



European
Commission

Structured Implementation and Information Framework (SIIF) Last version of the SIIF concept

European Commission
Directorate General for Environment
Unit C.2 - Marine Environment & Water Industry
Bruno Rakedjian

SIIF meeting
Wednesday 25 March 2015





Structured Implementation and Information Framework **the overall aim of the SIIF**

**A concrete way of data/information management
to implement the "INSPIRE" and "public access to
environmental information" directives**

in order

**to improve the implementation and maintain the
compliance of an EU Environmental directive/policy**

and

**to contribute to green and blue growth and jobs
creation.**

SIIF: The history

- Concept introduced in the 2012 **Implementation Communication** (COM(2012)95)
- SIIF pilot inspired by **FR waste water government website** <http://assainissement.developpement-durable.gouv.fr/>
- 2013: **clarification of the concept**
- 2014: **development of the concept with 3 pilot MS** under the waste water policy (CY, LT and SI)
- June 2014: adoption of an **new article 17 template** under the **UWWTD (programme of implementation)**
- End 2014: **adaptation** of the concept **to the new Commission agenda** (new boost for jobs, growth and investment, connected digital market,...) and **to other environmental policies**
- 2015: **New SIIF contract** to disseminate the UWWTD SIIF to four new MS.

SIIF The principles

(has to be implemented **step by step**)

Improve the governance and the implementation of a policy

Improve the dissemination of information/data of a policy





Improve the process of information/data of a policy

Improve the organisation of information/data of a policy

Implementation of directives

INSPIRE

Public access environmental information

1. **Work together. Focus on compliance, forward looking aspects, environmental pressure and quality, economic activities and jobs creation**
- Be up to date - Increase efficiency - Reduce administrative burden.

2. **Focus on user's need - Ease the access and sharing - Be user-friendly to use**

3. **Be decentralised, self-assessed and qualified**

4. **Be accurate and comparable**


New agenda of the Commission

Jobs and growth

Digital market

Internal Market and Industrial base

SIIF the forward looking aspect and economic approach

Implementation programme

Example of the article 17 under UWWTD

New template adopted in a new implementing Decision in June 2014 ([link](#))

totally **linked to the jobs, growth and investment agenda**

- *Detailed information, costs and dates about works on collecting systems and treatment plants*
- *Information about investments and their evolution*
- *Other information about implementation of the waste water policy at national level*

The INSPIRE directive requirements

INSPIRE directive (2007/2/CE) establishing an Infrastructure for Spatial Information in the European Community

<http://inspire.ec.europa.eu/>

EU/National/Regional/local Data linked to EU environmental policies

Art. 7 and 8 INSPIRE harmonisation of data

- Common framework for data per topic
- Creation of Relationships between data depending from several topics

Those services have to :

- take into account relevant requirements user
- be easy to use
- available to the public
- Be accessible via the Internet...

Art. 11 implementation of services

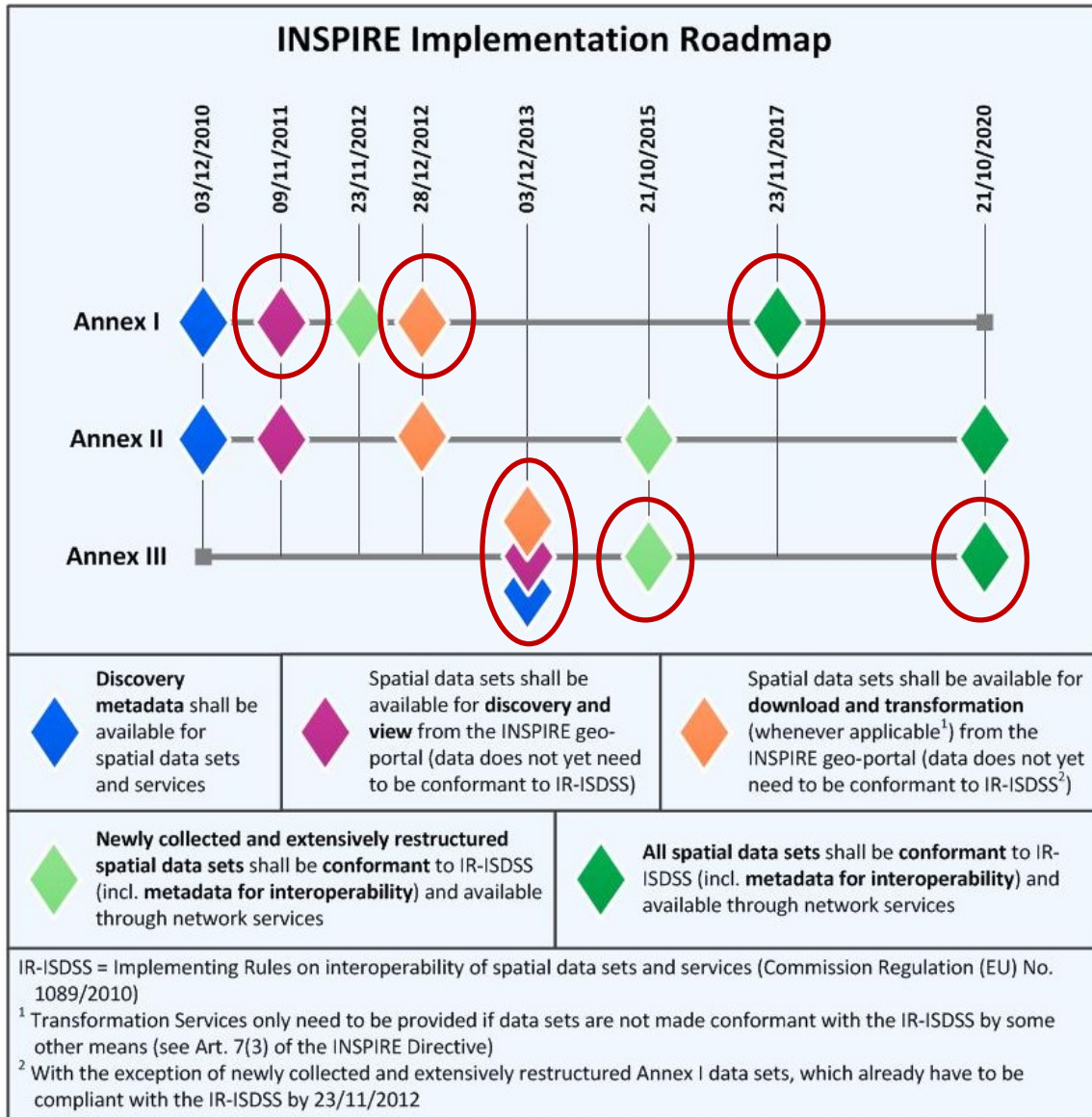
- Discovery services
- View services
- Download services
- Transformation services
- Invoke services

