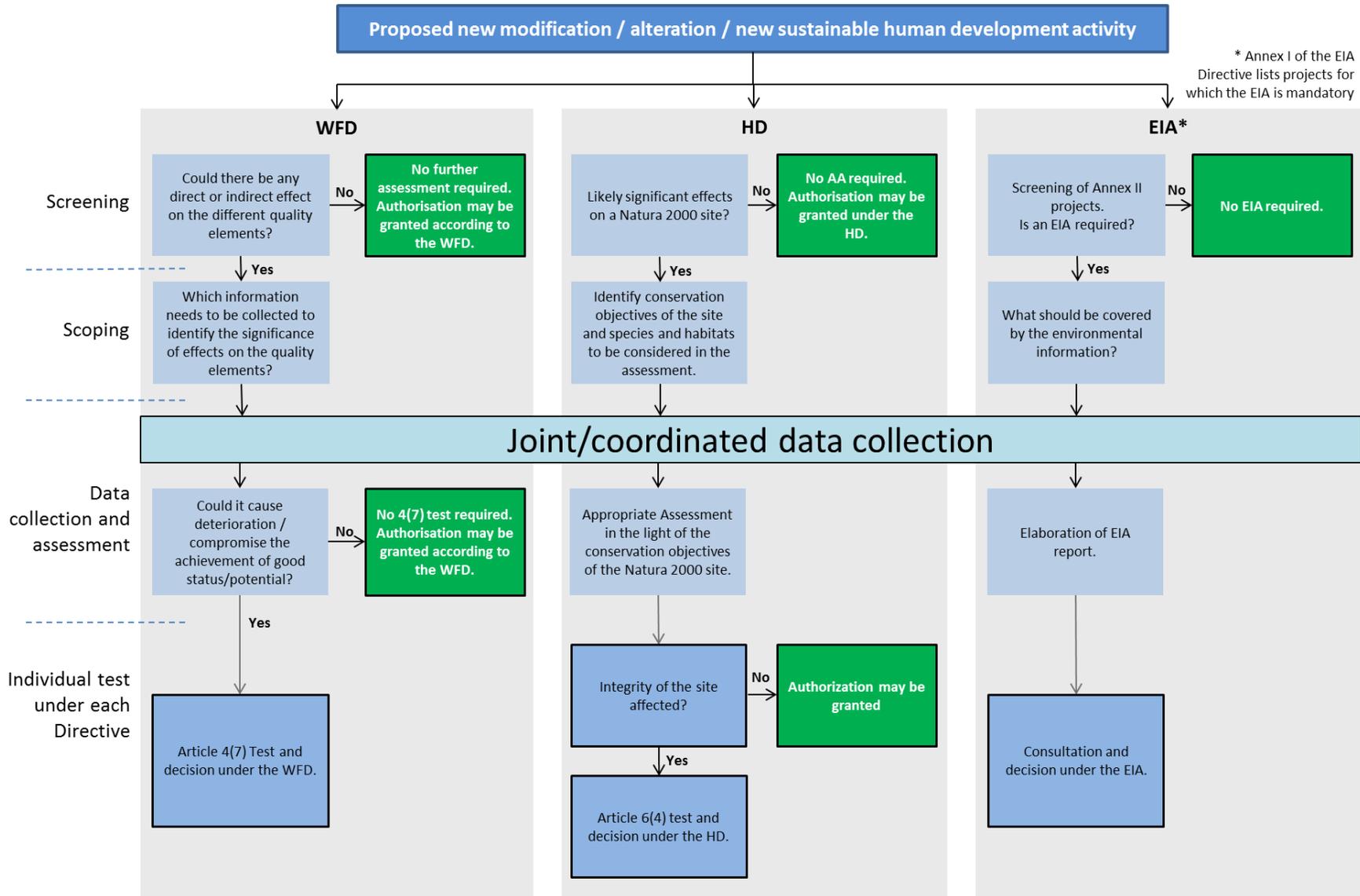
⁷² See for instance Guidance on Streamlining environmental assessment procedures for energy infrastructure Projects of Common Interest (PCIs), http://ec.europa.eu/environment/eia/pdf/PCI_guidance.pdf; Commission guidance document on streamlining environmental assessments conducted under Article 2(3) of the EIA Directive <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2016:273:FULL&from=DE>

⁷³ See Commission guidance document on streamlining environmental assessments conducted under Article 2(3) of the EIA Directive <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2016:273:FULL&from=DE>

⁷⁴ Where possible, synergies could still be used, for instance regarding the search for alternatives or mitigation measures.

1292

Figure 5: Streamlining of assessments under the WFD, HD and EIA Directive



1293

1294 **Projects which are subject to an EIA**

1295 The EIA Directive aims to ensure that projects which are likely to have a significant effect on the
1296 environment are adequately assessed before they are approved. Before any decision is taken to allow
1297 such a project to proceed, the possible impacts it may have on the environment (both from its
1298 construction, operation or demolition) need to be identified and assessed.

1299 An assessment is obligatory for projects listed in Annex I of the Directive, which are considered as
1300 having significant effects on the environment (for example: dams and other installations designed for
1301 holding back or permanent storage of water, where a new or additional amount of water held back
1302 exceeds 10 million cubic metres (p.15, Annex I).

1303 Other projects, listed in Annex II of the Directive (for example inland waterways, projects not included
1304 in Annex I, canalization and flood-relief works; urban development projects, etc.), are not automatically
1305 subject to an EIA procedure. The Member States have a margin of discretion to decide on a case-by-
1306 case basis or according to thresholds or criteria (for example size), location (sensitive ecological areas
1307 in particular) and potential impact (surface affected, duration) whether these projects are likely to have
1308 significant environmental effects and if they have to be liable to the EIA procedure. The process of
1309 determining whether Annex II projects may have significant effects on the environment and therefore
1310 be subject to an assessment is called "*screening*" under the EIA Directive. Scoping is not mandatory,
1311 but accepted as good practice.

1312 EU law can sometimes require several assessments for a single project. Each assessment is
1313 designed to maximise environmental protection of a specific kind. However, the multiple statutory
1314 requirements and parallel assessments can lead to discrepancies, delays, duplication and
1315 administrative uncertainties. The EIA Directive provides for enhanced assessment procedures, leading
1316 to more effective and efficient outcomes (Article 2(3), EIA Directive, as revised).

1317 The following potentials for synergies and streamlining of assessments required under the EIA and
1318 Article 4(7) have been identified:

- 1319 • Assess whether the project may lead to deterioration of the status/potential of a water body or
1320 relevant quality element (WFD Article 4(7)). This assessment might be part of the assessment
1321 of the factor water (EIA Article 3);
- 1322 • Joint/coordinated data collection for the relevant assessments;
- 1323 • Defining mitigation measures to reduce the adverse effects;
- 1324 • Assess the project specific component of the assessment of better environmental options
1325 according to WFD Article 4(7)(d) and Article 5(1)(d) EIA;
- 1326 • Synergies in terms of consultation prior to a project's approval by using the EIA process for
1327 public consultation in case a project should be approved within an RBM cycle.⁷⁵

1328 In this context it is important to note that the level of detail in the environmental report required under
1329 the EIA may be less than what would be required for assessments in relation to WFD Article 4(7). An
1330 EIA does not require (but also does not prevent) an assessment on quality element level but rather the

⁷⁵ See page 11 and 12 of the PCI Guidance: http://ec.europa.eu/environment/eia/pdf/PCI_guidance.pdf

1331 likely significant impact of the project on water (Article 3 EIA)⁷⁶. This can be explained by the fact that
 1332 an EIA assesses the impacts of a project on the environment, while an Article 4(7) assessment
 1333 addresses the impacts on a water body. In other words, carrying out an EIA does not guarantee
 1334 fulfilment of Article 4(7), but it could contribute if the assessments are streamlined.

1335 In cases where a project is subject to an EIA, under good practice this could be done in close
 1336 coordination with the Article 4(7) Applicability Assessment during the data collection and assessment
 1337 stage⁷⁷. In doing so Member States may nationally establish an EIA procedure/approach investigating
 1338 all requirements of Article 4(7) where all projects potentially deteriorating water or precluding
 1339 achievement of water environmental objectives will be assessed. This may also be done if projects fall
 1340 outside the scope of Annex I & II⁷⁸. Their integration offers the opportunity to adopt a new approach to
 1341 optimize the mutual synergies and minimize conflicts between them.

Case study 6: Development of an Article 4(7) assessment framework and linkage to EIA
Country: Croatia (HR)
<p>The Article 4(7) assessment in the Republic of Croatia is linked to the environmental impact assessment in order to decrease administrative burden and simplify procedures for new development. It is clear that EIA and Article 4(7) assessment have coinciding elements such as data collection and public participation processes.</p> <p>In an integrated procedure, the competent authorities are given a possibility to reach a single decision based on the agreed pool of data and taking account of all environmental protection aspects (not only the achievement of objectives in terms of the WFD). The availability of complete information is extremely important particularly in the event of larger projects which have significant impacts and for which the justification required for the application of WFD Article 4(7) needs to be provided. As such, the author of an environmental impact study is required as part of the study to analyse the project’s impacts on water bodies (in terms of the achievement of WFD objectives), thus identifying the scope and significance of such impacts. When required, they shall collect data and justify the application of the provisions of WFD Article 4(7).</p> <p>It has to be noted that, if EIA is not required, a comparable procedure for Article 4(7) assessment is envisaged in the Water Act as a part of water-permitting procedure. It should be mentioned that the same procedure is followed for the Plans and Programmes that are subject to the SEA.</p> <p>The overall procedure related to the identification of project impacts on the water status in terms of WFD objectives is based on the data and information contained in the current River Basin Management Plan, which – according to the provisions of the Water Act – contains a Flood Risk Management Plan adopted by the Croatian Government. In that way, the status of water bodies identified and the programme of measures foreseen by the current RBMP were made the starting point for the identification of potential impacts of future activities and projects in the basin. This has also enabled continuous communication and exchange of information between the RBMP and the (planned) developments in the basin, and the authors of the RBMP are given a better insight and sound background data for the RBMP updates.</p> <p>Insights into the whole process leads to the following key conclusions:</p> <ul style="list-style-type: none"> • Data about water bodies collected for the purposes of RBMP is valuable resource for both EIA and Article 4(7) assessments and there is a significant need for such data. • It seems convenient to have the Article 4(7) assessment “back to back” with EIA and sharing some elements of procedure. <p>Links: RBMP (including FRMP) and supporting documents are published at http://www.voda.hr/hr/plan-upravljanja-vodnim-podrucjima</p>

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⁷⁶ Art 3 EIA states: The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project (...).

⁷⁷ For more detailed information of such approaches see e.g. Guidance on Streamlining environmental assessment procedures for energy infrastructure Projects of Common Interest (PCIs), http://ec.europa.eu/environment/eia/pdf/PCI_guidance.pdf Commission guidance document on streamlining environmental assessments conducted under Article 2(3) of the EIA Directive <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2016:273:FULL&from=DE>

⁷⁸ This in line with recital (3) of the EIA Directive under which Member States may lay down stricter rules to protect the environment.

1343 Projects with relevance for Natura 2000 sites

1344 The Birds and Habitats Directives aim to contribute towards ensuring biodiversity through the
1345 conservation of natural habitats and wild fauna and flora. The establishment and sound management
1346 of sites under the Natura 2000 network is a key tool for that. Article 6 of the Habitats Directive lays
1347 down the requirements for the management and protection of the Natura 2000 sites, which are the
1348 "Sites of Community Importance" (SCIs) (subsequently designed by the Member States as Special
1349 Areas of Conservation (SACs)) under the Habitats Directive and the Special Protection Areas – SPAs
1350 – classified under the Birds Directive 2009/147/EC.

1351 Both the WFD and the Habitats Directive allow for the use of exemptions, although there are some
1352 differences in the procedures and conditions. Under the Habitats Directive, Article 6(3) and 6(4)
1353 establish a procedure for the assessment and authorisation of plans or projects that may affect Natura
1354 2000 sites. In particular, the aim of Article 6(3) is to avoid adverse effects of plans and projects on
1355 Natura 2000 sites and thereby maintain the integrity of the Natura 2000 sites and the coherence of the
1356 network and its features. Hence an appropriate assessment (AA) must be made of any plan or project
1357 likely to have a significant effect on a site in the light of the conservation objectives of the site.

1358 The step of the Article 6(3) process where it is determined whether a project or a plan is likely to cause
1359 significant effects to a Natura 2000 site, either alone or in combination with other plans and projects,
1360 corresponds to what is commonly called "screening". If it cannot be excluded, following the screening,
1361 that the plan or project will have a significant effect on the site, an AA is required.

1362 Similarly, even though not explicitly mentioned, scoping is accepted as good practice and aims to
1363 precisely identify the potential issues that the AA should cover, as well as the appropriate information
1364 to gather. The focus of the AA is on the conservation objectives of the site. Any possible mitigation
1365 measures (e.g. in relation to location of the project, timing, construction method, etc.) may be
1366 considered in the context of the AA so as to avoid adverse effects on the integrity of the site.

1367 In case of a negative conclusion of the AA, the provisions of Article 6(4) may apply still if the relevant
1368 conditions are met (lack of alternative solutions, presence of imperative reasons of overriding public
1369 interest, implementation of compensation measures). Further detailed information can be obtained
1370 from the flow chart on the specific Article 6(3) and Article 6(4) procedure according to the Habitats
1371 Directive which is provided in Annex B⁷⁹.

⁷⁹ See relevant guidance, documentation and jurisprudence on the implementation of Article 6(3) and 6(4) at http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm

1372 **5 ARTICLE 4(7) TEST AND RELATIONSHIP TO THE RBMPs**

1373 If, as a result of the "Applicability Assessment" in relation to Article 4(7) (see chapter 4), a new
1374 modification, alteration or new sustainable human development activity is expected to cause
1375 deterioration or compromise the ability of the water body(ies) to reach the objective of good
1376 status/potential, an "Article 4(7) Test" needs to be performed during the authorisation procedure.

