



Environmental reporting obligations and INSPIRE

*A practical concept to support
the identifying process*

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BACKGROUND

- INSPIRE REFIT evaluation: significant implementation gaps identified in the MS provision of INSPIRE datasets related to environmental reporting
- Finland has set up a Member State Action Plan for the years 2016–2020, to bring these datasets available
- Finnish Environment Institute SYKE is one of the biggest spatial data providers & environmental reporters in Finland

The goal:

- To search and identify “new” spatial data sets related to the environmental reporting obligations
- To create a concept for the identification process
- To create methods to define and publish datasets according to INSPIRE obligations

Practical concept for the identification

Base for the exercise: *Priority list of data sets related to environmental reporting obligations, “minimum list” by Commission and MIG-P*

T1. Updating of Commission priority list e.g. with responsible national institutes & reporters

T2. Classification of reporting obligations based on the known spatial datasets and implementation level of INSPIRE

T3. Identification of spatial datasets related to each environmental obligation together with thematic experts (reporters)

T 4. Development of data management system for environmental reporting

T5. Prioritization of reporting obligations for the next tasks according to e.g. reporting timetables, dataset readiness

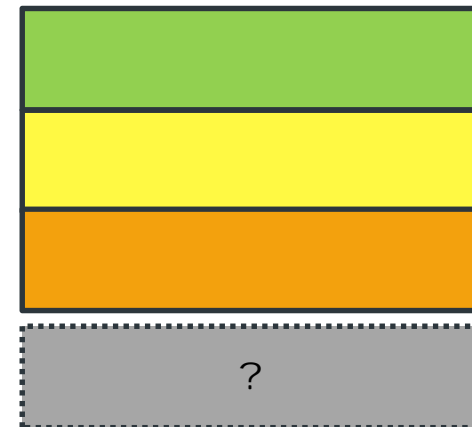
T6. Creating an action plan for adding reporting datasets to national catalogue of INSPIRE data sets and for publishing “as-is” data



T3. Classification of reporting obligations according to the INSPIRE implementation level

- The reporting obligations/directives were classified based on the known spatial datasets and according to the status of INSPIRE implementation

1. Identified and reported as INSPIRE datasets
2. Partly identified and reported as INSPIRE datasets
3. Identified, but not reported as INSPIRE datasets
4. **Spatial datasets not yet identified**



Spatial datasets not yet identified

Reporting obligation	Reporter	INSPIRE theme ?	Next reporting period
Industrial Emission Directive (2010/75/EU)	SYKE	PF	annually
Urban Waste Water Treatment Directive (91/271/EEC) – UWWT *	SYKE	AM, US, EF	2018
Nitrates Directive (91/676/EEC) – NID	SYKE	EM, AM	2020
Landfill of Waste (1999/31/EC)	SYKE	*	One-off
Marine Strategy Framework Directive (2008/56/EC) – MSFD	SYKE	AM, EM, PS	2018, -20, -22
Drinking Water Directive (98/83/EC) – DWD	THL/SYKE	*	2018
EU Regulation (1143/2014) on Invasive Alien Species	LUOMUS	-	2019
EMAS-regulation (EC) N:o 1221/2009	SYKE	*	Monthly
Mining Waste Directive (2006/21/EC)	SYKE	*	2018
Seveso III Directive (2012/18/EU)	SYKE/TUKES	*	
E-PRTR Regulation (EC 166/2006) *	SYKE	PF	annually

Example UWWTD

Starting point:

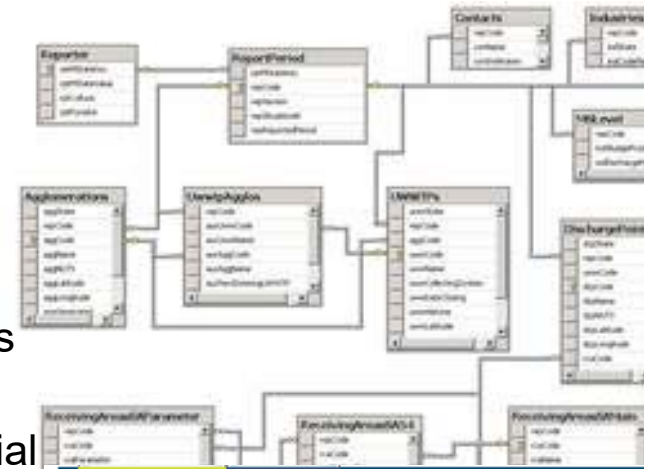
- Information for the reporting is gathered from various data sources
- Reported datasets are xls and xmls files, not in spatial data formats, stored in Reportnet/CDR

Identification process:

- Reporting obligation has been inspected together with reporters/thematic experts
- Preliminary identified data with location information: agglomerations (*id*), UWWT plants, discharge points (*coordinates*) and sensitive areas (*FI*)
- Data specifications of reporting obligation will be compared with INSPIRE data specifications

Lessons learnt:

- Identification process with thematical experts is not easy, as experts don't speak same language
- Ownership and responsibilities of the data are unclear
- **Reported datasets are not stored and maintained in national level**



2015 UWWTD Data

Description

Obligations [Urban Waste Water Treatment](#)

Period 2014 - Whole Year

Coverage Finland

Reported 30 Jun 2016 15:50

Status Envelope is complete

Note

If you want to stay updated about eve dataflow(s).