Development of guidance with datasets and datamodel to collect and qualify data

Development of EU/regional/national/local website(s) and IT tools

The INSPIRE directive deadlines

INSPIRE directive (2007/2/CE) establishing an Infrastructure for Spatial Information in the European Community



INSPIRE Annex I
Geographical names
Administrative units
Water transport networks and related infrastructure
Hydrography
Protected sites

INSPIRE Annex III.6
Utilities and governmental services (sewage, water supply, waste, Energy...)

The public access to environmental information Directive (2003/4/CE) requirements

http://europa.eu/legislation_summaries/environment/general_provisions/l28091_en.htm

EU/National/Regional/local information and data linked to EU environmental policies

The 2003/4 Directive requires implementation of :

Active and systematic dissemination of information to the public (article 7) :

- World, EU, national, regional, local regulation.
- Policies, plans et programmes.
- Progress report.
- National or regional or local reports which include information on the quality of and the pressure on, the environment published each four years.
- Authorisations.
- Data derived from monitoring of activities affecting environment.

Information has to be accurate and comparable. (article 8)

Development of EU/regional/national/local website(s) and IT tools

Those information have to be available through:

- Computer/electronic technologies,
- Electronic databases
- Public telecommunication networks

What we have learned- Challenges

- **MS are far from having implemented INSPIRE rules and given access to the environmental information,**
- **As regards data reported at EU level the INSPIRE directive requires from MS to develop 28 specific national INSPIRE compliant data model and IT systems which have more or less the same objective.**
- **Lack of Human resources at MS/EU level,**
- **Difficulties for some MS to develop national INSPIRE compliant data model**
- **Difficulties for some MS to do their officially requested reporting and to have an overview of their national situation,**
- **Difficulties for some MS to develop national websites and to implement the INSPIRE services,**
- **Difficulties for some MS to maintain specific tools developed at national level,**
- **Difficulties for some MS to accept changes in the existing reporting framework,**
- **Difficulties to propose new ideas without having good user-friendly examples.**



What we have **learned** - **Benefits**

- It **avoids the same IT INSPIRE compulsory development in 28 different countries.**
- It creates **new uses of this information.**
- The **EU reporting obligation becomes no more the main reason concerning data collection.**
- When **websites are well established user-friendly and interconnected it increases the use of them, it avoids developing different IT systems with the same data and allows a Member State to have only one official source of information.**
- It **increases citizens, civil servants, researchers, private companies... knowledge.**
The **work is done better and time and money are saved.**
- The **public is able to find alone the requested information → reduce the number of written questions** and give the opportunity to the administration to give an hyperlink where the answer is.
- It helps to **reduce the number of mistakes in the dataset** when visualizing the information



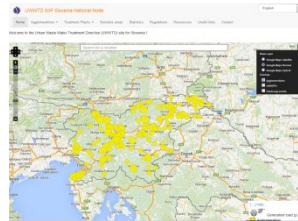
European
Commission

SIIF

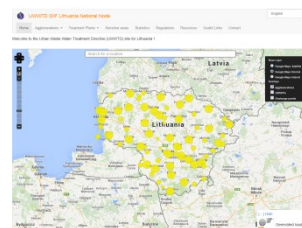
ongoing second phase of the SIIF
**Development of urban waste water EU
map viewer and national
"generic" website(s) and related IT
tools**
Concrete developments



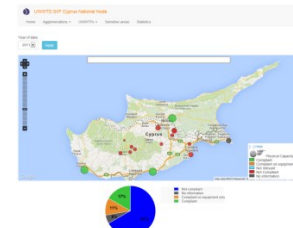
<http://www.eea.europa.eu/data-and-maps/uwwtd/interactive-maps/urban-waste-water-treatment-maps>