1377 Via the Article 4(7) Test it is determined whether permission for a proposed project can be granted
1378 despite it may cause deterioration / compromise the achievement of good status/potential. This is the
1379 case if the relevant conditions as outlined in the WFD are fulfilled, which are described in more detail
1380 in the following chapters. If the conditions are not fulfilled, then the project cannot be authorised.

1381 **5.1 Step-wise approach for an Article 4(7) Test**

1382 An Article 4(7) Test requires performing a number of assessments, which should be as simple and
1383 clear as possible but at the same time as detailed and comprehensive as necessary to reach
1384 reasonable results. These are presented in Figure 6 below in a stepwise approach. This flow chart
1385 aims to be a practical tool illustrating the different steps and relationships of assessments when
1386 considering the application of an Article 4(7) Test for the affected water body(ies). It follows the basic
1387 logic of an earlier flow chart elaborated for CIS Guidance Document No. 20⁸⁰ and was further
1388 developed. The different steps of the Article 4(7) Test are specified in more detail, and the iterative
1389 relationship with the Applicability Assessment in relation to Article 4(7) is indicated, following the basic
1390 logic that modifications to the project can lead to changes with regard to the effects it may cause on
1391 the status/potential of water body(ies), which might require to be re-evaluated under the Applicability
1392 Assessment. Under specific circumstances a modified or re-design project may even not lead to
1393 deterioration or compromising the achievement of good status/potential, thus making an Article 4(7)
1394 Test obsolete.

1395 The order of the different steps representing different requirements under the WFD is not strictly
1396 following the order of the text in the WFD. This was done for different reasons. For instance, the
1397 considerations under Step 1 (mitigation) and 2 (better environmental option), but potentially also step 3
1398 (weighing process), may result in adaptations of the project. In such a case a re-assessment of
1399 relevant elements, also in the frame of the Applicability Assessment, may be needed in an iterative
1400 manner. This is not necessarily the case for later steps in the process. Like all WFD exemptions,
1401 Article 4(7) cannot be applied when the provisions of Articles 4(8) and 4(9) are not fulfilled. In other
1402 words, the use of exemptions is only allowed when they guarantee at least the same level of
1403 protection as existing EU legislation and provided that they do not permanently exclude or
1404 compromise the achievement of the wider objectives of the WFD in other bodies of water within the
1405 same river basin district. The requirements for compliance with these provisions were further specified
1406 under Step 4 and 5.

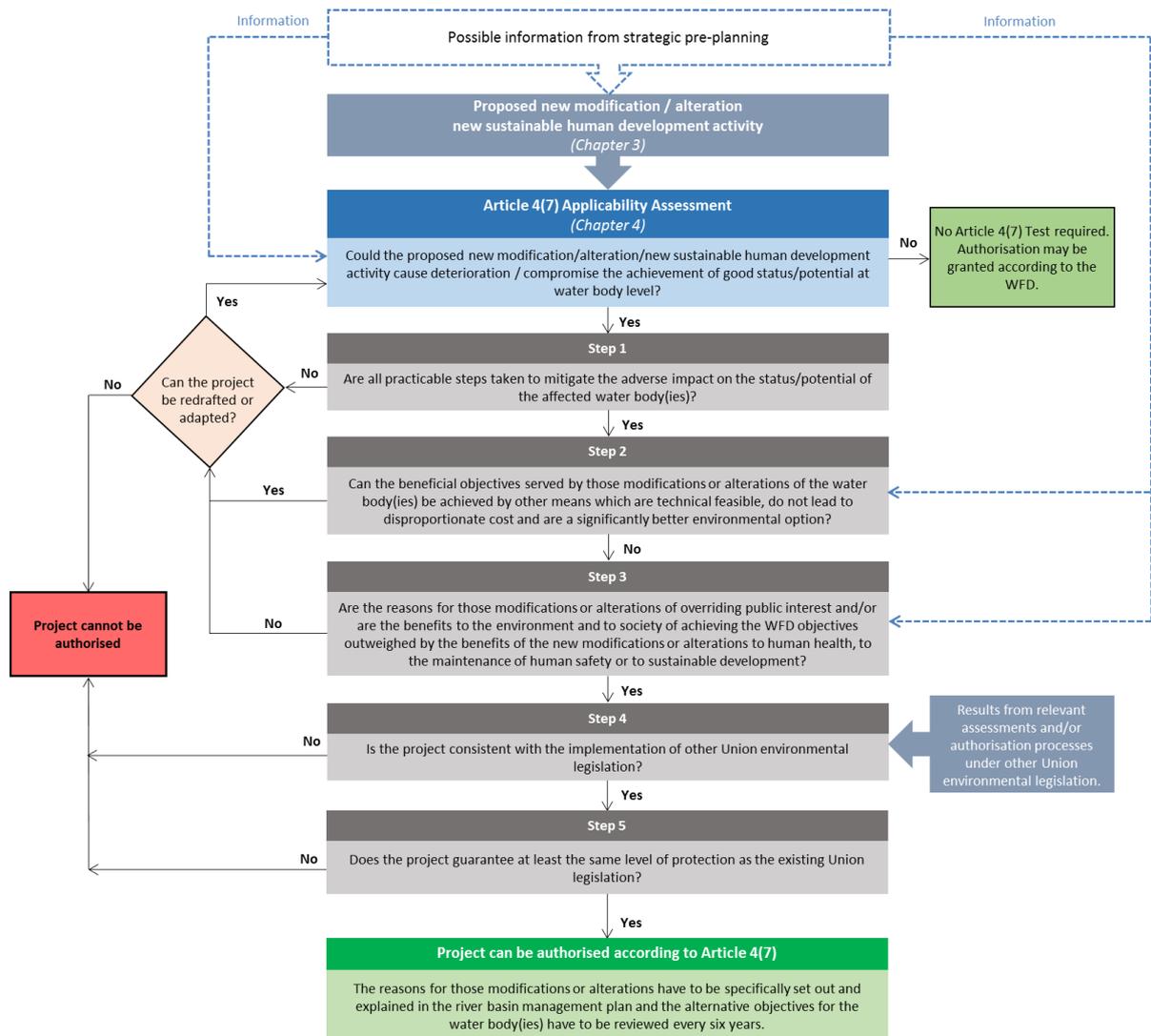
1407 Where a project also causes effects on other bodies of water, it can only be authorised if exemptions
1408 can also be justified for these other affected water bodies. In such a case it can be considered as
1409 reasonable to apply the Article 4(7) Test for the affected water bodies within the same procedure (see
1410 also chapter 3.5). Information on the results from relevant assessments and/or permission processes
1411 under other EU legislation, where relevant, allows performing Step 4 of the Article 4(7) Test (e.g.

⁸⁰ See CIS Guidance Document No. 20, Figure 4

1412 relevant assessments under an EIA or appropriate assessment under the Habitats Directive – see
 1413 chapter 4.2). Finally, the Article 4(7) Test can be concluded and the project authorised in the case the
 1414 conditions are fulfilled, including also the requirement that the reasons for those modifications or
 1415 alterations have to be specifically set out and explained by the competent authority in the river basin
 1416 management plan and the alternative objectives for the water body(ies) have to be reviewed every six
 1417 years.

1418 Note that strategic pre-planning mechanisms (e.g. for specific sectorial development plans) may
 1419 inform the elaboration and selection of projects, WFD related assessments and overall the decision
 1420 making process, including different steps of the Article 4(7) Test. Furthermore, the different steps, as
 1421 outlined in Figure 6, do not necessarily have to be followed in a strict sense and the most appropriate
 1422 order can depend on the approach and level of planning. For instance, for some projects it might be
 1423 more reasonable to perform step 2 (better environmental option) before step 1 (mitigation measures),
 1424 e.g. in case strategic pre-planning mechanisms are in place. However, it has to be ensured that the
 1425 different requirements of Article 4(7) are fulfilled.

1426 **Figure 6: Example for a step-wise approach for an Article 4(7) Test and the iterative relationship with the**
 1427 **Article 4(7) Applicability Assessment**



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 1429 In the following chapters, the different steps and considerations of the Article 4.7 Test are explained in
 1430 more detail.

1431 **5.2 Taking all practicable steps to mitigate adverse impacts**

1432 One of the conditions for granting an exemption under Article 4(7) is that "*all practicable steps are*
1433 *taken to mitigate the adverse impact on the status of the body of water*" (Article 4(7)(a)). In other
1434 words, this condition requires taking all practicable actions leading to less deterioration of the
1435 conditions in the impacted water body or minimising the effects compromising the achievement of
1436 good status/potential.

1437 The WFD neither defines nor constrains the definition of mitigation measures⁸¹. The 'practicable steps
1438 to mitigate the adverse impact on the status of the water body' required under Article 4(7)(a) can
1439 therefore cover a wide range of actions. What matters is that **the objective of these actions is to**
1440 **avoid or reduce an identified potential effect on the status** of a WFD quality element. In other
1441 words, the measure will minimise or even prevent the risk of deterioration or the compromising of an
1442 otherwise expected improvement in status.

1443 The most appropriate type of action to mitigate the adverse effect will vary according to the specific
1444 local circumstances. For those not familiar with the requirements of the EU Habitats and EIA
1445 Directives, it is worth providing clarification on the following important points:

1446 ***Mitigation and compensatory measures under the Habitats Directive***

1447 Although mitigation measures are not explicitly mentioned in the text of the Habitats Directive, they
1448 form part of normal practice and are considered in the context of the Appropriate Assessment process
1449 under Article 6(3) of the directive. These are measures aiming to remove, pre-empt or reduce the
1450 potential impacts on the Natura 2000 sites in question.

1451 As the final part of the Article 6(4) 'tests', the Habitats Directive requires that compensatory measures
1452 be provided to offset the negative effects of a plan or project so that the overall ecological coherence
1453 of the Natura 2000 network is maintained. In the context of the Habitats Directive, this typically means
1454 restoring or recreating habitat on a new or enlarged site that is subsequently incorporated into the
1455 Natura 2000 network as compensation for the impacts on an existing site caused by a project
1456 authorised under the Article 6(4) exemption. Under the Habitats Directive, mitigation measures should
1457 therefore not be confused with compensatory measures⁸².

1458 There is no equivalent requirement for such compensatory measures under Article 4(7) of the Water
1459 Framework Directive. Rather the WFD accepts that – if it can be demonstrated that the requirements
1460 of the Article 4(7) Tests are met – there will be a residual adverse effect on the status of the water
1461 body in question.

1462 ***Mitigation measures in the context of the EIA Directive***

1463 Mitigation measures are particularly relevant when assessing alternatives under the EIA Directive,
1464 both with a view to strengthening the feasibility of projects, and to improving the project's design. The
1465 EIA Directive does not define or explicitly differentiate between mitigation and compensation

⁸¹ A distinction between mitigation and compensation measures is highlighted in CIS Guidance Document No. 20, noting that mitigation measures aim to minimise or even cancel the adverse impact on the status of the body of water, whereas compensatory measures aim to compensate in another body of water the "net negative effects" of a project and its associated mitigation measures.

⁸² This distinction has been confirmed by the Court – see case C-521/12, paragraphs 29-35).

1466 measures⁸³. Measures envisaged to avoid, prevent, reduce or, if possible, offset any identified
1467 significant adverse effects on the environment are commonly referred to as 'Mitigation Measures', with
1468 the exception of the last action, offsetting, which can be considered to be a compensation measure.
1469 Nonetheless, when different types of mitigation actions under EIA are being considered, evolving good
1470 practice – supported by the various references in the EIA Directive to measures that 'avoid, prevent or
1471 reduce and if possible offset' adverse impacts – favours measures taken at source (on-site) over those
1472 'off site' and promotes the application of the so-called 'mitigation hierarchy'.

1473 When a potential adverse impact is identified this hierarchy therefore emphasises the need, in order of
1474 priority, to:

- 1475 1. Measures to avoid - avoid adverse impacts, for example by changing the location, method or
1476 timing of the activity or by the use of other preventative measures at source;
- 1477 2. Measures to reduce - take measures at source or as close as possible to the source of the
1478 effect, which aim to minimise or reduce adverse impacts to negligible, low or otherwise
1479 acceptable levels;
- 1480 3. Measures to offset - where there are residual adverse effects (i.e. impacts that are unavoidable
1481 or cannot be reduced further on site), to remedy, offset or otherwise compensate for these
1482 effects by taking measures elsewhere that help to reduce the net adverse impact to negligible,
1483 low or otherwise acceptable levels.

1484 ***Mitigation measures in WFD Article 4(7)(a)***

1485 Whilst there is no specific requirement to apply the mitigation hierarchy when considering practicable
1486 steps to mitigate the adverse impact on the status of the water body in the context of the WFD, it is
1487 nonetheless recommended that good practice is applied and that all practicable measures that avoid,
1488 minimise or reduce effects at source are implemented before other, off site measures.

1489 The notion of "steps" as outlined in Article 4(7)(a) addresses potentially a wide range of measures in
1490 all phases of development, including facilities' design, maintenance and operation conditions,
1491 restoration and creation of habitats.

1492 The wording "all practicable steps", in analogy with the term "practicable" used in other legislation,
1493 suggests those mitigation measures should be technically feasible, not disproportionate costly and
1494 compatible with the new modification, alteration or new sustainable human development activity.
1495 Requirements for mitigation measures for different types of modifications can be set out in guidance
1496 documents (e.g. guidance for fish migration aids) or specific reference documents (e.g. Best
1497 Environmental Practice (BEP), Best Available Techniques (BAT)). Mitigation measures aim at
1498 minimising or even cancelling the adverse effects on the status of a water body and should be an
1499 integral part of the project. As such, these measures might also be taken in other water bodies as long
1500 as their effects occur in the water body for which Article 4(7) is applied. Depending on their scope,
1501 some mitigation measures might, in some cases, even allow the improvement of status. If all
1502 practicable mitigation measures are not taken, an exemption under Article 4(7) cannot be granted. If it
1503 is assessed that implementing all practicable mitigation measures would lead to avoidance of

⁸³ For example, Directive 2014/52/EU refers in various places to the 'measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment' and notes that Member States 'should ensure that mitigation and compensation measures are implemented'.

