Workshop on Structured Information and Implementation Frameworks (SIIF) in Slovenia concerning Urban Waste Water Treatment Directive (91/271/EEC)

3. Ongoing SIIF contract – pilot phase

DG Environment – Brussels 25 March 2015

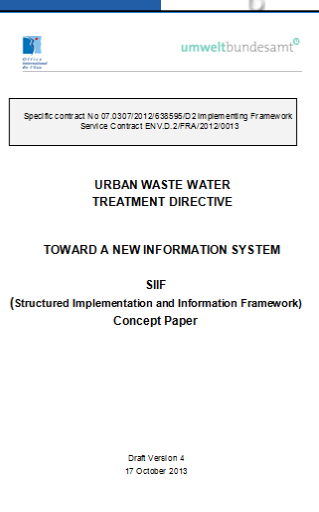*Benoît Fribourg-blanc & Laurence Guédet*
Office International de l'Eau

ENVIRONMENT AGENCY AUSTRIA **umwelt**bundesamt

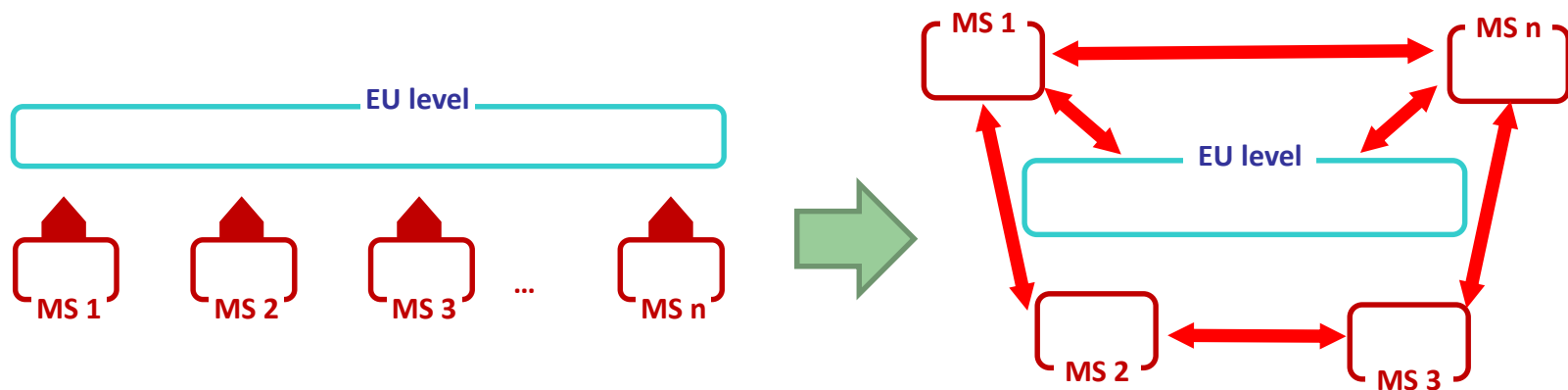Office International de l'Eau

UWWTD SIIF work: The framework

⟳ A framework contract to support DGENV on Water Industry Directives: 2012-2016

⟳ 2013: (Phase I) A specific contract "Towards a modern information system for the Urban Waste Water Treatment Directive (91/271/EEC)"

  ◆ **Current situation** on UWWT information in EU28 MS and EU: availability and accuracy
  ◆ Concept for a **new UWWTD reporting system** (assessment and information system, thematic implications, changes)
  ◆ Changes in UWWTD reporting **parameters**

Specific contract No 07.0307/2012/638595/D2 Implementing Framework
Service Contract ENV.D.2/FRA/2012/0013

URBAN WASTE WATER
TREATMENT DIRECTIVE

TOWARD A NEW INFORMATION SYSTEM

SIIF
(Structured Implementation and Information Framework)
Concept Paper

Draft Version 4
17 October 2013

⟳ 2014: (Phase II) A specific contract "Expanding the Urban Wastewater Structured Information and Implementation Framework (SIIF)"

  ◆ Task I: Technical support for legal compliance (8th reporting) tomorrow
  ◆ Task II: Implementation of UWWTD **SIIF platform in 3 pilot countries**
  ◆ Development of a **generic toolbox**
  ◆ Key **lessons** learnt

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UWWTD SIIF: requirements

- UWWTD reported data are of interest for many different users (thematic domain experts, general public, EU services…)

- → a shift from **bottom up** reporting to **information exchange**

- Single infrastructure requires two elements:
  - same language (semantic),
  - Same/compatible tools (technical interoperability)

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UWWTD SIIF: expected results

○ With a shared EU system with national and EU node

- ◆ automation is possible (collection, QA/QC, retrieval)

- ◆ Machine to machine data exchanges are eased

- ◆ Clear definitions + transparency on the situation and assessment methods increase the quality of data

- ◆ Data can be made immediately available to all users

- ◆ Use of the datasets are increased / widened & more users are involved:
  → generate new needs

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Detailed objectives for 2014 work

- 2014 objective: Pilot exercise to **test and develop** a UWWTD SIIF platform.