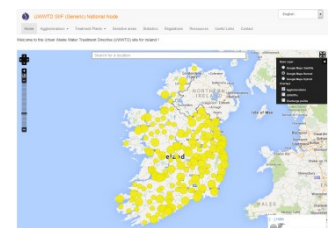
<http://uwwtd.oieau.fr/slovenia/>



<http://uwwtd.oieau.fr/lithuania/>



<http://uwwtd.oieau.fr/cyprus/>



<http://uwwtd.oieau.fr/>



European Commission

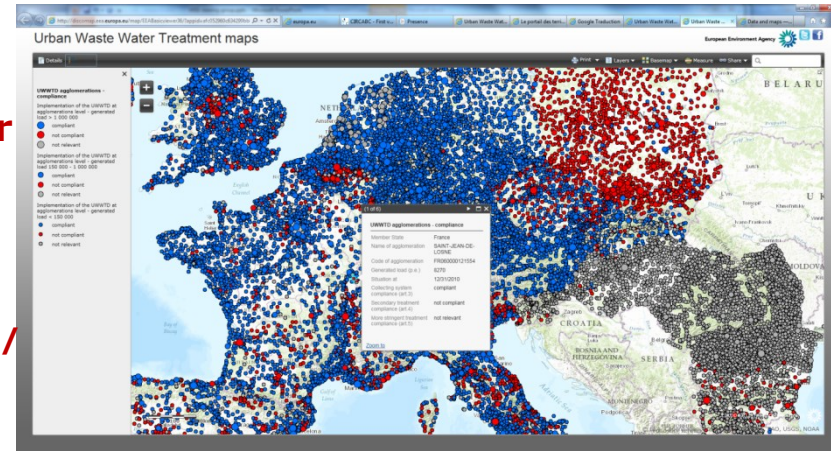
Development of urban waste water EU map viewer Interconnection of EU/national waste water web sites



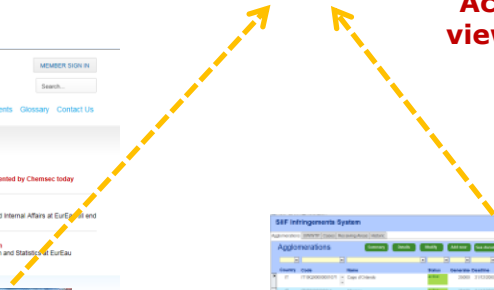
Access to the EEA mapviewer



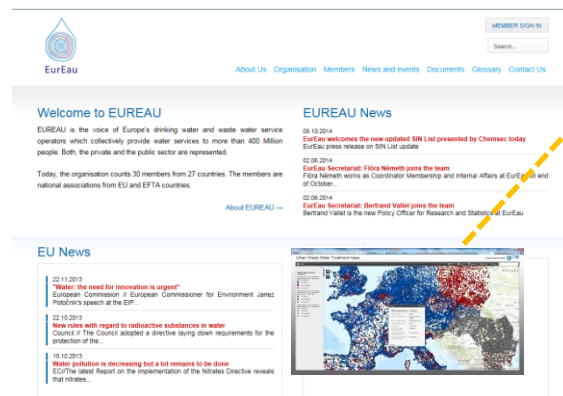
Access to Commission implementation/regulation webpages



Access to EEA map viewer from internal tools



Access to EEA map viewer or inclusion of the EEA map viewer in other EU/national web sites

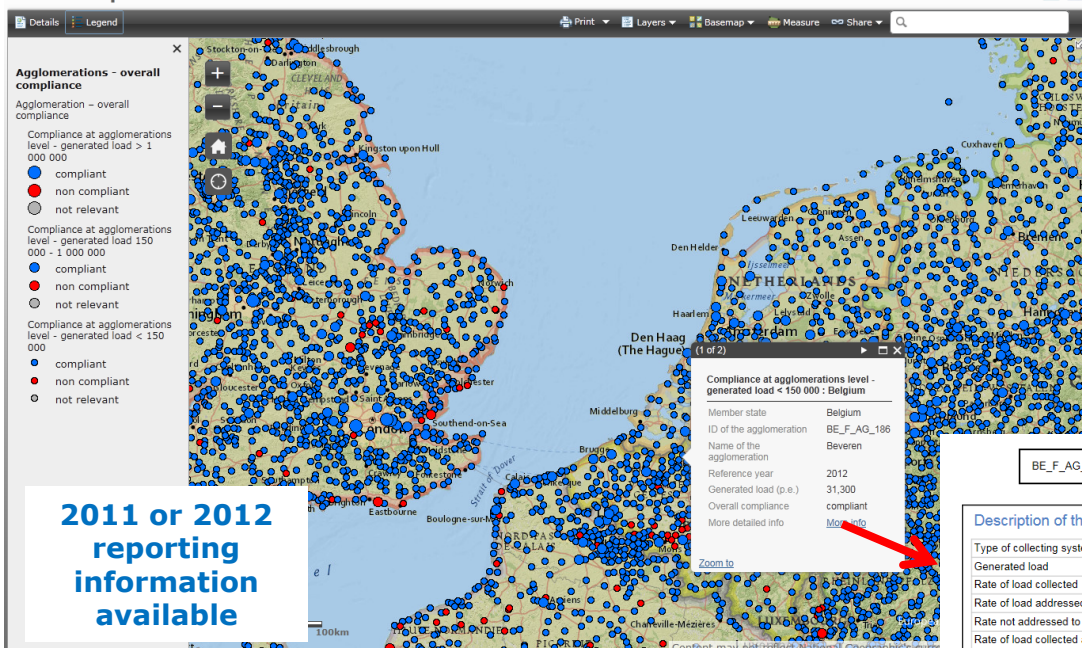


| Agglomeration | Name | Status | Start | End | Notes |
|---------------|------------------|-----------|------------|------------|-------|
| FR0000000001 | Paris | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000002 | Marseille | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000003 | Nice | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000004 | Lyon | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000005 | Bordeaux | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000006 | Toulouse | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000007 | Nantes | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000008 | Strasbourg | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000009 | Montpellier | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000010 | Nîmes | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000011 | Clermont-Ferrand | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000012 | Lille | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000013 | Limoges | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000014 | Rennes | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000015 | Angers | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000016 | Amiens | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000017 | Orléans | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000018 | Reims | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000019 | Caen | compliant | 1991-01-01 | 2014-12-31 | |
| FR0000000020 | Nancy | compliant | 1991-01-01 | 2014-12-31 | |