1504 deterioration or failure to achieve good status/potential, there is no need to apply an Article 4(7) Test,
1505 as a result of the Article 4(7) Applicability Assessment (see iterative feedback loop in Figure 6).

1506 As an example for mitigation measures, in the case of a new hydropower plant important mitigation
1507 measures normally include the construction of functional fish migration aids for relevant fish species
1508 and/or the establishment of ecological flows. Examples for related types of mitigation measures are
1509 addressed in the frame of the CIS (e.g. work on Good Ecological Potential – Water Storage⁸⁴). In the
1510 case of a new abstraction of groundwater, next to the limitation of the amount of groundwater allowed
1511 to be abstracted, mitigation measures might include natural water retention measures (NWRM) for
1512 additional groundwater recharge and therefore supporting to maintain a balance of groundwater
1513 abstraction and recharge.

1514 Mitigation measures do not necessarily need to be only of hydromorphological nature. In some cases,
1515 e.g. for projects including water abstraction, mitigation measures might also include the reduction of
1516 pollution from point or diffuse sources in order to address the reduced dilution capacity of a water body
1517 due to the abstraction and hence avoiding increased concentrations of pollutants.

1518 Bearing in mind the wide range of possible projects, impacts and types of mitigation, dealing with all
1519 the different types of mitigation measures to be considered under Article 4(7)(a) would exceed the
1520 scope of this guidance. Therefore, this section of the guidance concentrates on how and when all
1521 practicable mitigation measures should be considered, established and monitored in the Article 4(7)
1522 assessment procedure and permitting process for new projects.

1523 ***Consideration of mitigation during the project design stage***

1524 Mitigation measures need to be considered both in the initial Article 4(7) Applicability Assessment to
1525 determine whether the project may cause deterioration / non achievement of good status/potential and
1526 therefore trigger an Article 4(7) Test, as well as in the Article 4(7) Test itself to determine whether the
1527 conditions for granting an exemption under Article 4(7) are met. Mitigation measures to reduce
1528 adverse effects can be required as conditions of the authorisation (permit/license) for a new project,
1529 including also requirements for the maintenance and monitoring of the effectiveness of mitigation
1530 measures (for example to ensure the functioning of fish migration aids) and for potential modification
1531 needs.

1532 It is reasonable to consider "all practicable steps to mitigate adverse impacts" already in the early
1533 project design stage for the following reasons:

- 1534 • To reduce or even eliminate impacts on water bodies;
- 1535 • For consideration in the initial Article 4(7) Applicability Assessment - if deterioration / non-
1536 achievement of good status / potential can be avoided in the first instance, no Article 4(7) Test
1537 and therefore no Article 4(7) exemption will be required;
- 1538 • If deterioration / non-achievement of good status / potential cannot be avoided – for the Article
1539 4(7) Test itself since taking "all practicable steps to mitigate the adverse impacts" is an integral
1540 part of the requirements to allow for an Article 4(7) exemption;

⁸⁴ Common understanding of using mitigation measures for reaching Good Ecological Potential for heavily modified water bodies - Part 1: Impacted by water storage: <https://ec.europa.eu/jrc/en/publication/working-group-ecostat-report-common-understanding-using-mitigation-measures-reaching-good-ecological>

- 1541
- To avoid protracted discussions and uncertainty over the project which could unduly delay its authorisation;
- 1542
- And finally, since the integration of mitigation measures is usually cheaper and easier in the early project design stage compared to exploring mitigation options once the design is already fixed, what can have several advantages, i.e. in terms of cost-savings but also in terms of efficiency gains for the administrative procedures during the project authorisation phase.
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1547 During the Article 4(7) Test, competent authorities will have to evaluate whether all practicable steps to mitigate adverse impacts are included as part of the proposed project, or whether additional practicable mitigation measures will be required (additional to those proposed by the project owner) in order to further reduce the impacts. This may lead to modifications of the initial project design and therefore have an influence on the results of the Article 4(7) Applicability Assessment. Therefore, taking the effects of sound mitigation measures into account can be an iterative process, which may lead to an updated evaluation of the effects the project may have on the status / potential of a water body due to mitigation.

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1555 For defining specific mitigation measures, synergies can be gained with the process of an EIA for projects under its scope, but it is important to note that the Article 4(7) Test needs to be carried out in a distinct way.

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1558 Knowledge gained from monitoring results on the effects of mitigation measures implemented as part of the programs of measures in previous planning cycles can be useful for selecting relevant and effective mitigation measures. Possible mitigation requirements are usually set out in guidance documents used in authorisation processes or catalogues of measures elaborated at national level which list and describe state-of-the-art measures and Technology / Best Available Technology / obligatory minimum requirements for different types of modifications. The latter (catalogues of measures) are also relevant for other steps in WFD implementation such as the HMWB designation process and the consideration of mitigation measures when defining ecological potential.

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1566 Mitigation measures listed for the definition process of good ecological potential (GEP) are also relevant for the definition of practicable mitigation measures under Article 4(7)(a). They should be considered as a starting point, but the range of mitigation measures under Article 4(7) is potentially wider compared to mitigation measures for GEP definition of an existing HMWB. This because it can be easier to integrate mitigation measures already in the project design phase compared to the implementation of measures on existing infrastructure. Another important reason why GEP mitigation measures are only a sub-set of those that could be applied in the case of Article 4(7) is that construction methods can be modified to reduce impacts, whereas there is no construction phase for ongoing operations and activities.

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1575 Where practicable mitigation measures exist, but for some of them there is uncertainty about the magnitude or timing of their effects on status, adaptive management principles might be applied.

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1577 The adaptive management concept provides a potentially useful way forward where there are residual uncertainties. Decisions on the implementation of actions to manage the effects of a modification or alteration can therefore be informed by the outcomes of an agreed monitoring programme. The adaptive management concept is relevant in situations where:

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- 1581 • the type of mitigation measures is agreed but it is not clear exactly when, or where,
1582 implementation will be required;
- 1583 • An untested mitigation measure is being implemented and a back-up plan is deemed
1584 necessary in case the new measure does not achieve the desired outcome;
- 1585 • there is a reasonable level of understanding about the likely implications of a modification or
1586 alteration, and high certainty about the effectiveness of the measure supporting recovery, but
1587 the measure is costly so will only be implemented if monitoring demonstrates that it is needed
1588 in order to avoid deterioration or compromising the achievement of good status/potential (see
1589 iterative feedback loop in Figure 6).

1590 A concrete example of adaptive management can include a situation where dredging activities will
1591 generate a plume of suspended sediment and there is an especially sensitive ecological resource in
1592 the context of the water body within 2km of the dredging activity (for example this might be the only
1593 seagrass bed or a fish nursery area in the water body). The modelling undertaken as part of the
1594 assessment demonstrated that the risk of deterioration of the ecological resource is limited to certain
1595 combinations of weather and tide so, rather than prevent the dredging going ahead, real-time
1596 monitoring of suspended sediment levels was recommended. If the monitoring identifies that the
1597 dredged plume crosses a 'red line', dredging will be temporarily suspended until conditions return to
1598 normal. However, if the sediment plume regularly crosses the 'red line', an adaptive response might
1599 then be to modify the dredging method to use a technique that generates less suspended sediment
1600 (but is also less productive).

Case study 7: City water supply development and mitigation

Country: Finland (FI)

New abstraction of ground water by pumping has been planned to secure drinking water supply of a large city depending on one water source, the nearby river. Of the designated water bodies at the proposed site, a few small lakes and a smaller amount of rivers were estimated to be possibly at risk due to water abstraction. There are also springs and brooks, not designated as water bodies, at the area.

- A. The waterworks initially applied for a permit for abstraction of 32,500 m³/day. The application was rejected due to impacts on areas protected by the habitats directive. The process restarted with survey on the alternatives for other water intake areas within a radius of 80-100 km from city centre.
- B. Based on the options found, an interactive multi-criteria decision analysis was carried out. The target was not only to find an economically, technically, socially and ecologically sustainable option, but also to support open discussion between parties. Two alternative options were eventually recommended by the project group; one of them being the original area, but, with a considerably smaller water abstraction volume. Uncertainty on the quantity and quality of ground water and also a considerably longer time period required for the implementation of the project were seen as major weaknesses of the alternative option.
- C. As mitigation means at the original site it was decided to relocate the water pumping sites, reduce their number and decrease the daily intake by two thirds, to 11,000 m³/day, which would be the lowest possible intake needed for raising the security level status for the city from low to medium. Also the regulation of water level at a lake was abandoned. The ground water flow modelling showed that in spite of these actions, changes in water quality would be observed in some lakes and brooks, especially during the low flow periods. Therefore, additional means of diminishing the impacts were suggested: directing water from some pumping stations to watersheds and reducing the intake of certain stations during low flow. Also blocking of forest drainage ditches in certain areas has been suggested.
- D. To compensate the losses for springs at the impact area, a large number of springs outside it will be restored.
- E. Natura 2000 impact assessment report for the renewed project and reports of field and modelling surveys have been forwarded together with the permit application to the authorizing body. During the permitting procedure, it will assess whether the methods and results are reliable and whether the mitigation and compensation actions are sufficient with respect to e.g. nature conservation act, water act and Art 4(7).

Links: <http://www.ymparisto.fi/download/noname/%7B5DC260B6-B2EC-468B-9E83-90DC9F2C28EE%7D/78444>

1602 **Practicability of mitigation**

1603 As mentioned above, practicable mitigation measures should be technically feasible, should not lead
1604 to disproportionate costs and should be compatible with the new modification, alteration or new
1605 sustainable human development activity.

1606 Assessing which mitigation measures are practicable can be done on the basis of good-practice
1607 principles to be applied to all projects of a certain type. Nevertheless, the selection of practicable
1608 mitigation measures also has a case-specific component. Certain mitigation measures may not be
1609 technically feasible in a specific location or may not be reasonable due to type-specific natural
1610 conditions. For example, in the case of hydropower plants, ensuring ecological flow and the installation
1611 of fish migration aids are usually required as mitigation measures for water bodies within fish regions.
1612 The installation of fish migration aids will not be reasonable in water bodies outside of such regions
1613 where natural fish habitats have not existed, however, sediment continuity might need to be
1614 considered. Note that fish habitats could be restored if they got lost due to an existing pressure.

1615 **5.3 Assessing significantly better environmental options**

1616 According to Article 4(7)(d) "*the beneficial objectives served by those modifications or alterations of*
1617 *the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other*
1618 *means, which are a significantly better environmental option*". It is therefore necessary to assess
1619 "alternative means" for proposed new modifications, alterations or new sustainable human
1620 development activities.

1621 Guidance Document No. 20 already outlines in this context that those means or alternatives solutions
1622 could involve alternative locations, different scales or designs of development, or alternative
1623 processes. Alternatives should be assessed in the early stages of development and at the appropriate
1624 geographical level (e.g. EU, national, RBD) against a clear view of the beneficial objectives provided
1625 by the modification. For projects under its scope, the use of the requirements of the EIA Directive can
1626 help to assess the different possible alternatives, but might not always be sufficient.

1627 Technical infeasibility is justified if no technical solution is available. With regard to disproportionate
1628 costs, "disproportionality" is a judgment which has a political, technical and social dimension informed
1629 by economic information and analysis of costs and benefits⁸⁵.

1630 The scope for "alternative means" can include two dimensions – the strategic level and the project
1631 specific level, whereas assessments at the strategic level can feed into the project-specific
1632 assessment for decision making.

1633 **5.3.1 Strategic level**

1634 For judging significantly better environmental options strategic components need to be considered,
1635 going beyond the local level. Examples for "other means" for the beneficial objectives served by those
1636 modifications can for instance include:

⁸⁵ For more details see CIS Guidance Document No. 1 Economics and the environment: [https://circabc.europa.eu/sd/a/cffd57cc-8f19-4e39-a79e-20322bf607e1/Guidance%20No%201%20-%20Economics%20-%20WATECO%20\(WG%202.6\).pdf](https://circabc.europa.eu/sd/a/cffd57cc-8f19-4e39-a79e-20322bf607e1/Guidance%20No%201%20-%20Economics%20-%20WATECO%20(WG%202.6).pdf)

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- Other forms of renewable energy generation, measures to increase energy efficiency or alternative locations for hydropower generation, other forms to balance energy supply and demand;
 - Assessment of capacities and possibilities for other forms of transport, e.g. rail and/or road for navigation;
 - Possibilities and effects of water retention measures with regard to flood protection;
 - Potentials for water saving measures for drinking water supply or irrigation projects;
 - etc.

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Depending on the nature of the new modification, alteration or new sustainable human development activity, consideration of relevant sector policies is crucial in this context, including for instance the Renewable Energy Action Plans, TEN-T Programme, Flood Risk Management Plans, Rural Development Programmes, etc. (see Chapter 2). In other words, a strategic level assessment taking account of a range of possible options is required for an informed judgement on whether deterioration / non achievement of good status / potential can be justified or not. Life cycle considerations (such as energy demand) may also have a part to play in the decision process⁸⁶. Consideration of the strategic component also helps to improve policy coherence. The results of Strategic Environmental Assessments according to the SEA Directive, which applies to plans and programmes, can be useful in this context, but might not always be sufficient.

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Finally, there is a need to consider potential cumulative effects of modifications (see Chapter 3.6). Since the spatial extent of impacts is a relevant consideration, the strategic level can be the appropriate scale for related assessments.