- MS participating were invited to :
  - contribute to the definition of the main features of a SIIF for Urban Wastewater
  - develop and publish online a (pilot/demo or prototype) national SIIF
  - report the results and experiences of the pilot exercise to all MS

- 3 pilot MS: Slovenia, Cyprus and Lithuania

Tasks of the contract and objectives

The main tasks of Objective II -
UWWTD SIIF national nodes - Support the development of online systems are

- 1: Identify the **countries' needs** for establishing the national demonstration sites

- 2: For each of the countries participating, elaborate proposals to complete the basic IT system, present different **visualisation** options and enable the **exchange of information** with the EEA

- 3: Testing of Member States **web services** and Reportnet interface to EU level Plants

- 4: Establish an offline/restricted access version of the three **demonstration sites**, based on chosen data to be presented and visualisation options

- 5: Install on a **national server** and establish the three demonstration sites

- 6: Derive **recommendations** for developing national SIIF portals

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Timeline

- The project started on 16st of December 2013 with the signature of the contract and will end on 15th of March 2015

- The selection of the 3 pilot Member States (MS) ended on mid-April : Cyprus, Lithuania and Slovenia

- Web conferences on countries needs with the 3 pilot MS took place on **March and April**.

- A **Workshop with 6 Member States** on SIIF and adaptation to INSPIRE took place on **May 5th**.

- First results and the prototype platform using data from Ireland were presented at the **3rd June Expert Group meeting**,

- The three national platform were implemented during **summer/autumn**

- Webconferences with the 3 pilot MS took place in **November** to collect feedback on the national SIIF

- Workshops were organized to present and install the tool in countries (**27/1**: Slovenia, **10/2**: Cyprus, **17/2**: Lithuania)

Task 1 : Collecting user needs

- Three web conferences to collect MS situation and needs, regarding the UWWTD national SIIF node functions which are:
  - Reporting data
  - Data visualization

- A specification document was elaborated and distributed.

- Proposed approach was to develop a generic platform using these specifications and then a MS platform
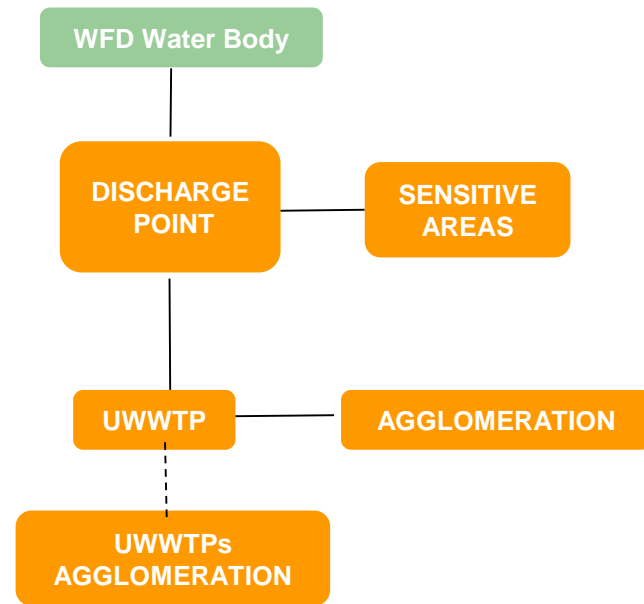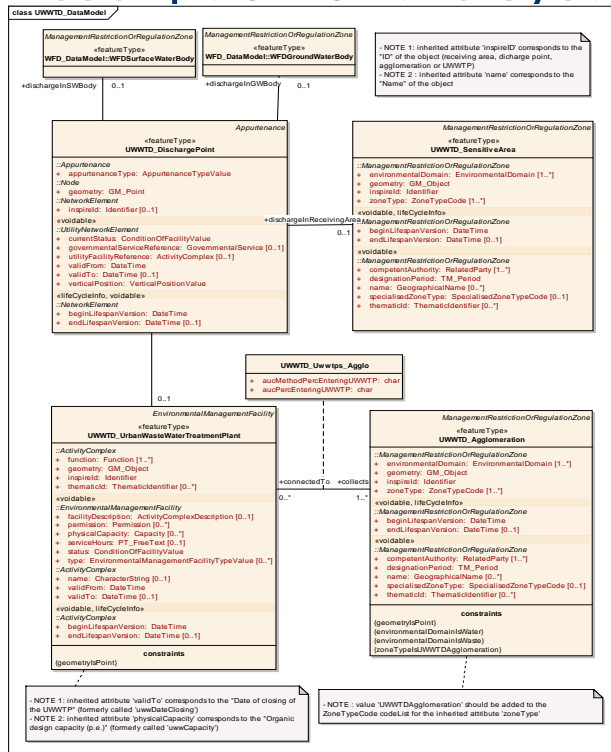
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Task 2: Elaborate IT systems