Development of urban waste water EU map viewer

Ease the access to the content of the EEA database

UWWT maps - 20150225



2011 or 2012 reporting information available

Implementation of view service
 To give access to the whole content of the EEA database by hyperlink from the pop-up window
 Creation of a detailed webpage per Agglomeration/UWWTP/dischARGE point/receiving area

| | | |
|-------------|---------|---------|
| BE_F_AG_186 | Beveren | Belgium |
|-------------|---------|---------|

| Description of the Agglomeration | | Direct access on the map |
|--|------------------|--------------------------|
| Type of collecting system | | |
| Generated load | 31300 | |
| Rate of load collected | 100 | |
| Rate of load addressed to IAS | 0 | |
| Rate not addressed to IAS and not collected | 0 | |
| Rate of load collected and entering treatment plants | 99.9899959564209 | |
| Raw sewage discharged (collecting system) (m3/d) | | |
| Raw sewage discharged (collecting system) (p.e) | | |

| Compliance of the Agglomeration | |
|---------------------------------|--|
| Compliance collection art3 | |
| Date of compliance art3 | |
| Compliance treatment art4 | |
| Date of compliance art4 | |
| Compliance treatment art5 | |
| Date of compliance art5 | |

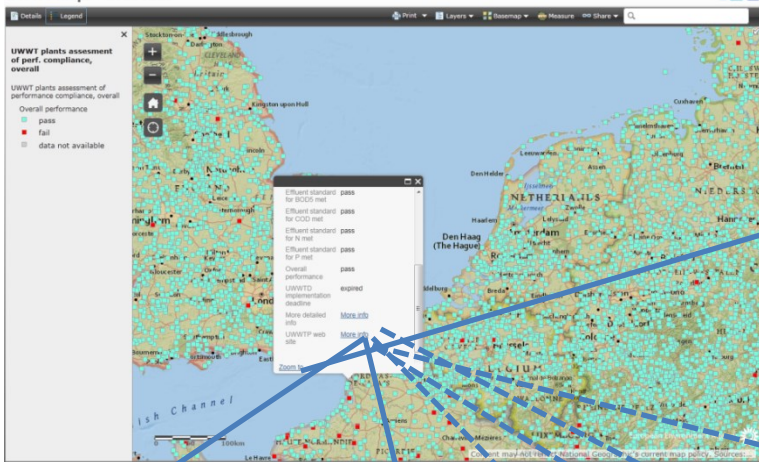
| Description of the UWWTP serving the Agglomeration | | | | | | | |
|--|-----------------|---------------------|----------|-----------|-----------------|--------------------|-----------------|
| Name of the UWWTP | ID of the UWWTP | Region | Latitude | Longitude | Design capacity | Treatment in place | Date of closing |
| Beveren | BE_F_CS_199 | BE2 (VLAAMS GEWEST) | 4.20559 | 51.2084 | | Other | |
| Beveren | BE_F_TP_199 | BE2 (VLAAMS GEWEST) | 4.20844 | 51.2235 | 45000 | Other | |
| Beveren | BE_F_CS_199 | BE2 (VLAAMS GEWEST) | 4.20559 | 51.2084 | | Other | |
| Beveren | BE_F_TP_199 | BE2 (VLAAMS GEWEST) | 4.20844 | 51.2235 | 45000 | Other | |
| Beveren | BE_F_TP_199 | BE2 (VLAAMS GEWEST) | 4.20844 | 51.2235 | 45000 | Other | |

| Key figures of the UWWTP serving the Agglomeration | | | | | | | | | | | | | | | |
|--|-----------------|---------------|--------------------------------------|---------------------|-----------------------|--------------|---------------------|-----------------------|--------------|-------------------|---------------------|------------|-------------------|---------------------|------------|
| Name of the UWWTP | ID of the UWWTP | Entering load | Volume of waste water treated (m3/d) | Incoming BOD [kg/d] | Discharged BOD [kg/d] | %BOD removal | Incoming COD [kg/d] | Discharged COD [kg/d] | %COD removal | Incoming N [kg/d] | Discharged N [kg/d] | %N removal | Incoming P [kg/d] | Discharged P [kg/d] | %P removal |
| Beveren | BE_F_CS_199 | 0 | | | | | | | | | | | | | |
| Beveren | BE_F_TP_199 | 26400 | | | | | | | | | | | | | |

Development of urban waste water EU map viewer

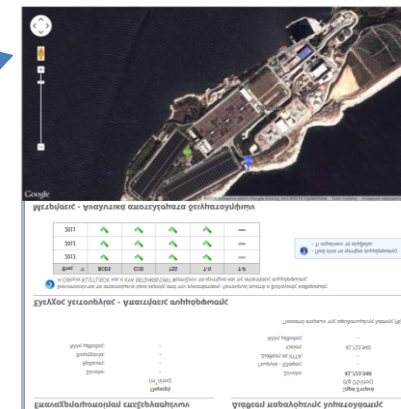
Interconnection between EEA/national web sites