Case study 8: ICPDR Guiding Principles on Sustainable Hydropower Development

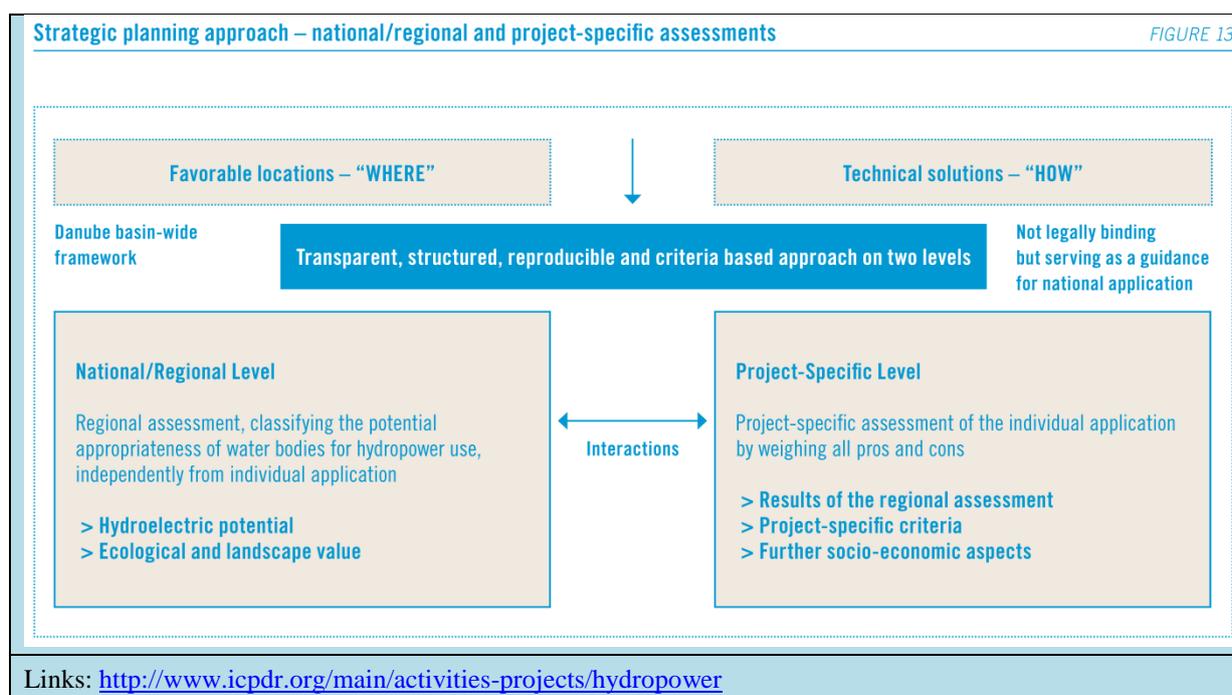
Country: International Commission for the Protection of the Danube River (Danube River Basin, including the 9 EU Member States AT, BG, CZ, DE, HR, HU, RO, SI, SK and 5 non EU Member States BA, MD, ME, RS and UA)

Countries in the Danube River Basin are planning new hydropower development in order to increase the share of renewable energy. At the same time countries are committed to meet the environmental protection objectives, including the WFD.

Acknowledging the challenge of sustainable hydropower development in the frame of the existing legal and policy framework, the ICPDR elaborated "Guiding Principles on Sustainable Hydropower Development". The Guiding Principles recommend the application of a strategic approach, including the strategic (national/regional) and project specific level. Criteria for both levels are included in the document. This is also due to the fact that the required assessments and acquisition of data is only feasible on the respective levels. Therefore, a two-level assessment is suggested for the strategic planning approach as illustrated below.

The Guiding Principles which have been developed by an interdisciplinary team, including representatives from authorities (energy and environment), the hydropower sector and NGOs, were finalised and adopted in June 2013 and recommended by the ICPDR for application at national level.

⁸⁶ See Royal Commission on Environmental Pollution (1988): 12th report: Best Practicable Environmental Option



1658 5.3.2 Project level

1659 At the project level alternatives have to be assessed against the criteria whether other means can
 1660 serve the same purpose while being a significantly better environmental option. This includes for
 1661 instance different project designs which are technically feasible and not disproportionate costly. Also
 1662 other legislation (e.g. EIA or Habitats Directives) can require the assessment of alternative means⁸⁷.

1663 Potential synergies can be gained with assessments according to the EIA Directive (if applicable) for
 1664 determining environmental impacts of a planned project, prescribing a description of the reasonable
 1665 alternatives studied by the developer, which are relevant to the project and its specific characteristics,
 1666 and an indication of the main reasons for the option chosen, taking into account the effects of the
 1667 project on the environment⁸⁸. It has to be clarified in this context that neither the EIA (nor SEA)
 1668 procedures prescribe the design of projects, nor recommend its improvement or change.

1669 5.4 Weighing interests: Overriding public interest / benefits versus impacts

1670 A further condition which needs to be complied with is that "*the reasons for those modifications or*
 1671 *alterations are of overriding public interest and/or the benefits to the environment and to society of*
 1672 *achieving the objectives set out in paragraph 1 are outweighed by the benefits of the new*
 1673 *modifications or alterations to human health, to the maintenance of human safety or to sustainable*
 1674 *development"* (Article 4(7)(c)). To comply with this test at least one of the two criteria of Article 4(7)(c)
 1675 has to be fulfilled (overriding public interest or the weighing test) by the new modification, alteration or
 1676 new sustainable human development activity, or both⁸⁹.

⁸⁷ See for instance Case C-239/04 Castro Verde special protection area - Lack of alternative solutions: <http://curia.europa.eu/juris/liste.jsf?language=en&num=c-239/04>

⁸⁸ See EIA Directive Article 5.1(d)

⁸⁹ See also Austrian National High Administrative Court Decision (VwGH 24.11.2016, Ro 2014/07/0101), ruling that the fulfilment of one criteria of Article 4(7)(c) is sufficient, thus overriding public interest or the weighing test, and not necessarily both.

1677 5.4.1 Overriding public interest

1678 In EU legislation the public or general interest can serve as a ground for justifying derogations. A
 1679 range of "public interests" exist within the EU and at national level of a social, economic or
 1680 environmental nature. Since not all public interests can automatically be "overriding", it is important to
 1681 distinguish between "public interest" and "overriding public interest" which is addressed by Article
 1682 4(7)(c)⁹⁰. "Overriding" practically means that the other interest overrides achieving the objectives of the
 1683 WFD. Member States must be allowed a certain margin of discretion for determining whether a
 1684 specific project is of such interest⁹¹. Public participation can contribute considerably in determining
 1685 overriding public interest.

1686 The following sources of information can help to provide further perspectives on the question what to
 1687 consider as "public interest" or "overriding public interest"⁹²:

- 1688 • The CIS Guidance Document No. 1 (WATECO)⁹³ outlines a number of key elements which
 1689 need to be considered (e.g. to fulfil public interests, not all types of public interest can apply,
 1690 aim to protect fundamental values for citizens' lives and society (e.g. health, safety), within the
 1691 framework of fundamental policies for the State and society).
- 1692 • The EU court has clarified⁹⁴ that irrigation and the supply of drinking water may⁹⁵ constitute an
 1693 overriding public interest that can justify a water diversion project in the absence of alternative
 1694 solutions (for considerations relating to human health or beneficial consequences of primary
 1695 importance for the environment). It has also noted⁹⁶ that the construction of a hydropower
 1696 plant may in fact be an overriding public interest.
- 1697 • In the relation to hydropower projects, within the CIS process it was concluded that a
 1698 hydropower activity is not automatically of overriding public interest just because it will
 1699 generate renewable energy⁹⁷.
- 1700 • On the national level, additional issues related to the application of WFD Article 4(7) might
 1701 also play a role such as military security (e.g. causing Article 4(7) cases on coastal areas)⁹⁸.

1702 Further perspectives may also be offered by existing practice in relation to a similar concept under the
 1703 EU Habitats Directive (Natura 2000 sites which might also be affected by a new modification). Article
 1704 6(4) first subparagraph stipulates that imperative reasons of overriding public interest include those of
 1705 social or economic nature, while the second subparagraph mentions human health, public safety and

⁹⁰ Note that the consideration of "overriding public interest" only applies to the first part of Article 4(7)(c), not to the second part.

⁹¹ See Case C-346/14 Commission v Austria:

<http://curia.europa.eu/juris/document/document.jsf?text=&docid=177722&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=320623>

⁹² Note that the references provided do not claim completeness as new decisions might appear.

⁹³ [https://circabc.europa.eu/sd/a/cffd57cc-8f19-4e39-a79e-20322bf607e1/Guidance%20No%201%20-%20Economics%20-%20WATECO%20\(WG%202.6\).pdf](https://circabc.europa.eu/sd/a/cffd57cc-8f19-4e39-a79e-20322bf607e1/Guidance%20No%201%20-%20Economics%20-%20WATECO%20(WG%202.6).pdf)

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<http://curia.europa.eu/juris/document/document.jsf;jsessionid=9ea7d0f130d679e412f3db944bbd8cceb4d91f8fe99e.e34KaxilC3eQc40LaxqMbN4Pah4Te0?text=&docid=126642&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=55628> ;

<http://curia.europa.eu/juris/document/document.jsf;jsessionid=9ea7d0f130d679e412f3db944bbd8cceb4d91f8fe99e.e34KaxilC3eQc40LaxqMbN4Pah4Te0?text=&docid=111201&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=55628>

⁹⁵ Please note it is stated that such activities may be of "overriding public interests", what is important in the context of the whole judgment, and, by analogy, in the context of WFD 4(7)

⁹⁶

<http://curia.europa.eu/juris/document/document.jsf?text=&docid=177722&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=320623>

⁹⁷ https://circabc.europa.eu/sd/a/23d94d2d-6b9c-4f17-9e15-14045cd541f3/Issue%20Paper_final.pdf

⁹⁸ See Treaty on European Union Art 42 (3)

1706 beneficial consequences of primary importance for the environment as examples of such imperative
 1707 reasons of overriding public interests⁹⁹. There is case law from the European Court of Justice on the
 1708 application of this concept¹⁰⁰. In addition the European Commission's "Guidance on the provisions of
 1709 Article 6 of the Habitats Directive 92/43/EEC"¹⁰¹ and sector specific guidance¹⁰² may shed some light.
 1710 It is reasonable to consider that imperative reasons of overriding public interest refer to situations
 1711 where plans or projects envisaged prove to be indispensable within the framework of:

- 1712 • Actions or policies aiming to protect fundamental value for citizen's lives (health, safety,
 1713 environment);
- 1714 • Fundamental policies for the state and the society;
- 1715 • Carrying out activities of an economic or social nature, fulfilling specific obligations of public
 1716 services.

1717 Based on the above sources which summarize approaches to distinguish "public interests" from
 1718 "overriding public interests", it can be reasonably considered that a simple declaration without further
 1719 well-grounded assessments is not sufficient to declare a planned new modification or new sustainable
 1720 human development activity as "overriding public interest". A broad and transparent discussion
 1721 process underpinning such assessments with involvement of relevant authorities and stakeholders can
 1722 help in this regard, including a transparent and clearly documented decision making process for each
 1723 case. Guidance on the different levels of public participation and how to organise public participation
 1724 can be found in CIS Guidance No. 8 - Public Participation in Relation to the Water Framework
 1725 Directive.¹⁰³

1726 Results from an SEA on relevant plans and programs can also be helpful in this regard, next to the
 1727 public participation process required under WFD Article 14 which can support the debate to determine
 1728 overriding public interests. However, it should be noted that a specific project context will in most
 1729 cases be needed as Article 4(7) cases can have a different scale, different timing and different
 1730 stakeholder groups which might need to be involved compared to the consultation process of the
 1731 RBMPs.

1732 **5.4.2 Weighing benefits of the modification versus foregone benefits and opportunities**

1733 The second part of Article 4(7)(c) addresses the question whether "*the benefits to the environment*
 1734 *and to society of achieving the objectives set out in paragraph 1 are outweighed by the benefits of the*
 1735 *new modifications or alterations to human health, to the maintenance of human safety or to*
 1736 *sustainable development*".

⁹⁹ Please note that the WFD does not use the term "imperative" as it is used in Article 6.4 of the Habitats Directive, what is important to be considered for a comparison. As regards the "other imperative reasons of overriding public interest" of social or economic nature, it is clear from the wording that only public interests, irrespective of whether they are promoted either by public or private bodies, can be balanced against the conservation aims of the Directive. Thus, projects developed by private bodies can only be considered where such public interests are served and demonstrated.

¹⁰⁰ See "Article 6 of the Habitats Directive - Rulings of the European Court of Justice" at:

http://ec.europa.eu/environment/nature/legislation/caselaw/index_en.htm

¹⁰¹ See Guidance on Article 6(4) and Methodological guidance on Assessment of Plans and Projects significantly affecting Natura 2000 sites available at: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf ; See Chapter 2.7

¹⁰² See: http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm

¹⁰³ See: <https://circabc.europa.eu/sd/a/0fc804ff-5fe6-4874-8e0d-de3e47637a63/Guidance%20No%208%20-%20Public%20participation%20%28WG%202.9%29.pdf>

1737 An analysis of the costs and the benefits of the project adapted to the needs of the Directive is
1738 necessary to enable a judgement to be made on whether the benefits to the environment and to
1739 society of preventing deterioration of status or restoring a water body to good status are outweighed
1740 by the benefits of the new modifications or alterations to human health, to the maintenance of human
1741 safety or to sustainable development. The benefits of achieving the environmental objectives of Article
1742 4 include¹⁰⁴:

- 1743 • In case of deterioration of status, those benefits and opportunities foregone as a result of the
1744 deterioration of status (e.g. loss of biodiversity, loss of ecosystem services); and
- 1745 • In case of failure of reaching good status or potential, those benefits that would be provided if
1746 the achievement of good status or good ecological status were not prevented (e.g. drinking
1747 water supply is no longer possible¹⁰⁵ or the foregone benefits due to the necessary increase in
1748 the level of purification treatment; if a water body may deteriorate from moderate to poor the
1749 gap between good and poor).

1750 The "water costs" (i.e. the residual negative effects of the project) have to be put in balance with the
1751 potential benefits and other costs (increased use of other natural resource, including global impacts) of
1752 the new modifications and alterations to human health, to the maintenance of human safety or to
1753 sustainable development¹⁰⁶. Thus, other categories of possible benefits and costs will have to be
1754 considered and - if possible – calculated, taking into account the specific quality element which is
1755 expected to deteriorate or be compromised to improve.