◉ **What do we expect from the national nodes of the UWWTD SIIF?**

- ◆ It does not
  - ◆ Be the production tool of the UWWTD data
  - ◆ Consolidate sub-national datasets in order to create the national dataset for reporting purpose

- ◆ It does or will
  - ◆ Consider dataset as a whole: dataset items that is to say **"individual data" won't be amendable** with the tool
  - ◆ Carry out **Quality controls** on datasets
  - ◆ Be the **reporting tool** towards the EU platform
  - ◆ Be the **dissemination tool** towards the European and national web users via dynamic maps, graphs, statistics, exports and selection functions
  - ◆ Comprise a web portal and a webservice module, **easy to operate** and to manage, for national UWWTD data managers

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- **Objective:** *Going further than the initial proof of concept presented in the concept paper on UWWTD SIIF on webservices*
  - ◆ consider recent development for INSPIRE (12/2013)
  - ◆ Tests for different technical solutions (April - September)
  - ◆ propositions for some adaptations
  - ◆ Description of the system key components using modelisation

Task 4: Establish demonstration websites

꙰ **Objective:** *Demonstration sites will be set up according to the technical and functional specification Document*

꙰ **Setting up a web portal for each country (*in English*):**

- ◆ Hosted at our facilities
- ◆ Provided with free access for test purpose
- ◆ A demo website has been realised from Ireland UWWTD data (June-October)
- ◆ National websites have been developed for each pilot MS (August-October), *see next agenda point*

꙰ **Next steps:**

- ◆ Translation in national language
- ◆ Feeding of text sections, of relevant resources and links
- ◆ Connection with other potential references and links

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Task 5: Install

- **Objective:** *Three demonstration sites have to be implemented on national servers*

- **Providing the necessary kit to each of the country to set up their web portal**
  - The Workshop in each country can allow for extra hands-on technical support if need be.
  - An administration guide, written in English, is provided by the Contractor.

- **Next steps before end of March:**
  - Provision of a dedicated space on a server by SL, LT, MT
  - Transfer of the platform
  - Tests and bug fixing, adjustment of the guide

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Task 6: Derive recommendations for national portals

 Objective: *Lessons learned from the creation of the demonstration portals should be communicated as widely as possible, to allow for an efficient development in other countries (non-pilot Member States) in the long run.*

 After implementation of the Three national platforms, the contractor write a report detailing the main lessons learnt from the implementation with

- Key steps and challenges on IT and thematic aspects
- Recommended approach for the next steps and for implementing a national SIIF portal

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Key conclusion

- The UWWTD SIIF platform needs appropriation and the three pilot MSs have progressively adopted

- The toolbox makes visible the standardisation: allow connections

- It provides easy to use information and figures for all users from citizen to technical expert

- The toolbox implements Directives on public access to environmental information and INSPIRE

- Extension of the toolbox to DWD and BWD feasible?

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Key recommendations:
1. What can be done by consultant

- Generic tool: a good idea to be continued

- Opensource softwares: could be used in any technical environment.

- No security breach was identified.

- To keep the security at its maximum, regular updates are needed.

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- Use of significant and permanent URLs, easy to build: a pragmatic approach to be continued

- For next round: Early Workshop with as a basis the generic tool with MS national dataset (first draft of national platform) for
  - use and tests by MS
  - give them a month for feedback
  - Push them to involve the relevant experts (IT and UWWTD)

- Use of - and link to - reference systems necessary.

- Appropriate management of these references (genealogy/history, single shared EU lists and definitions): link to WISE and INSPIRE.

- Evolvements of the data model in separate tables for ease of management

- Visualisation options: optional information not provided not visible on fiches.

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- Centralisation of the data quality assessment: easy to maintain / update.

- The UWWTD data model is complex and the toolbox works: it could be used for the SIIF for DWD and BWD.

- Ideas for new uses are welcome:
  - adaptation for smartphones
  - ...

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Thank you

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