UWWT maps - 20150225

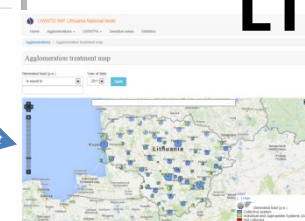


<http://ypeka.plexscape.com/Services/Pages/Browse.aspx>

GR



LT



<http://uwwtd.oieau.fr/lithuania/>

CY



<http://uwwtd.oieau.fr/cyprus/>

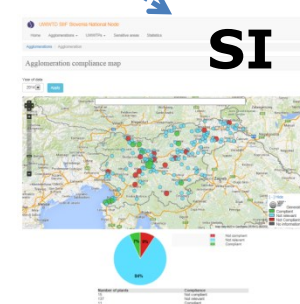
SIIF second phase

IE



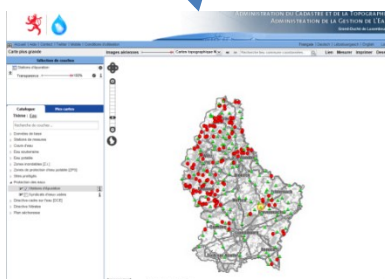
<http://uwwtd.oieau.fr/>

SI



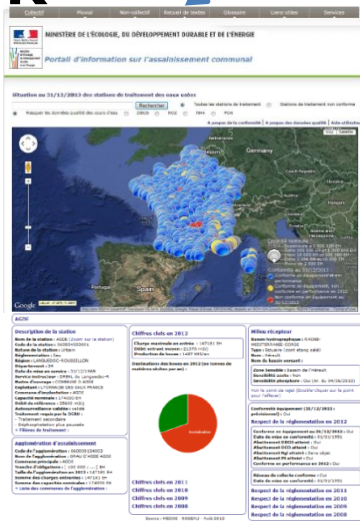
<http://uwwtd.oieau.fr/slovenia/>

LU



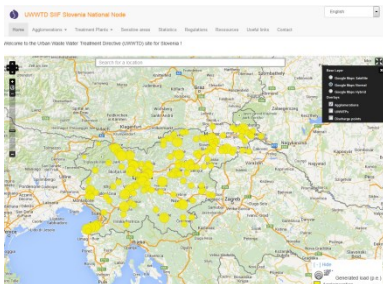
http://eau.geoportail.lu/?eau_new_Klaeranlagen=937&lang=fr

FR

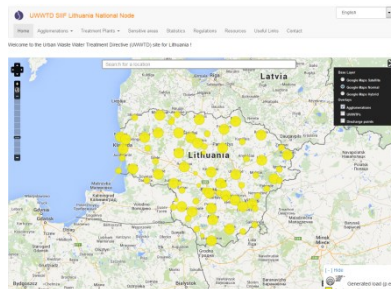


<http://assainissement.developpement-durable.gouv.fr/>

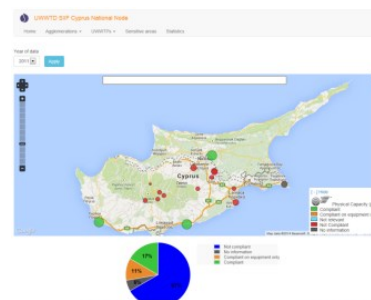
Development of a national "generic" website which implement INSPIRE services and SIIF principles



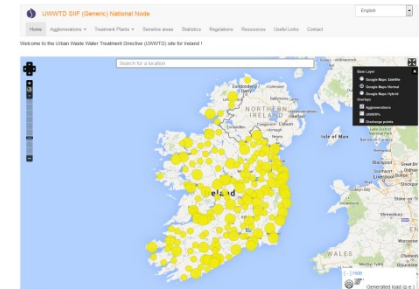
<http://uwwdt.oieau.fr/slovenia/>



<http://uwwdt.oieau.fr/lithuania/>



<http://uwwdt.oieau.fr/cyprus/>



<http://uwwdt.oieau.fr/>

Examples of INSPIRE view, discovery download and invoke service which have to be implemented at national level

The SIIF/INSPIRE view service

Welcome page with a map viewer

Collectif Pluvial Non-collectif Recueil de textes Glossaire Liens utiles Services

MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE ET DE L'ÉNERGIE

Portail d'information sur l'assainissement communal

Situation au 31/12/2013 des stations de traitement des eaux usées

Rechercher Toutes les stations de traitement Stations de traitement non conforme

Masquer les données qualité des cours d'eau DBO5 NO2 NH4 PO4

A propos de la conformité | A propos des données qualité | Aide utilisateur

Possibility to zoom in/out

VILLEPARISIS
Code de la STEP : 037751401000
Nom de la STEP : VILLEPARISIS
Capacité nominale : 32000
Voir la fiche

SIIF focused on compliance
And forward looking aspect
Article 17

VILLEPARISIS

Description de la station
Nom de la station : VILLEPARISIS (Zoom sur la station)
Code de la station : 037751401000
Nature de la station : Urbain
Réglementation : Eau
Région : ÎLE-DE-FRANCE
Département : 77
Date de mise en service : 01/01/2006
Service instructeur : DDT 77
Maître d'ouvrage :
Exploitant :
Commune d'implantation : VILLEPARISIS
Capacité nominale : 32000 EH
Débit de référence : 6000 m³/j
Autosurveillance validée : non validé
Traitement requis par la DERU :
- Traitement secondaire
- Dénitrification
- Déphosphatation
+ Filières de traitement :