1756 In addition, CIS Guidance Document No. 1¹⁰⁷ outlines the following steps:

- 1757 1. Investigating issues similar to those considered in analysing the "sustainability status" of new
1758 activities. These include: improvement in human health, improvements in human safety (e.g.
1759 in the case of flood protection projects), increase in economic activity or production.
- 1760 2. Assessing the foregone benefits resulting from the failure to achieve the environmental
1761 objectives of the Directive, based on the evaluation of the environmental, economic and social
1762 water-related benefits. In both cases, it should be attempted to quantify and express benefits
1763 or foregone benefits in monetary terms so as to make both parts of the analysis comparable.
1764 In many cases, however, it will be difficult to express and quantify all benefits or foregone
1765 benefits in monetary terms. Thus, the different benefits and impacts should be presented,
1766 whether in monetary terms, quantified or assessed qualitatively, in a multidimensional table.

1767 Hence, this does not mean that it will be necessary to monetise or even quantify all costs and benefits
1768 to make such a judgement as this might be methodologically challenging. The appropriate mix of
1769 qualitative, quantitative and, in some cases, monetised information should depend on what is
1770 necessary to reach a judgement and what is proportional and feasible to collect¹⁰⁸. In this context and

¹⁰⁴ For an extended list see Annex I: Costs & Benefits of CIS Guidance No. 20

¹⁰⁵ Note that WFD Article 7(3) requires that Member States shall ensure the necessary protection for the bodies of water identified with the aim of avoiding deterioration in their quality in order to reduce the level of purification treatment required in the production of drinking water.

¹⁰⁶ http://ec.europa.eu/environment/sustainable-development/SDGs/implementation/index_en.htm

¹⁰⁷ <http://ec.europa.eu/environment/water/water-framework/economics/pdf/Guidance%201%20-%20Economics%20-%20WATECO.pdf>

¹⁰⁸ For assessing benefits or comparing benefits, inspiration can be found in the Guide to Cost-Benefit Analysis of Investment Projects - Economic appraisal tool for Cohesion Policy 2014-2020: http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/cba_guide.pdf

1771 due to the range of expertise which may be needed for such assessments, close cooperation of the
1772 relevant competent authorities is considered as good practice.

1773 The challenge in quantifying and monetizing the environmental benefits and losses arise in an
1774 economic assessment. Thus one could perform a multi-criteria analysis which might produce more
1775 relevant information and results than a cost-benefit analysis. This method can enable to consider a
1776 wide range of criteria¹⁰⁹, with not only monetary indicators, and can therefore lead to better informed
1777 decisions. In the event of two analyses being performed separately to assess the benefits and losses
1778 to the environment and the welfare effects, one should keep in mind that a methodology will need to
1779 be designed in order to compare the results of both analysis and perform the final balanced judgement
1780 on the overall benefits. Regardless of the methodology and assessment tool which is applied to make
1781 a judgement, it should be noted that the assessment of economic and social welfare is linked to the
1782 environmental one, and its justification needs to be transparent and accountable.

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Case study 9: Criteria Catalogue for Hydropower

Country: Austria (AT)

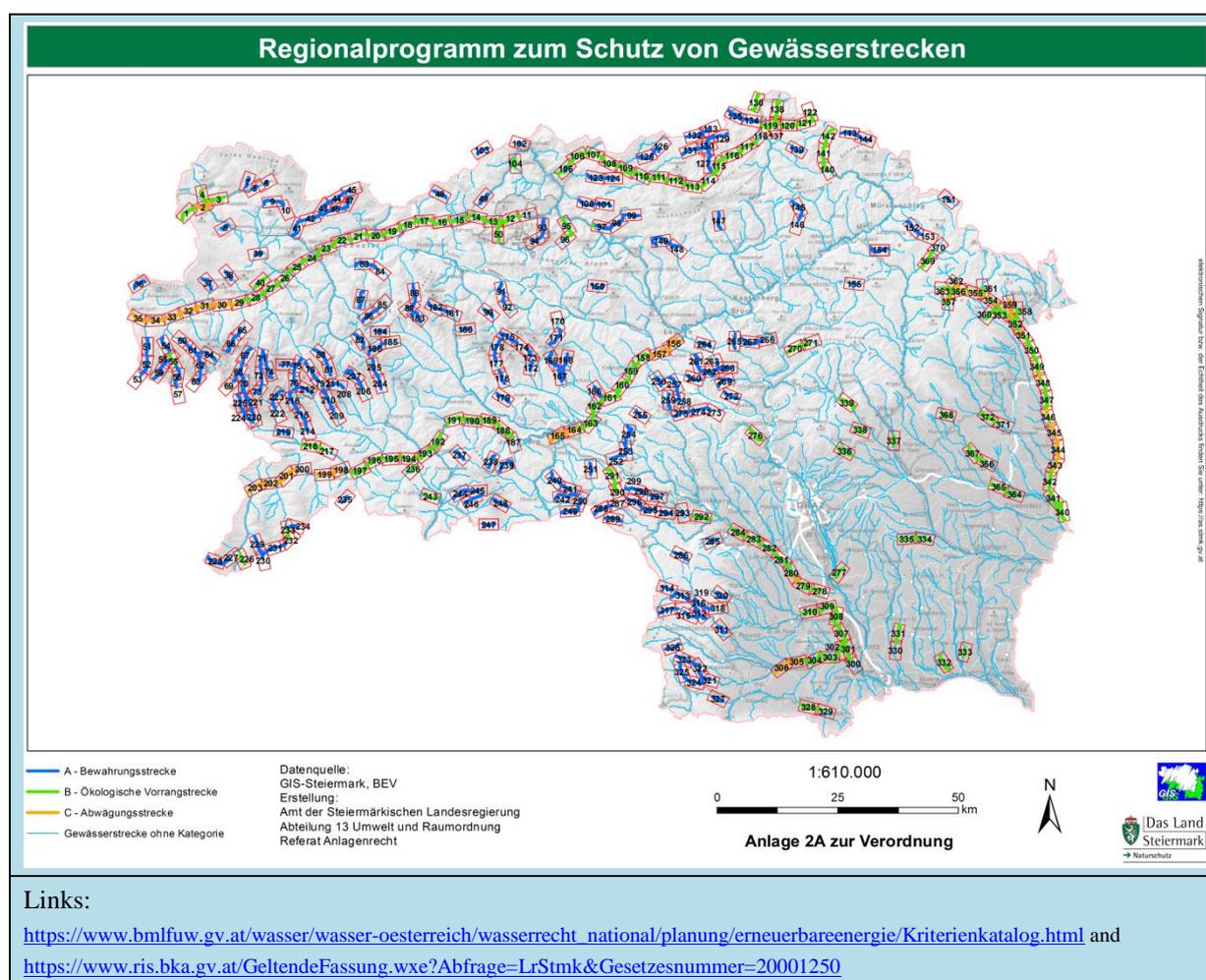
Austria has laid down principles for hydropower development in the first RBMP as well as the “Criteria Catalogue for new hydropower development” (Österreichischer Wasserkatalog: Wasser schützen – Wasser nutzen. Kriterien zur Beurteilung einer nachhaltigen Wasserkraftnutzung) which is a decision support system as basis for regional planning. The main goals of the catalogue are:

- to assist water authorities in weighing the diverse public interests
- to summarise technical knowledge on most relevant aspects (energy management, ecology and other relevant water management aspects)
- give information on the criteria to assess the ecological value of WBs
- to ensure an Austrian wide common understanding and application of Art. 4 (7) test
- to assist transparency
- supporting tool - not forestalling the final decision of authorization body
- additional support for the assessment of better environmental options
- basis for further strategic planning for hydropower development on regional level
- will help hydropower planners to evaluate at a very early stage the chances of a new project to get an approval before detailed project planning is done

In order to implement this approach, in a first step the development of the criteria catalogue was included as a measure in the Program of Measures (PoM) of the 1st River Basin Management Plan to be used for weighing public interests in case of status deterioration (Article 4(7) WFD) as well as a basis for regional planning of hydropower development. Criteria were developed to rate new hydropower projects with regard to their positive effect on energy management aspects as well as positive or negative effects on other water management aspects (e.g. flood protection, sediment balance, water supply, water quality, tourism, etc.). On the other hand criteria were developed to rate river stretches with regard to their ecological value. The catalogue was published by the Ministry and provided to the regional authorities as an order for application (Erlass).

As an example for the second step (practical application), the regional program from the provincial government of Styria is provided, outlining "preservation stretches", "ecological priority stretches", and "weighing stretches" (see map).

¹⁰⁹ Also the use of results from mapping and assessment of ecosystems and their services (MAES process), if available, may be useful in that context; See: <http://biodiversity.europa.eu/maes>



1784

1785 5.5 Relationship to the River Basin Management Plans

1786 Article 4(7) exemptions are linked to a number of issues with the River Basin Management Plans. The
1787 main ones are outlined as follows.

1788 5.5.1 Reporting in the River Basin Management Plans

1789 Article 4(7)(b) includes a general provision that "*the reasons for those modifications or alterations are*
1790 *specifically set out and explained in the river basin management plan required under Article 13 and*
1791 *the objectives are reviewed every six years*". Furthermore, WFD Annex VII A.5, A.7 and B1 refer to
1792 Article 4(7) exemptions and the need to report them in the RBMP. The core rational behind these
1793 requirements is to support the public participation process and to ensure that the use of exemptions is
1794 made transparent and traceable, allowing for public scrutiny. The public participation process can also
1795 be useful in other terms, e.g. for determining overriding public interest due to feedback provided by
1796 relevant actors and stakeholder if potential Article 4(7) cases are included in the draft RBMPs.

1797 Guidance Document No. 20 outlines in this context that this is a reporting obligation and does not
1798 mean that Member States must wait until the publication of the River Basin Management Plan before
1799 allowing a new physical modification or new sustainable development activity to proceed. In many
1800 cases projects will be developed within the RBMP six year cycle.

1801 For modifications and alterations within the scope of the Environmental Impact Assessment Directive,
1802 Member States must ensure that the public concerned is given the opportunity to express an opinion
1803 before the project is initiated.

1804 Even if timing of a project is such that consultation on the RBMPs will not provide the opportunity for
1805 interested parties to express their views in advance of those decisions, Article 14 requires Member
1806 States to encourage the active involvement of all interested parties in the implementation of the
1807 Directive. It is recommended that Member States ensure that such opportunities¹¹⁰ are provided in
1808 relation to projects that are outside the scope of the Environmental Impact Assessment Directive but
1809 likely to result in deterioration of status or to prevent the achievement of good ecological status, good
1810 ecological potential or good groundwater status.

1811 The information provided through such consultations will help Member States in reaching a judgment
1812 on whether the exemption conditions are met and will reduce the likelihood that interested parties will
1813 challenge the subsequent decision. If a modification or alteration goes ahead part way through a river
1814 basin management planning cycle, the reason for that modification or alteration must be set out in the
1815 subsequent (update of the) RBMPs.

1816 Furthermore, the PCI Guidance¹¹¹ for energy infrastructure Projects of Common Interest, which is a
1817 Commission Guidance, provides some further direction, outlining that *"where a project is put forward
1818 in the middle of the 6 years cycle and was not included in the previous RBMP, under strict and short
1819 time limits, Member States will be de facto amending their RBMPs and with no public consultation.
1820 Therefore, the preferred course of action would be to formally update the existing RBMPs. An
1821 alternative would be to rely on a proper ad hoc public consultation, e.g. using the EIA process or other
1822 proper consultation. (...) Failing to carry out a proper public consultation could run the risk that
1823 Member States lose sight of the links between the proposed project and other water uses in the basin
1824 or that citizens are partly deprived of their right to be consulted as provided under the WFD. It is
1825 therefore recommended that time limits for the consultations are sufficient to allow a proper
1826 consideration of the project in the RBMP context. In cases where the projects are developed in the
1827 middle of the WFD planning cycle, they will then need to be included in the subsequent RBMP, which
1828 will be subject to public consultation in its entirety."*

1829 In addition, the following information can be considered as useful to be included in the RBMPs (and
1830 the draft RBMPs) or provided in supplementary documents that are available at the time of publishing
1831 the plans:

- 1832 • Potential 4(7) cases before the project is assessed or where assessment is ongoing, e.g. flood
1833 protection measures outlined in the FRMP, other infrastructure projects (e.g. navigation,
1834 hydropower, irrigation schemes) which may be subject to an Article 4(7) Test, or other projects
1835 for which an authorisation procedure was launched;
- 1836 • Other projects which may have effects on water body status/potential but which may not
1837 trigger, individually, an Article 4(7) Test;
- 1838 • Information on potential interaction with existing pressure and uses in the basin;

¹¹⁰ Note that the provisions of the Aarhus Convention can be relevant in that context.

¹¹¹ Guidance on Streamlining environmental assessment procedures for energy infrastructure Projects of Common Interest (PCIs),
https://ec.europa.eu/energy/sites/ener/files/documents/20130919_pci-en-guidance.pdf

- 1839
- Information and links to relevant background documents;

1840 An added value can also be information in the RBMP about projects where an Article 4(7) Test was
 1841 not required (since the proposed project was assessed to not cause a deterioration / non-achievement
 1842 of good status / potential). This information can inter alia be relevant for the update of the review of the
 1843 environmental impact of human activity and the economic analyses required under WFD Article 5 and
 1844 Annex III. Here in particular for the identification of pressures, the assessment of impacts and the risk
 1845 of failing to achieve the environmental objectives. It can also be useful for transparency reasons, i.e. if
 1846 information is requested by interested parties¹¹².

Case study 10: Instruction of the Spanish Water Director in relation to Article 4(7)

Country: Spain (ES)

Spain has developed technical Instruction that applies to all interregional RBDs in the country. The instructions establish a technical procedure to analyse new modifications of physical characteristics of water bodies, new sustainable human development activities and alterations to the level of groundwater bodies that could lead to the consideration of possible art 4(7) exemptions. For each potential Art 4(7) case a fact sheet needs to be filled out.

The final factsheet that has to be included in the RBMP as a summary of the 4(7) evaluation. It can be used as a summary (that can be used in the public participation process) but also as a check list for water planning officers to follow all the steps of a complete analysis. Furthermore, it enables to compile all the information as structured data in a computer system.

Links: <https://circabc.europa.eu/sd/a/f72ae44f-23e3-4cb6-9cba-74a79bf5c331/19> - MS Spain - 4.7 Case Study 1.pdf

1847

1848 5.5.2 Article 4(7) and the designation of heavily modified water bodies (HMWB)

1849 If Article 4(7) is applied for a new modification to the physical characteristics of a surface water body
 1850 (hydromorphological alteration), a water body might then qualify to be designated as HMWB in the
 1851 next RBMP where the water body is deteriorated / cannot reach Good Ecological Status.