Files in this envelope

- 1 [Export.xml](#)
- 2 [t_agglomerations.log](#)
- 3 [t_contact.log](#)
- 4 [t_dischargepoints.log](#)
- 5 [t_industries.log](#)
- 6 [t_mslevel.log](#)
- 7 [t_receivingareas_Isa.log](#)

Development of data management system for environmental reporting

1. National "metadata" of the reporting obligations is produced to SYKEs metadata catalogue

- Relevant issues for managing reporting obligations selected
- Links to Reportnet ROD & CDR
- Spatial datasets and network services can later be linked to the profile

2. Reported data is stored and shared using data portal platform (CKAN)

- Data is open and easily accessible for public use

3. Selected reported data are transformed to spatial datasets

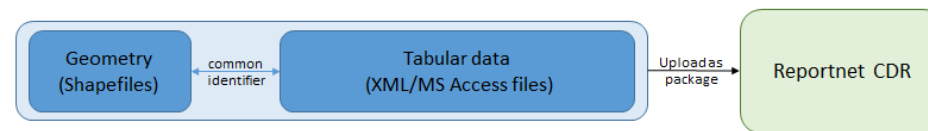
4. Implementation steps of INSPIRE can start

The screenshot displays the SYKE Research Data Service interface. At the top, there is a navigation bar with the SYKE logo and links for 'Datasets' and 'About'. The main heading reads 'Welcome to SYKE Research Data Service'. Below this, a search bar is present with the text 'Search data' and a dropdown menu showing 'E.g. environment'. A table of data records is visible, with columns for 'Grid', 'Graph', 'Map', 'ID', 'Lat', 'Lon', 'Date', 'Hours', and 'Min'. A line graph is also shown on the right side of the table. Below the table, there is a section for 'METATIETOPALVELU' with navigation options like 'HAKU', 'OMAT METATIETODOT', 'SUOHEKSI', and 'IN ENGLISH'. The main content area is titled 'METATIETOEITTORI' and contains a form for editing metadata. The form includes a 'Meta data ID' field with the value '(82EFFBBD-60BC-47CC-A860-9725E0BF8E4B)', a 'Last modified' field with the value '2017-09-04T12:36:34', and a 'SAVE' button. Below the form, there is a section for 'Research material metadata' with a 'Contact person' field and a 'Dataset creators' field. The 'Contact person' field has sub-fields for 'First name', 'Last name', 'Email', and 'Organisation'. The 'Dataset creators' field has sub-fields for 'First name', 'Last name', and 'Organisation'. At the bottom of the form, there are 'SAVE' and 'PUBLISH' buttons. The footer of the page contains the text '© Suomen Ympäristökeskus SYKE | WWW.SYKE.FI | PALAUTE | TIETOA PALVELLUSTA | EU'.

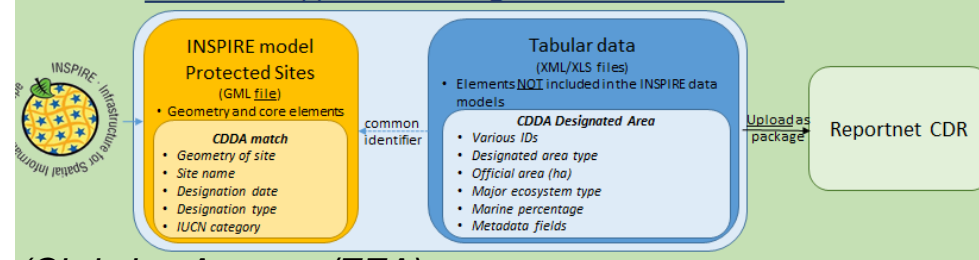
Main conclusions

- Spatial datasets related to the framework directives are mostly organized to SDIs
- In major part of the environmental reporting obligations, location information is in *non-spatial* form
- INSPIRE requirements should be taken into account when making reporting guidelines
- **EU-level guidance needed to insure the interoperability and harmonized datasets in EU-level**
 - For each reporting obligation INSPIRE themes have to be defined
 - EEA /Commission could provide data models each reporting obligation as in CDDA

Current reporting approach in CDDA



CDDA 2018 approach re-using INSPIRE Protected Sites



(Christian Ansoerge/EEA)

Thank you!