Agglomération d'assainissement
Code de l'agglomération : 030000177514
Nom de l'agglomération : VILLEPARISIS
Commune principale : VILLEPARISIS
Tranche d'obligations : [10 000 ; 100 000 [E
Taille de l'agglomération en 2012 : 32217 EH
Somme des charges entrantes : 32217 EH
Somme des capacités nominales : 32000 EH
+ Liste des communes de l'agglomération :

Chiffres clefs en 2012
Charge maximale en entrée : 32217 EH
Débit entrant moyen : 7446 m³/j
Production de boues : 453 TMS/an
Destinations des boues en 2012 (en tonnes de matières sèches par an) :
Décharge

Milieu récepteur
Bassin hydrographique : SEINE-NORMANDIE
Type : Eau douce de surface
Nom : Ru des Grues
Nom du bassin versant : MARNE
Zone Sensible : Le bassin de la Seine
Sensibilité azote : Oui (Ar. du 22/02/2006)
Sensibilité phosphore : Oui (Ar. du 22/02/2006)
Voir le point de rejet (Double-cliquer sur le point pour l'effacer)

Conformité équipement (31/12/2013 ; prévisionnel) - (date prévisionnelle de conformité : 01/01/2018)
Respect de la réglementation en 2012
Conforme en équipement au 31/12/2012 : Non
Date de mise en conformité : 01/01/2018
Abattement DBO5 atteint : Non
Abattement DCO atteint : Non
Abattement Ngl atteint : Oui
Conforme en performance en 2012 : Non

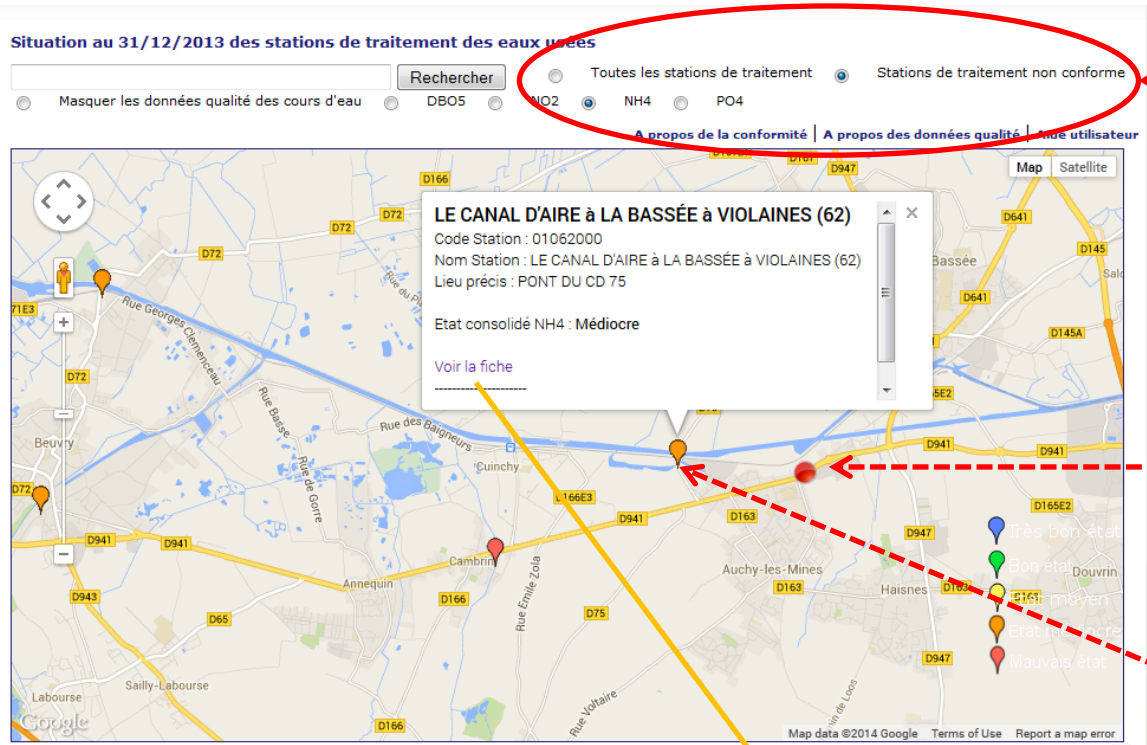
Chiffres clefs en 2011
Chiffres clefs en 2010
Chiffres clefs en 2009
Chiffres clefs en 2008

Respect de la réglementation en 2011
Respect de la réglementation en 2010
Respect de la réglementation en 2009
Respect de la réglementation en 2008