1852 Guidance Document No. 20 outlines in this context that after a new hydro-morphological alteration has
 1853 occurred, it may be that the water body qualifies for designation as a heavily modified water body in
 1854 accordance with Article 4(3) in the next planning cycle. There is no requirement that the designation
 1855 has to wait until the publication of the next River Basin Management Plan. However, water bodies
 1856 cannot be designated as HMWBs before the new modification has taken place because of the
 1857 anticipation of the significant hydro-morphological alteration.

1858 After the application of Article 4(7) and in case of designation of new HMWBs, the step by step
 1859 approach developed within the HMWB guidance document should be applied without the "provisional
 1860 identification-step".

1861 There are similarities between the Article 4(7) exemption and HMWB designation test, addressing e.g.
 1862 physical modifications or requiring mitigation measures. CIS Guidance Document No. 4 already
 1863 outlines that HMWB designation tests according to Article 4(3) can become relevant for newly modified

¹¹² See for example Court Case C-75/08, concerning the EIA Directive, available at <http://curia.europa.eu/juris/document/document.jsf?text=&docid=73330&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=194020>

1864 water bodies, for instance for water bodies that have become substantially changed in character as a
1865 result of the application of the Article 4(7) derogation¹¹³. Therefore it can be reasonable to ensure
1866 coherence between the required assessments under Article 4(7) and the tests according to Article
1867 4(3). At the same time, a new hydro-morphological alteration will not always lead to a designation of
1868 the respective water body as heavily modified (e.g. in case of deterioration from high to good).

1869 Once a water body is designated as HMWB following the Article 4(7) exemption and Article 4(3) test,
1870 HMWB designation needs to be checked every 6 years in subsequent RBMPs whether the
1871 requirements for HMWB designation and GEP are achieved. This is required for proving if new
1872 approaches and possibilities for mitigating impacts might have emerged which have to be considered.

1873 In case an Article 4(7) exemption is granted for a new physical modification in an existing HMWB (see
1874 chapter 0), the ecological potential of this water body might subsequently need to be re-defined based
1875 on the WFD 6-years planning cycle to take account of the additional physical modification.

1876 **5.5.3 Relationship of Article 4(7) to Article 4(4) and 4(5)**

1877 In case the Article 4(7) criteria are met it is possible to apply Article 4(7) exemptions under the first
1878 limb (new modifications to the physical characteristics of a surface water body or alterations to the
1879 level of bodies of groundwater) to water bodies which are already subject to exemptions under Article
1880 4(4) or 4(5)¹¹⁴. This question is not relevant for exemptions under the second limb (new sustainable
1881 human development activities) since it only applies to deterioration of surface water bodies from high
1882 to good status, for which there is no need to consider the application of exemptions under Article 4(4)
1883 or 4(5).

1884 There can be cases where the application of Article 4(4) or 4(5) exemptions may need to be justified
1885 following the application of an Article 4(7) exemption and modification of a water body. An example
1886 can be to apply an Article 4(7) exemption for a new modification which deteriorates water status,
1887 followed by an Article 4(4) exemption based on natural conditions since it takes the ecosystem longer
1888 to recover although the necessary mitigation measures to reach good status are implemented (see
1889 also chapter 3.3.1 in this context). Similarly, in case Article 4(7) is applied for an alteration to the level
1890 of groundwater, exemptions according to Article 4(4) or 4(5) will have to be justified in the following
1891 river basin management planning process according to their distinct conditions and reviewed every 6
1892 years. Therefore it can be reasonable to ensure coherence between the required assessments and
1893 tests under Article 4(7) and the required assessments according to Article 4(4) or 4(5).

1894 Take note that the application of Article 4(7) exemptions on water bodies which are subject to Article
1895 4(4) or 4(5) exemptions does not obviate the need for measures to improve status. The drivers and
1896 pressures that underpin the application of Article 4(4) or 4(5) still need to be addressed what may or
1897 may not be influenced by a new modification for which an Article 4(7) exemption is applied.

1898 Inter-relations with existing pressures from other uses on a water body need to be considered. A
1899 typical example could be a water body where an Article 4(4) exemption is applied due to nutrient
1900 pollution from agriculture (for a phased implementation of measures taken by the polluter addressing

¹¹³ See chapter 8.3.2 of CIS Guidance Document No. 4: [https://circabc.europa.eu/sd/a/f9b057f4-4a91-46a3-b69a-e23b4cada8ef/Guidance%20No%204%20-%20heavily%20modified%20water%20bodies%20-%20HMWB%20\(WG%202.2\).pdf](https://circabc.europa.eu/sd/a/f9b057f4-4a91-46a3-b69a-e23b4cada8ef/Guidance%20No%204%20-%20heavily%20modified%20water%20bodies%20-%20HMWB%20(WG%202.2).pdf)

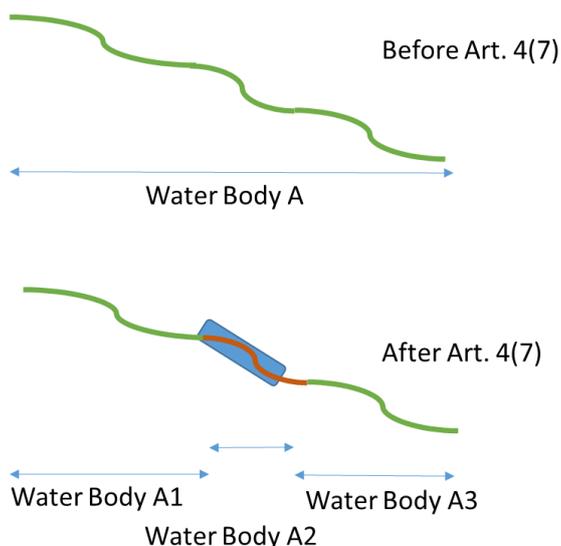
¹¹⁴ Note that the provisions of Articles 4(8) and 4(9) need to be fulfilled for the application of WFD exemptions.

1901 the existing pressure) and at the same time an Article 4(7) exemption is applied for a new modification.
 1902 Generally the impacts of nutrient pollution may not be affected but in some cases, and depending on
 1903 the nature of the new modification, it may actually make impacts of pollution worse (e.g.
 1904 hydromorphological changes that affect the capacity of the ecosystem to absorb nutrients). Therefore,
 1905 it should be considered how mitigation measures for a new project can be combined and interact with
 1906 other measures necessary to improve status (e.g. a fish ladder combined with morphological
 1907 measures for habitat recreation and ecological flow requirements).

1908 5.5.4 Change in water body delineation and/or typology due to an Article 4(7) exemption

1909 Once the project is implemented, a change in water body delineation might be required (for
 1910 subsequent RBMPs). According to CIS Guidance Document No. 2¹¹⁵, physical features (geographical
 1911 or hydromorphological) that are likely to be significant in relation to the objectives of the Directive
 1912 should be used to identify discrete elements of surface water. It further makes clear that HMWBs
 1913 should be designated as single water bodies. In other words, depending on the water body size before
 1914 the application of Article 4(7), a further split into water bodies might be needed. For the water bodies
 1915 that result from the split, a reassessment in terms of objectives and exemptions is needed, considering
 1916 what was applied in the previous RBMP.

1917 **Figure 7: Changing water body designation due to the application of Article 4(7)**



1918

1919 In cases where contiguous elements of surface water have been combined in a single water body,
 1920 such combination might not be longer possible after a modification has taken place as the criteria for
 1921 combining them (contiguous elements of surface water within a type are of the same status)¹¹⁶ will no
 1922 longer be met.

¹¹⁵ <https://circabc.europa.eu/sd/a/655e3e31-3b5d-4053-be19-15bd22b15ba9/Guidance%20No%20%20-%20Identification%20of%20water%20bodies.pdf>

¹¹⁶ See Guidance document number 2, available at: <https://circabc.europa.eu/sd/a/655e3e31-3b5d-4053-be19-15bd22b15ba9/Guidance%20No%20%20-%20Identification%20of%20water%20bodies.pdf>

1923 Note that the need for an update of the typology might also stem from measures for the improvement
1924 of water body status, e.g. by re-introducing natural processes (e.g. removal of a sluice, re-introducing
1925 tidal processes) leading to a change of the water body type.

1926 **5.5.5 Article 4(7) in a transboundary context**

1927 Transboundary coordination is a key issue for international river basins and addressed by the WFD.
1928 Article 3.4 outlines that “*Member States shall ensure that the requirements of this Directive for the*
1929 *achievement of the environmental objectives established under Article 4, and in particular all*
1930 *programmes of measures are coordinated for the whole of the river basin district. For international*
1931 *river basin districts the Member States concerned shall together ensure this coordination and may, for*
1932 *this purpose, use existing structures stemming from international agreements*”.

1933 This is of particular relevance in cases where a proposed project requires Article 4(7) assessments for
1934 water bodies which form the border between two countries, where the water body is crossing the
1935 border, or where the proposed project might cause transboundary impacts in more than one water
1936 body. Practical examples might be flood protection measures, hydropower plants or water abstraction
1937 from transboundary groundwater bodies. In such cases the Member States concerned need to
1938 coordinate the Article 4(7) Applicability Assessment as well as Article 4(7) Test, ensuring that
1939 common/coordinated procedures, thresholds and methodologies are used. Bilateral and multilateral
1940 transboundary river basin commissions might act as facilitators of such coordination¹¹⁷.

¹¹⁷ See also the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the UN Watercourses Convention in that context.

1941 **6 OUTLOOK AND FOLLOW-UP**

1942 The guidance aims to further clarify different aspects in relation to the practical application of
1943 exemptions to the environmental objectives according to WFD Article 4(7). While many issues gained
1944 in clarity and understanding, the constraints of the CIS process are also recognised, since for many
1945 aspects no "one-size-fits-all approach" can be elaborated in the frame of the CIS, requiring more
1946 specific attention, methodologies, tools and suitable approaches at Member State level.

1947 Therefore, the practical application of the guidance would benefit from further follow-up activities,
1948 potentially covering a range of topics. These can include for instance the following:

- 1949 • Exchange on experiences with assessments whether a planned project is expected to cause
1950 deterioration or compromise the achievement of the WFD objectives (Applicability
1951 Assessment);
- 1952 • Assessments of the cause-and-effect relationships between modifications/alterations and
1953 different quality elements;
- 1954 • Exchange of practical experiences on aspects related to the Article 4(7) Test itself, e.g.
1955 exchange on mitigation measures for different modifications, assessing alternative options,
1956 weighing of interests/overriding public interest, etc.;
- 1957 • Strategic planning approaches for different sectors and linkage to the WFD and Article 4(7)
1958 assessments, including sector-specific workshops;
- 1959 • Streamlining of assessments with other Directives;
- 1960 • Administrative settings at Member State level for project authorisation;
- 1961 • Reporting of Article 4(7) exemptions.

1962 In addition, the results of the assessment of the 2nd RBMPs might reveal further issues worth to be
1963 tackled. The CIS process can provide an appropriate framework for such potential follow-up activities.
1964 Therefore some of these issues may be given specific attention when developing the next CIS work
1965 programme. However, it may also be explored whether other coordination mechanisms and supporting
1966 tools might provide opportunities for a continued follow-up exchange and capacity building.

1967

ANNEX A: Comparative overview table WFD, HD, EIA and SEA Directive

Legislation	WFD 2000/60/EC	Habitats Directive 92/43/EEC	EIA Directive 2011/92/EU	SEA Directive 2001/42/EC
Aims of the procedure	<p>The Directive aims at maintaining and improving the aquatic environment. The Directive requires that Member States implement measures to prevent deterioration of the status and to achieve good status of all water bodies.</p> <p>The planning of "new modifications" requires the carrying out of an assessment of the impacts on the status of the affected water bodies. If the new modification is liable to cause deterioration or prevent the achievement of good status, the competent authority needs to ensure that the conditions of Article 4.7, but also 4.8 and 4.9, are met before granting the project authorisation.</p>	<p>The Habitats Directive aims to contribute towards ensuring biodiversity through the conservation of natural habitats and wild fauna and flora. It requires Member States to take measures to maintain or restore habitats and species to a favourable conservation status, including through the establishment and conservation of sites (SCIs and SACs) for the Natura 2000 network. The Birds Directive 2009/147/EC contains similar provisions for wild birds. SPAs classified under the Birds Directive form part of the Natura 2000 network.</p> <p>Art. 6 of the Habitats Directive lays down the requirements for the management and protection of the Natura 2000 sites. Art. 6(3) and (4) establish a procedure for the assessment and authorisation of plans or projects that may affect Natura 2000 sites. The aim to maintain the integrity of the Natura 2000 sites and the overall coherence of the network.</p>	<p>To ensure a high level of protection of the environment and of human health, through the establishment of minimum requirements for the environmental impact assessment of projects.</p> <p>Hence, Member States shall adopt all measures necessary to ensure that, before development consent is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects on the environment (Article 2(1)).</p>	<p>To provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment (Article 1).</p>
Types of developments covered	<p>Any project and activity that can lead to deterioration or otherwise affect the status/potential of a water body. Article 4(7) allows under certain conditions for exemptions for new modifications to the physical characteristics of a surface water body, alterations to the level of a groundwater, or new sustainable human development activities.</p> <p>Even if certain projects are not covered by the EIA Directive, Article 4(7) may apply. The determining factor is whether the project is liable to cause deterioration of the status/potential of the affected water bodies or prevent the achievement of good status/potential.</p> <p>Some measures to improve status may fall within the scope of the EIA Directive and hence require an EIA (e.g. urban waste water treatment plants).</p>	<p>Any plan or project likely to have adverse effect on a Natura 2000 site</p>	<p>Projects listed in Annex I, EIA Directive.</p> <p>Annex II projects determined on a case by case basis and/or through thresholds or criteria.</p>	<p>All plans and programmes and their modifications: (a) which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II to the EIA Directive or (b) which, in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive. Other plans and programmes (P/P), P/P for the use of small areas at local level or minor modifications to P/P determined on a case by case basis and/or by specifying types of P/P.</p>
Screening	<p>No specific prescription, however, the step of the Art. 4(7) process where it is determined whether a new modification/alteration/new sustainable human development activity may affect water body status/potential. If the results of the screening step indicate that no significant effects are to be expected, there is no need to carry out further assessments.</p>	<p>The step of the Art. 6(3) process where it is determined whether a project or a plan is likely to cause significant effects to a Natura 2000 site, either alone or in combination with other plans and projects, corresponds to what is commonly called "screening procedure". If the results of the screening step indicate that no significant effects are to be expected, there is no need for an AA to be carried out.</p>	<p>Annex I of the EIA Directive lists projects for which the EIA is mandatory. For projects listed in Annex II of the Directive, the Member States have to determine if an EIA should be undertaken, based on the characteristics of the project; through a case-by-case examination and/or setting thresholds or criteria⁷. This is known as "screening procedure". The screening have to take into account the criteria set in Annex III, i.e. the characteristics of the project; its location, and the characteristics of the potential impact.</p>	<p>Identify whether a plan or programme is a "plan or programme" as defined by Article 2(a) and whether it is likely to have significant environmental effects (Article 3(4)). If the answer to both of the above is "yes" then the plan or programmes will require SEA.</p>

