

## Priority Datasets Harmonization

The experience of the first attempt in Greece

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# Greek journey towards INSPIRE

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- **1986**: The founding law of the Hellenic Mapping and Cadastral Organization (HEMCO) provides for a **central management of mapping programs** in Greece
- [various steps towards NSDI while INSPIRE was drafted]
- **2010**: the INSPIRE **transposition law** enters into force – provision for NSDI creation
- **2013**: HEMCO is **abolished** - vague environment of responsibilities – the INSPIRE responsibility is appointed to the **Ministry for Environment and Energy (MEE)**
- **2015**: communication/pre-pilot for INSPIRE implementation – **PDS initiative**
- **2018**: launching of the first version of the **Greek INSPIRE geoportal<sup>1</sup>** – PDS provision
- **Dec 2019**: MD provision according to **TG 2.0**
- **2020**: PDS **harmonization** project launches

1. <http://geoportal.yopen.gr/geonetwork/srv/eng/catalog.search#/home>

# 1. PDS provision “as-is”

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## Ministry for Environment and Energy

INSPIRE coordination (NCP)

reporting for environmental legislation

## Identification of PDS

not an easy exercise

- limited or incomplete **flow of information** between INSPIRE NCP and reporting authorities
- **lack of a continuous data maintenance culture** within the reporting authorities – outsourcing at the time of the report

<http://geoportal.yopen.gr/geonetwork/srv/eng/catalog.search#/home>

## 2. PDS harmonization project

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- poor NSDI framework led to the need for a PDS catalog review
- some reporting authorities were not aware of the use of INSPIRE in e-reporting
- few thought that the reporting data already are INSPIRE compliant

## 2.1 Preparing for the harmonization

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### Review of the initial PDS identification findings

- Data that were not included in the geoportal today (i.e. AQ Models and Measurements)
- Data that have to be un-tagged (i.e. END data)
- Data that do not contain any spatial information (i.e. DWD)

## 2.1 Preparing for the harmonization

### Understand the status of the alignment of the reporting data models with INSPIRE

- E-reporting data models that seemed to be extension of relevant INSPIRE application schemas

**Do these datasets have to be harmonized?**

early adoption of INSPIRE schemas in reporting data flows

schemas that include INSPIRE elements but were not created using INSPIRE extension patterns

**Yes! According to INSPIRE schemas**

### Referencing INSPIRE in environmental reporting

A blueprint on the use of INSPIRE data models in reporting

Version 1.0, November 2018

extensions  
& linked  
approaches

## 2.1 Preparing for the harmonization

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### Decide upon specific source and target feature types to be provided

- **A straightforward decision in most cases!**
- For some PDS, the reference to the **specific application schema** is missing (i.e HD)
- OR even the PDS is **difficult to be determined** (AQ Data)

# Example #1 – AQD Stations

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## Identified PDS: AQ Monitoring Stations

**Reporting file: Dataflow D: information on AQ assessment methods (Articles 8 and 9)**

There are **5 feature types** in the reporting file:

- AQD\_SamplingPointProcess (not an INSPIRE generalization, no geometry property)
- **AQD\_Station** (INSPIRE extension of EnvironmentalMonitoringFacility)
- **AQD\_Network** (INSPIRE extension of EnvironmentalMonitoringNetwork)
- AQD\_Sample (not an INSPIRE generalization, no geometry)
- **AQD\_SamplingPoint** (INSPIRE extension of EnvironmentalMonitoringFacility)



# Example #2 – AQD Data

## Identified PDS: AQ Data

### Reporting file: (not much information in the PDS spreadsheet)

Overview

#### Reporting under air quality directives 2004/107/EC and 2008/50/EC

##### Envelopes and subcollections

- (B) Information on zones and agglomerations (Article 6) 28 Sep 2020
- (B) Preliminary information on zones and agglomerations (Article 6) 13 Nov 2020
- (C) Information on the assessment regime (Article 7)
- (C) Preliminary information on the assessment regime (Article 7)
- (D) Information on the assessment methods (Articles 8 and 9)
- (D1b) Information on the assessment methods (Articles 8 and 9) - for models and objective estimation
- (E1a) Information on primary validated assessment data - measurements (Article 10)
- (E1b) Information on primary validated assessment data - modelled (Article 10)
- (F1a) Information on generated aggregated data - primary validated measurements (Article 11)
- (F1b) Information on generated aggregated data - primary validated modelled (Article 11)
- (F2) Information on generated aggregated data - primary up-to-date measurements (Article 11)
- (G) Information on the attainment of environmental objectives (Article 12)
- (H) Information on air quality plans (Article 13)
- (I) Information on source apportionment (Article 13)
- (J) Information on the scenario for the attainment year (Article 13)
- (K) Information on measures (Articles 13 and 14)

Probably:

- a [http://cdr.eionet.europa.eu/gr/eu/aqd/e1a/envx5qn6g/REP\\_D-GR\\_MINENV\\_20201029\\_E1a-001.xml](http://cdr.eionet.europa.eu/gr/eu/aqd/e1a/envx5qn6g/REP_D-GR_MINENV_20201029_E1a-001.xml)
- [http://cdr.eionet.europa.eu/gr/eu/aqd/e1b/envx1jz6q/REP\\_D-GR\\_MINENV\\_20200915\\_E1b-001.xml](http://cdr.eionet.europa.eu/gr/eu/aqd/e1b/envx1jz6q/REP_D-GR_MINENV_20200915_E1b-001.xml)
- shapefiles (referenced in the above xml files)
- <http://cdr.eionet.europa.eu/gr/eu/aqd/e1b/envx1jz6q/AS-5018.zip>
- <http://cdr.eionet.europa.eu/gr/eu/aqd/e1b/envx1jz6q/Bap-5029.zip>
- <http://cdr.eionet.europa.eu/gr/eu/aqd/e1b/envx1jz6q/Cd-5014.zip>
- <http://cdr.eionet.europa.eu/gr/eu/aqd/e1b/envx1jz6q/Ni-5015.zip>
- <http://cdr.eionet.europa.eu/gr/eu/aqd/e1b/envx1jz6q/Pb-5012.zip>
- <http://cdr.eionet.europa.eu/gr/eu/aqd/e1b/envx1jz6q/SO2-1.zip>

## Example #3 – Drinking Water Directive

- Identified PDS:
- drinking water protection areas, supply zones, safeguard zones
- small water supply zones
- drinking water abstraction points

### Reporting file:

	A	B	C	D	E	F	G
1	CountryCode	WSZ_ID	DWD_WSZ_Name	WSZ_NUTScoordinates	WSZ_Residents	WSZ_Volume	DWD_Year
2	GR	GR111_ALEXANDROUPOLI_A LEXANDROUPOLI WSZ1	GR111_ALEXANDROUPOLI_A LEXANDROUPOLI WSZ1		69,408.00	13,908.00	2014
3	GR	GR111_ALEXANDROUPOLI_F ERES FERES	GR111_ALEXANDROUPOLI_F ERES FERES		6,372.00	1,780.00	2014
4	GR	GR111_ORESTIADA_ORESTIA DA_ORESTIADA	GR111_ORESTIADA_ORESTIA DA_ORESTIADA		19,570.00	4,500.00	2014
5	GR	GR112_MYKIS_MYKIS_MYKIS	GR112_MYKIS_MYKIS_MYKIS		8,051.00	1,015.00	2014
6	GR	GR112_TOPEIROU_TOPEIRO U EVLALOU	GR112_TOPEIROU_TOPEIROU _EVLALOU		8,977.00	1,795.00	2014
7	GR	GR112_XANTHI_XANTHI_XA NTHI WSZ1	GR112_XANTHI_XANTHI_XAN THI WSZ1		27,071.00	5,414.00	2014
		GR112_XANTHI_XANTHI_XA	GR112_XANTHI_XANTHI_XAN				

## Example #4 – Habitats Directive

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### Identified PDS: Habitat Types Distribution and Range

**Reporting file:** data collected and provided using a 10 x 10 km<sup>2</sup> grid

**Recommendation 1** Additional and/or use case-specific information related to the theme *Habitats and Biotopes* should be made available using the spatial object types and data types specified in the following application schema: SpeciesDistributionExtension.

**HB TG**

These spatial object types and data types should comply with the definitions and constraints and include the attributes and association roles

**INSPIRE Community Forum**

**HabitatsAndBiotopes in WCS**

**HabitatsAndBiotopesDistribution XSD**

## 2.2. Where we are today

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- Based on information we gathered from various reports and discussions, we are going to **harmonize all of the PDS according to the INSPIRE application schemas**
- We will start discussions in the **new helpdesk** for those cases where it is unclear to us which are **the source and target feature types** for the requested PDS and the relevant application schemas
- We plan to **upgrade the geoportal**, in terms of applications used but also as regards the provided services and their compliance, where feasible.

### 3. Conclusions

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- PDS provision and harmonization will **strongly support the scope of INSPIRE** in the second decade of its implementation.
- PDS initiative can be seen as a chance to **modernize the maintenance of the reporting spatial datasets**.
- Close **cooperation** between **INSPIRE NCP** and the **reporting authorities/EIONET NFP**, in order to facilitate the circulation of information from/to all directions (EEA/INSPIRE/Greek stakeholders).
- The reporting authorities might need to take **clearer guidance to use INSPIRE** infrastructure.
- The **new generic INSPIRE helpdesk** seems to be fulfilling its purpose.

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**Thank you!**

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