Réseau de collecte :
Date de mise en conformité : 01/01/2000

Possibility to display the content of the database

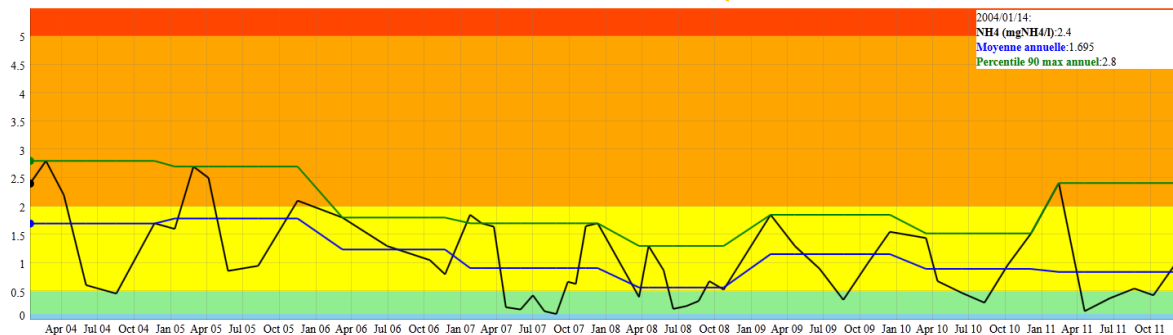
The SIIF/INSPIRE view service



Possibility to overlay viewable spatial data sets

UWWTP information

Ammonium concentration in river



The SIIF/INSPIRE discovery service

Collectif Pluvial Non-collectif Recueil de textes Glossaire Liens utiles Services

Accueil collectif

Liste des stations

Raccourcis non-thématiques

MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE ET DE L'ÉNERGIE

Portail d'information sur l'assainissement communal

Situation au 31/12/2013 des stations de traitement des eaux usées

Rechercher

Toutes les stations de traitement Stations de traitement non conforme

Masquer les données qualité des cours d'eau DBO5 NO2 NH4 PO4

A propos de la conformité Propos des données qualité Aide utilisateur

Map Satellite

Capacité nominale :

- Entre 100 000 EH et 1 000 000 EH
- Entre 10 000 EH et 100 000 EH
- Entre 2 000 EH et 10 000 EH
- Moins de 2 000 EH

Conformité au 31/12/2013 :

- Conforme en équipement et en performance
- Conforme en équipement, non conforme en performance en 2012
- Non conforme en équipement au 31/12/2013

Google

Collectif Pluvial Non-collectif Recueil de textes Glossaire Liens utiles Services

MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE ET DE L'ÉNERGIE

Portail d'information sur l'assainissement communal

Liste des stations de traitement des eaux usées de toutes les agglomérations (Les informations concernant les stations appartenant à des agglomérations de moins de 2000 équivalents-habitants doivent encore être fiabilisées)

Afficher 100 éléments

Rechercher (région, commune desservie, code de la STEU... sans accents)

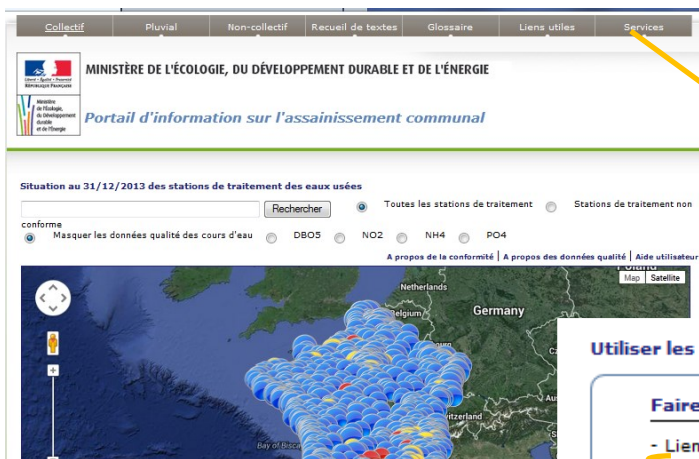
| N° Dép | STEU | Agglomération | Service gestionnaire | Capacité nominale en EH | Conformité globale équipement au 31/12/2013 | Conformité globale performance en 2012 | Conformité réseau | Fiche |
|--------|----------------------------------|--|----------------------|-------------------------|---|--|-------------------|-------|
| 01 | AMBERIEUX-EN-DOBES | AMBERIEUX-EN-DOBES | DDT 01 | 1500 | Oui | Oui | - | Voir |
| 01 | AMBLEON | AMBLEON | DDT 01 | 100 | Oui | Oui | - | Voir |
| 01 | AMBRONAY - Chef-lieu | AMBRONAY-Chef lieu | DDT 01 | 1700 | Oui | Non | - | Voir |
| 01 | AMBRONAY - GV2C | AMBRONAY-GV2C | DDT 01 | 600 | Oui | Oui | - | Voir |
| 01 | ANDERT-ET-CONDON - Condon | ANDERT-ET-CONDON-Condon | DDT 01 | 270 | Oui | Oui | - | Voir |
| 01 | ANGLEFORT - Chef lieu | ANGLEFORT-Chef-lieu | DDT 01 | 1083 | Oui | Oui | - | Voir |
| 01 | APREMONT 01011 | APREMONT-01011 | DDT 01 | 400 | Oui | Oui | - | Voir |
| 01 | ARBIGNIEU - Chef lieu | ARBIGNIEU-Chef lieu | DDT 01 | 450 | Oui | Oui | - | Voir |
| 01 | ARS-SUR-FORMANS | ARS-SUR-FORMANS | DDT 01 | 2250 | Oui | Oui | - | Voir |
| 01 | ARTEMARE | ARTEMARE | DDT 01 | 1500 | Oui | Non | - | Voir |
| 01 | ATTIGNAT - Vacagnole | ATTIGNAT-Vacagnole | DDT 01 | 900 | Oui | Oui | - | Voir |
| 01 | ATTIGNAT - Chef-lieu | ATTIGNAT-Chef lieu | DDT 01 | 1200 | Oui | Oui | - | Voir |
| 01 | ATTIGNAT - Secteur Ouest | ATTIGNAT-Secteur Ouest | DDT 01 | 1650 | Oui | Oui | - | Voir |
| 01 | BAGE-LA-VILLE - Chef lieu | BAGE-LA-VILLE-Chef lieu - Les Spattières | DDT 01 | 550 | Oui | Non | - | Voir |
| 01 | BAGE-LA-VILLE - Les Spattières | BAGE-LA-VILLE-Chef lieu - Les Spattières | DDT 01 | 1100 | Oui | Oui | - | Voir |
| 01 | BAGE-LA-VILLE - Onjard | BAGE-LA-VILLE-Onjard | DDT 01 | 500 | Oui | Oui | - | Voir |
| 01 | BAGE-LA-VILLE - Teppes de Biches | BAGE-LA-VILLE-Teppes de Biches | DDT 01 | 290 | Oui | Oui | - | Voir |
| 01 | BAGE-LE-CHATEL | BAGE-LE-CHATEL | DDT 01 | 1100 | Oui | Oui | - | Voir |