Legislation	WFD 2000/60/EC	Habitats Directive 92/43/EEC	EIA Directive 2011/92/EU	SEA Directive 2001/42/EC
<p>Scope and level of detail of the environmental information</p>	<p>No specific prescription, however, scoping aims to identify the assessments which are needed to determine the effects on water body status/potential at quality element level.</p>	<p>Although not explicitly mentioned, scoping is accepted as good practice and aims to precisely identify the issues that the AA should cover, as well as the appropriate information to gather.</p>	<p>Scoping is not mandatory, but accepted as good practice.</p>	<p>Mandatory requirement to consult designated authorities on the "scope and level of detail of the information which must be included in the environmental report"(Article 5(4)).</p>
	<p>Information is needed about the status of the quality elements that form the definition of ecological status (e.g. fish, macroinvertebrates, etc.) and the potential impact of the project on those. This is the first assessment that needs to be carried out, to assess whether the project may deteriorate status or prevent the achievement of good status. If this is the case, then the project cannot be authorised unless the conditions in article 4(7) are fulfilled.</p> <p>In Article 4.7 it is indicated that it is necessary to demonstrate that the beneficial objectives served by the modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option. Those means or alternative solutions could involve alternative locations, different scales or designs of development, or alternative processes. Alternatives should be assessed in the early stages of development and at the appropriate geographical level against a clear view of the beneficial objectives provided by the modification. For projects under its scope, the use of the requirements of the EIA Directive can help to assess the different possible alternatives.</p> <p>Additional conditions are that the project is of overriding public interest (similar concept as used in the Habitats Directive) or that the projects benefits outweigh the impacts of not achieving the WFD objectives.</p> <p>In addition, all practicable mitigation measures need to be included in the project. Again the EIA procedures can be helpful to identify adequate mitigation measures.</p> <p>It is important to realise that the WFD is only concerned about permanent impacts at water body level, whereas the EIA also deal with local impacts of temporary nature.</p>	<p>If it cannot be excluded, following the screening, that the plan or project will have a significant effect on the site, an Appropriate Assessment is required. The focus of the AA is on the conservation objectives of the site, which relate to the species and habitat for which the site was designated. (NB: Although the HD does not specify the content of the AA, this is clarified through relevant Commission guidance drawing on Court rulings). All kinds of effects, including cumulative, have to be assessed. Any possible mitigation measures (e.g. in relation to location of the project, timing of operations, construction method, etc.) can be considered in the context of the AA so as to avoid adverse effects on the integrity of the site.</p> <p>In case of a negative conclusion of the AA, the provisions of Art. 6(4) may apply and they define key elements to be considered (alternative solutions, imperative reasons of overriding public interest, compensation measures). (NB: These elements are clarified in relevant Commission guidance on Article 6 of the Habitats Directive. The examination of alternatives does not fall within the scope of Article 6(3) but within the scope of Article 6(4) (C-441/03, C-241/08).</p>	<p>The environmental impact assessment report to be provided by the developer for a project should include a description of reasonable alternatives studied by the developer which are relevant to that project, including, as appropriate, an outline of the likely evolution of the current state of the environment without implementation of the project (baseline scenario), as a means of improving the quality of the environmental impact assessment process and of allowing environmental considerations to be integrated at an early stage in the project's design (Article 5(d), Annex IV, EIA Directive as amended).</p>	<p>The environmental report shall be prepared and it shall identify, describe and evaluate "reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme" (Article 5(1)).</p>
<p>Public participation and consultation</p>	<p>One of the conditions of article 4(7) is that the reasons for the project are specifically set out and explained in the river basin management plan, which is compulsory subject to a 6 months public consultation. This provision allows consultation of the project in the context of the plan, which enables the assessment of interactions with other</p>	<p>Not obligatory in the context of decision making under Art. 6(3) but encouraged ("if appropriate").</p>	<p>The authorities likely to be concerned by the project by reason of their specific environmental responsibilities or local and regional competences are given an opportunity to express their opinion on the information supplied by the developer, and on the request for development consent.</p> <p>The public shall be informed electronically and by</p>	<p>The draft plan or programme and the environmental report shall be made available to (i) the authorities which by reason of their specific environmental responsibilities are likely to be concerned by the environmental effects of implementing the plans and programmes and (ii) the public. The</p>

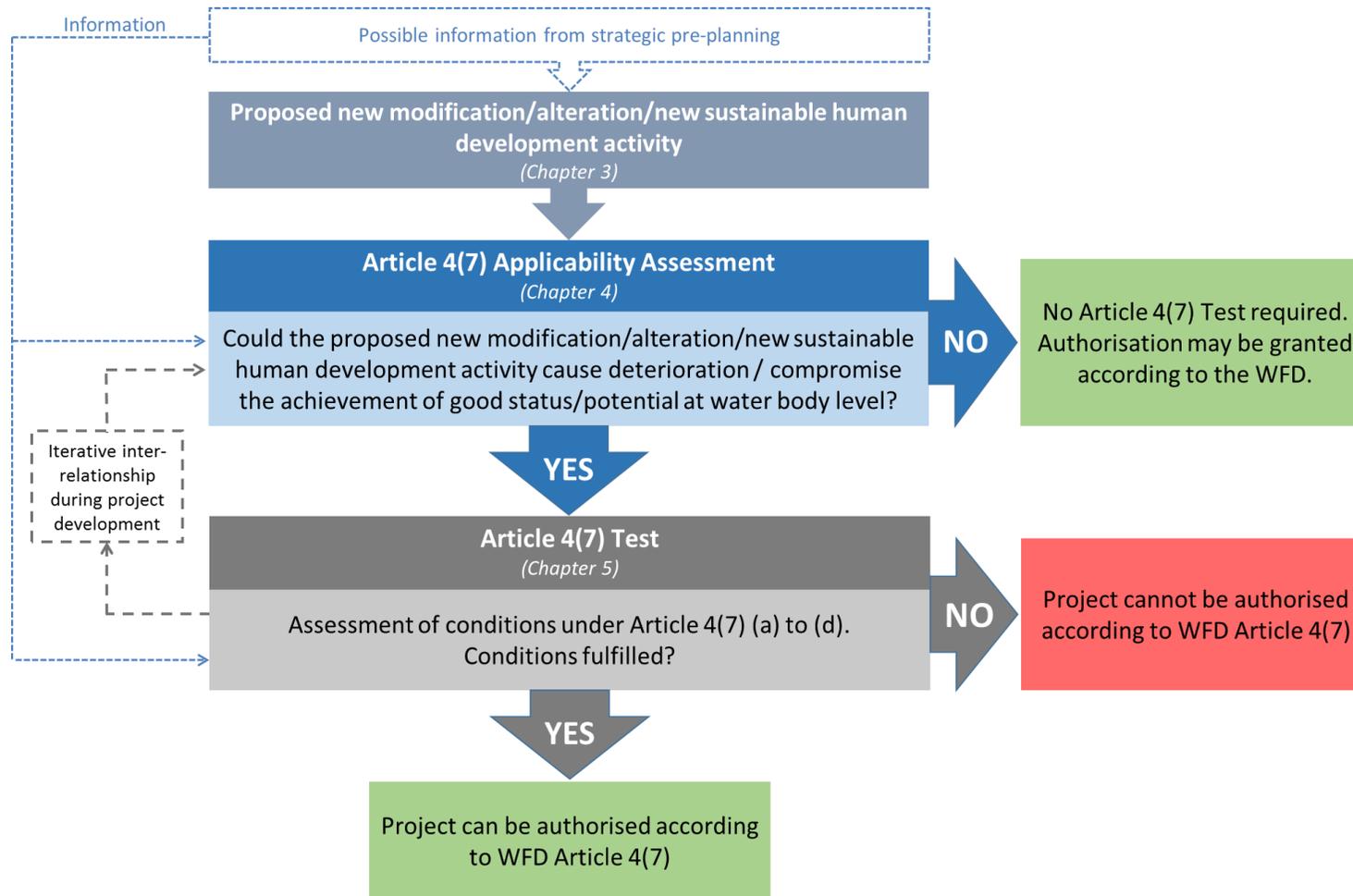
Legislation	WFD 2000/60/EC	Habitats Directive 92/43/EEC	EIA Directive 2011/92/EU	SEA Directive 2001/42/EC
	new projects and existing water uses in the basin.		public notices or by other appropriate means. (Article 6(1)-(2)). The public concerned shall be provided with access to the information described in Article 6(3) (a)-(c) within reasonable time-frames. The public shall be given early and effective opportunities to participate in the environmental decision making procedures.	authorities and the public shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Article 6 (1)-(2)).
Decision-making	The environmental objectives are binding for plans and projects. This means that if a new project is liable to cause deterioration of status or prevent the achievement of good status in the affected water bodies, the authorities are bound to refuse the authorisation unless the conditions in article 4(7) are fulfilled.	The results of the AA are binding, i.e. the competent authorities can authorise the plan or project only if the AA concludes that it will not adversely affect the integrity of a Natura 2000 site. However, if the AA concludes that adverse effects cannot be ruled out, the competent authority must be satisfied that all conditions set out in Article 6(4) are met (there are no alternative solutions, there are imperative reasons of overriding public interest, compensation measures for damage have been found to ensure coherence of the Natura 2000 network. In that case the Commission must be informed, and, in specific circumstances, give an opinion.	The objective of an EIA is to describe the potential environmental impacts of a project, to ensure that results of consultations and information gathered during the EIA process is duly taken into account in the decision making process and to inform of the final decision taken. (Article (8), (8a) and (9)).	The environmental report, the opinions expressed and the results of any transboundary consultations, shall be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure (Article 8). When a plan or programme is adopted Member States shall ensure that the authorities which by reason of their specific environmental responsibilities, the public and any Member State consulted in a transboundary consultation are informed and the information described in Article 9(1) (a)-(c) is made available.
Monitoring	The WFD includes the requirement to establish monitoring programmes for the monitoring of water status in order to establish a coherent and comprehensive overview of water status within each river basin district (Article 8 and Annex V).	Considered good practice. In particular, monitoring of the mitigation or compensation measures will be important to ensure their effectiveness with regard to their objective (respectively no adverse effects on the integrity of the site, or maintenance of the coherence of the network).	Member States shall ensure that the features of the project and/or measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment are implemented by the developer, and shall determine the procedures regarding the monitoring of significant adverse effects on the environment. The type of parameters to be monitored and the duration of the monitoring shall be proportionate to the nature, location and size of the project and the significance of its effects on the environment. Existing monitoring arrangements resulting from Union legislation other than this Directive and from national legislation may be used if appropriate, with a view to avoiding duplication of monitoring. (Article 8a(4)). Where appropriate the monitoring measures shall be incorporated in the decision to grant development consent (Article 8a (1)(b)).	Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action" (Article 10(1)). The Environmental Report shall include "a description of the measures envisaged concerning monitoring" (Annex I (i)). Monitoring allows the actual significant environmental effects of implementing the plan or programme to be tested against those predicted. It thus helps to ensure that any problems which arise during implementation, whether or not they were foreseen, can be identified and future predictions made more accurately. As good practice monitoring can be integral to compiling baseline information for future plans and programmes, and to preparing information which will be needed for EIAs of projects.

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ANNEX B: Collection of flow-charts

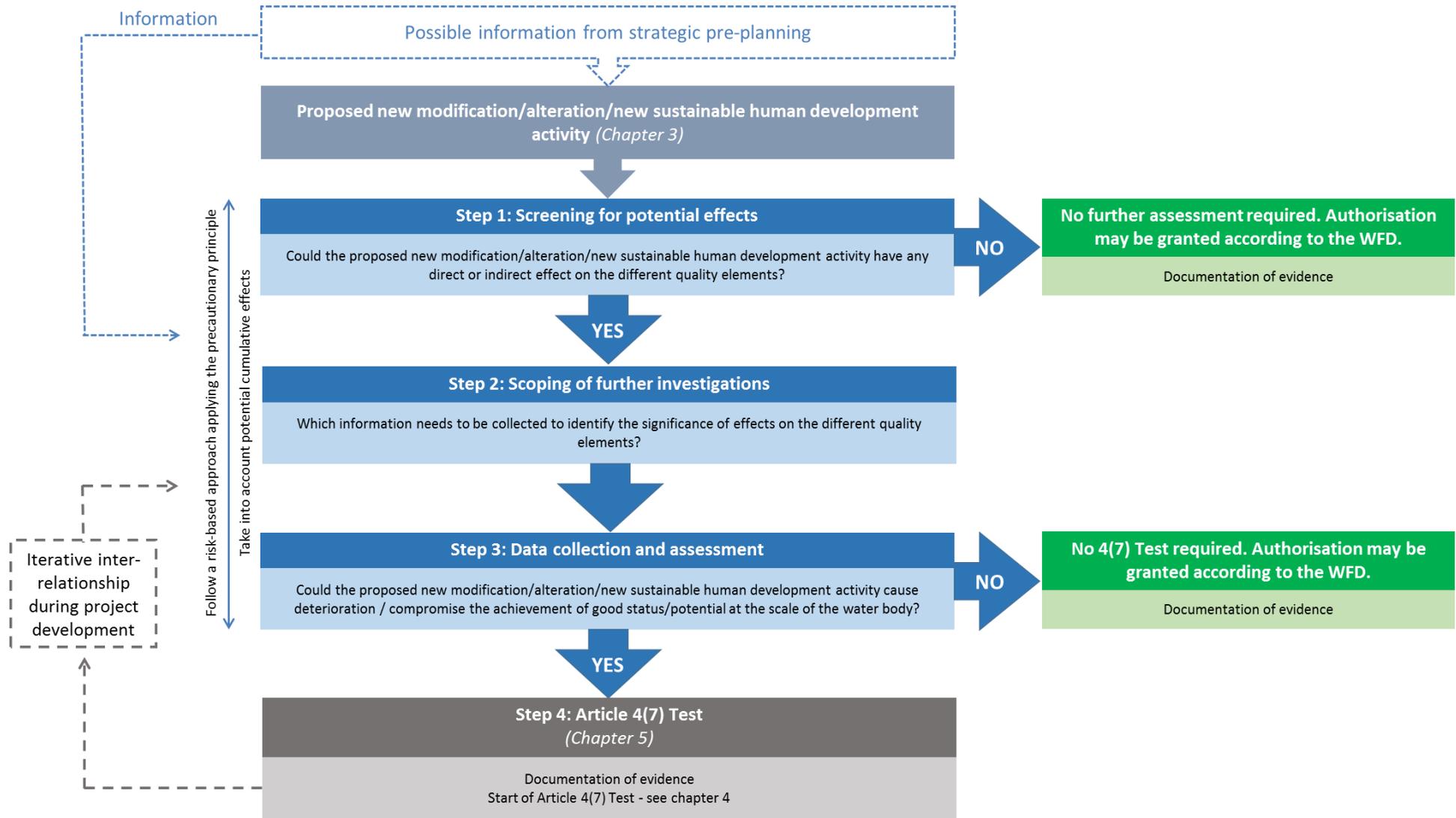
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Principle relationship between Article 4(7) Applicability Assessment and Article 4(7) Test



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Step-wise approach for an Article 4(7) Applicability Assessment

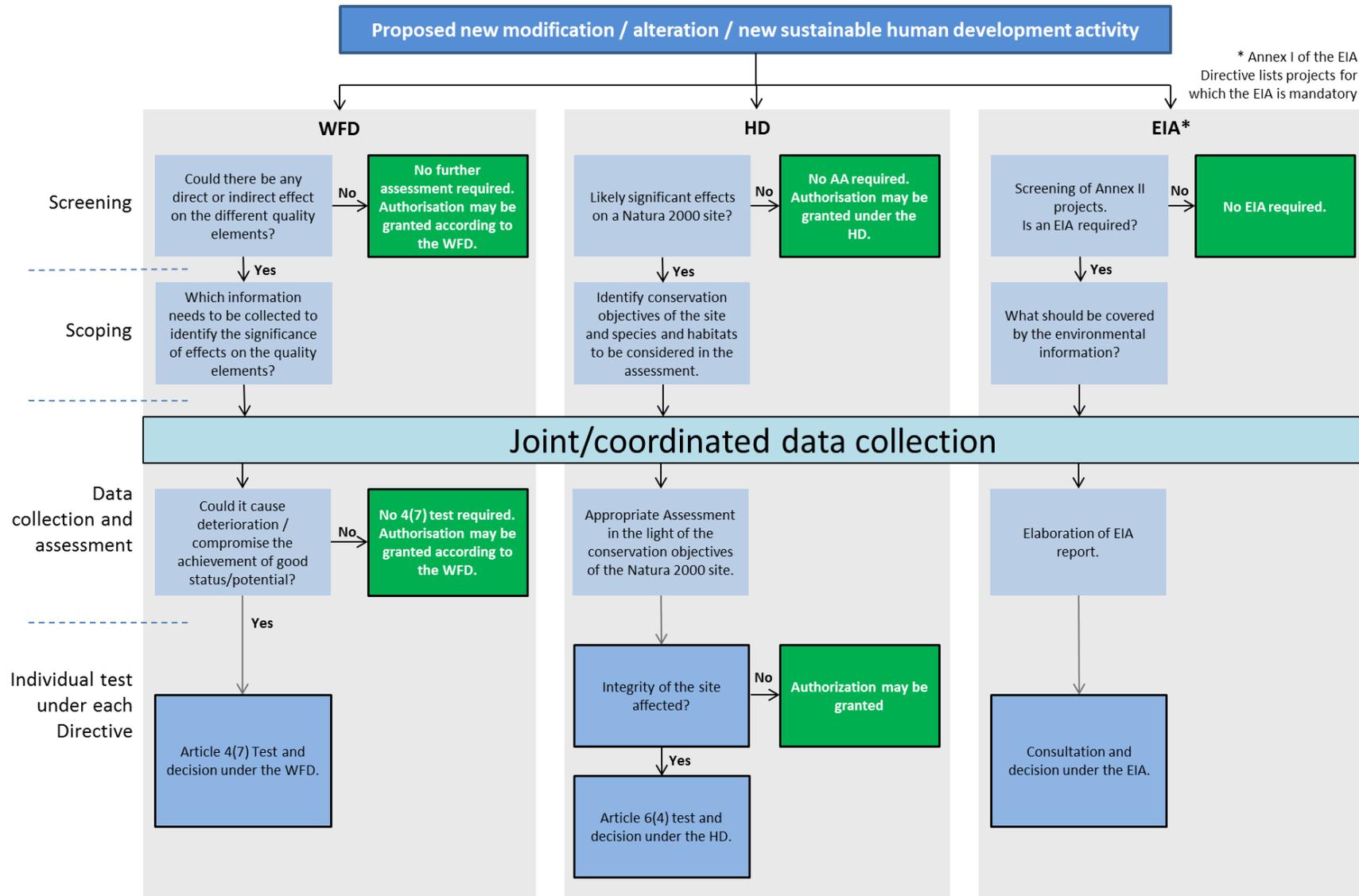


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Streamlining of assessments under the WFD, HD and EIA Directive

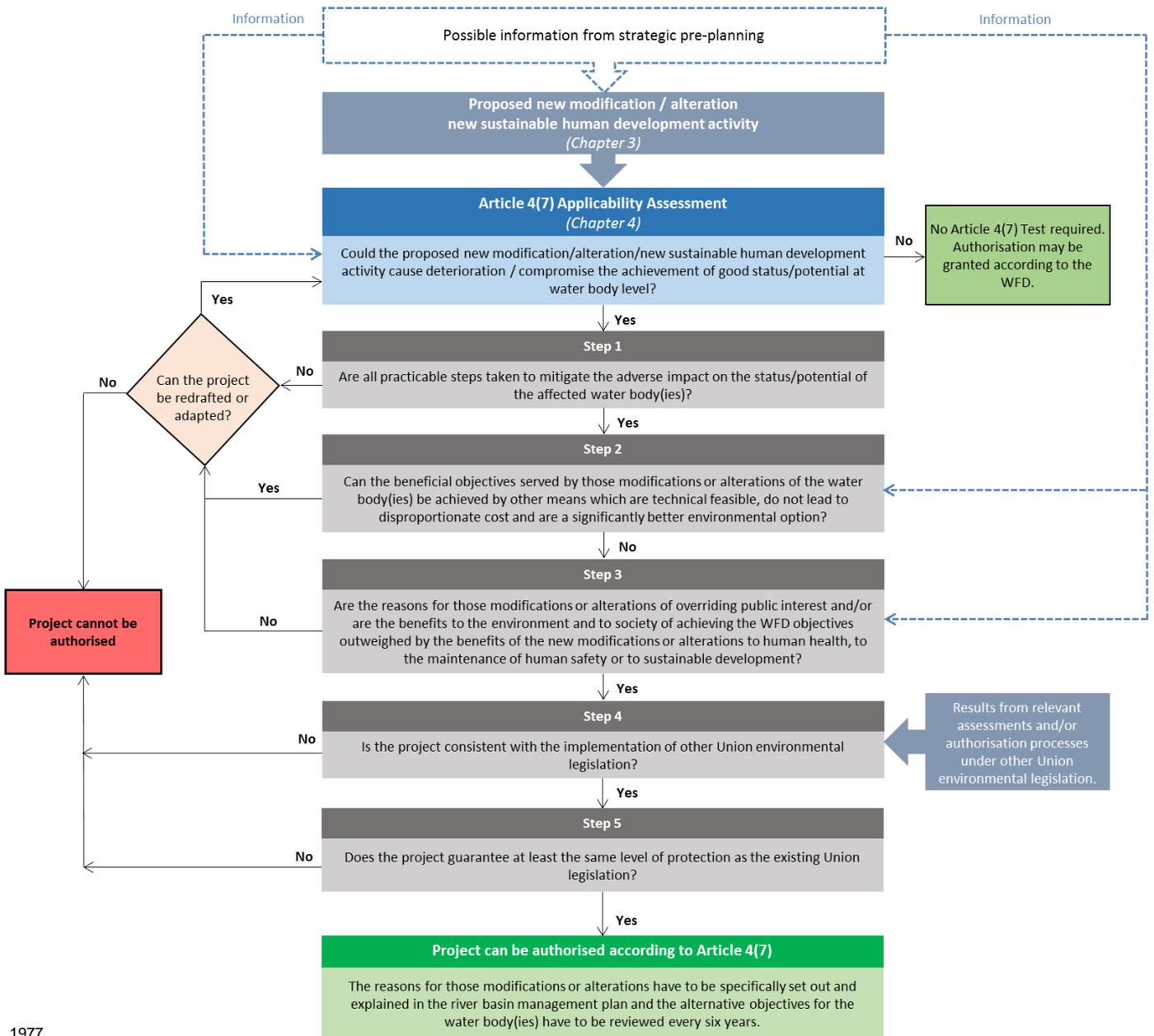


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Step-wise approach for an Article 4(7) Test

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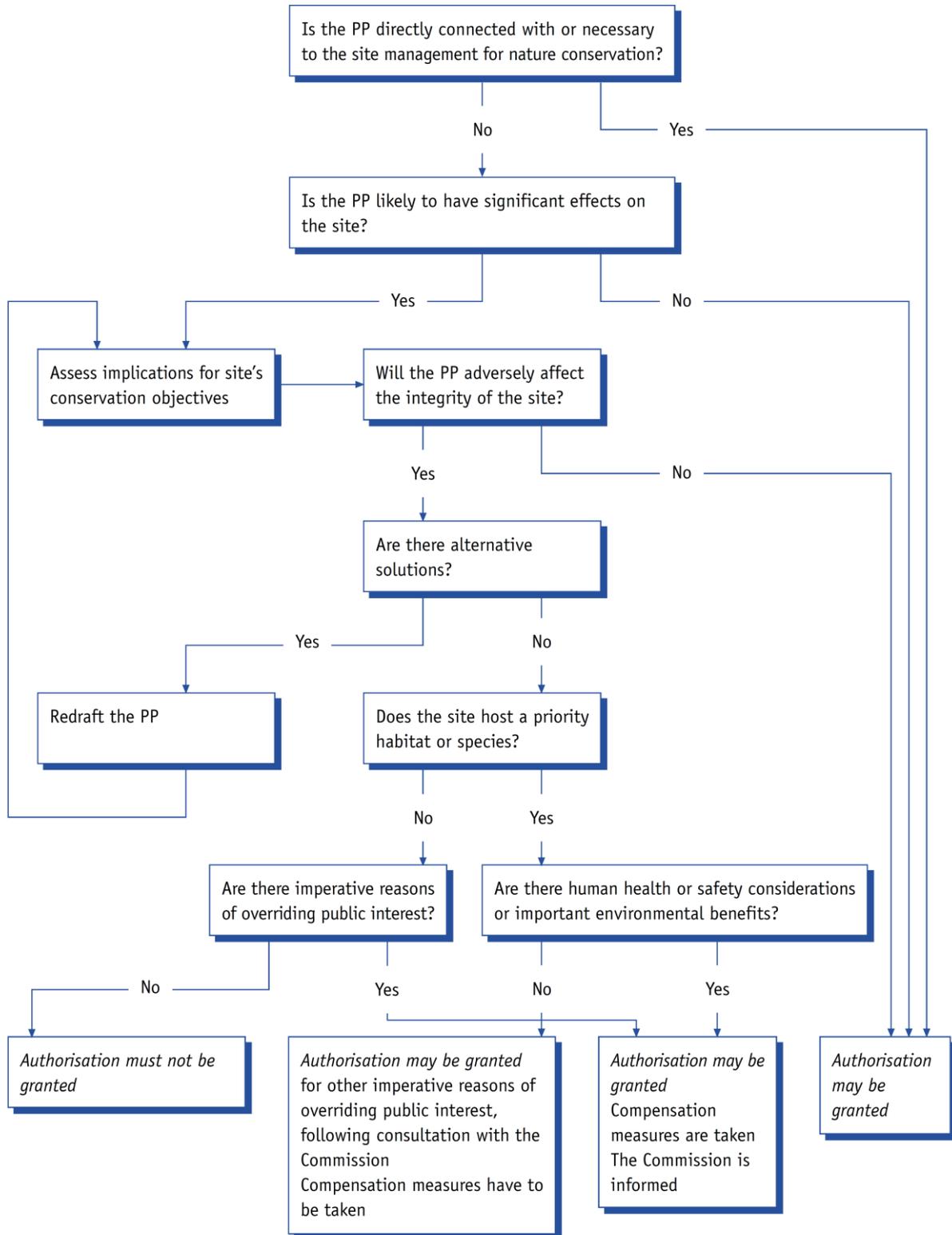
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Article 6(3) and 6(4) procedure of the Habitats Directive

1979

CONSIDERATION OF A PLAN OR PROJECT (PP) AFFECTING A NATURA 2000 SITE



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