- Sort data by capacity, name, region, compliance...

- Search data

- Display the content of the database as regards a specific treatment plant (previous slide)

The SIIF/INSPIRE download/invoke service



<http://assainissement.developpement-durable.gouv.fr/services.php>

Utiliser les données du portail

Faire un lien direct vers une station de traitement des eaux usées


- Lien seulement vers la fiche :


`http://assainissement.developpement-durable.gouv.fr/fiche.php?large=no&code=[code SANDRE du STEU]`
(exemple : `http://assainissement.developpement-durable.gouv.fr/fiche.php?large=no&code=043523850004`)


- Lien vers la page complète :


`http://assainissement.developpement-durable.gouv.fr/station.php?code=[code SANDRE du STEU]`
(exemple : `http://assainissement.developpement-durable.gouv.fr/station.php?code=043523850004`)

Exporter les données

Les données 2009 des STEU des agglomérations de plus de 200 EH sont exportables à partir de ce fichier  (données 2009)

Les données 2010 des STEU de toutes les agglomérations sont exportables à partir de ce fichier  (données 2010)

Les données 2011 des STEU de toutes les agglomérations sont exportables à partir de ce fichier  (données 2011)

Les données 2012 des STEU de toutes les agglomérations sont exportables à partir de ce fichier  (données 2012)


Visualiser les données géographiques

Les données 2009, 2010, 2011 et 2012 sont visualisables sur GoogleEarth™ à partir de ce fichier  (données 2009-2012) !

Les données sont également disponibles au format OGC sur l'atlas-catalogue du SANDRE.

Service web WMS/WFS : services.sandre.eaufrance.fr/geo/odp_FRA?

Données de référence en assainissement

La liste des zones sensibles à l'eutrophisation au titre de la directive ERU est exportable à partir de ce fichier  (consolidé en juin 2012) !

Services en cours de création

Service Web spécifique pour consultation des données au format xml SANDRE

Download service
How to create a link to the detailed information webpage of a UWWTP










Download service
Whole waste water dataset accessible
(libre-office format, reference years 2009 to 2012)

Invoke Service
. Kml file, OCC files, WMS and WFS

Download service
Sensible area dataset

SIIF and the IT tools

The ongoing objectives to comply with the INSPIRE and public access to environmental information directives and to reach the digital market target

- Improve regularly the EEA data viewers to provide all the INSPIRE services at EU level   
- Develop and ensure at EU level an INSPIRE services compliant tool box (common framework for installing national web sites) for dissemination of data/information and improve it regularly (new SIIF contract)   
- encourage the integration of EEA/MS map viewers in all world/national relevant websites   

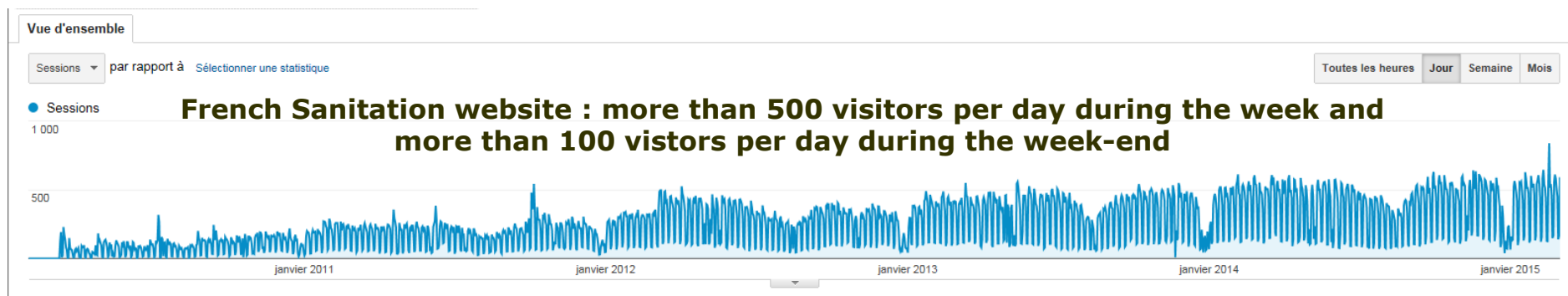
Public access
environmental
information

INSPIRE

Digital
market

The proposed SIIF indicators

- The number of web sites which are linked to the specific web site.
- The number of users and visitors of the web sites



- The number of countries which have implemented the **INSPIRE** services and given access to environmental information
- The time needed to achieve the official reporting



European



Thank you for your attention

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