

INSPIRE implementation progress in Ireland

INSPIRE KEN

1st October 2020



Topics

- ✓ Where we were
- ✓ What we have done
- ✓ Annex II & III implementation
- ✓ What's next?



**STARTING
POINT**

- ✓ From the GAP Analysis
 - ✓ **Organizational changes**
 - ✓ **Absence of coordination and communication activities** (fora, meetings) according Data providers.
 - ✓ **Roles** were not clear. Responsible, support, decisions.
 - ✓ Data providers were not aware of deadlines, priority data sets lists requirements, **state of art of INSPIRE**
 - ✓ Low **resources** availability
 - ✓ **Valuable technical knowledge**
 - ✓ **Simultaneous initiatives:** ISDE, Geoportal, Open DATA



Request of assistance by DHPLG

- ✓ Developing an **Action Plan**
- ✓ Providing **technical guidance**
- ✓ Liaison with **Data Providers**
- ✓ Creating **work packages** around any of the following aspects:
 - 0. **Organization:** EU communication, MIG participation, Action plan, Geoportal...
 - 1. Monitoring and Reporting
 - 2. Data Specifications
 - 3. Metadata
 - 4. Network Services
 - 5. Data and Service Sharing
 - 6. Spatial Data services
 - 7. Transformation of metadata, data and services
 - 8. Validation of metadata, data and services.



Work packages activities

✓ WP0 Organization



- ✓ 0.1 Establish relations and methodologies with European Commission
- ✓ 0.2 Ireland actively participate in the MIG-P
- ✓ 0.3 Identify agencies in Ireland responsible for INSPIRE response
- ✓ 0.4 Re-activate or create all the TWG required
- ✓ 0.5 Organize of forums and events
- ✓ 0.6 Ireland actively participate in the MIG-T group
- ✓ 0.7 Create an Action Plan
- ✓ 0.8 Ireland's INSPIRE geoportal

✓ WP1 Monitoring and Reporting



- ✓ 1.1 Fulfilment of the different activities deadlines
- ✓ 1.2 Dissemination activities
- ✓ 1.3 Use of tools provided by the European Commission
- ✓ 1.4 Ensuring a timely delivery of the 2019 Reporting document
- ✓ 1.5 Identify and classify Priority Datasets

✓ WP2 Data specifications



- ✓ 2.1 Common methodology for INSPIRE data harmonisation
- ✓ 2.2 Expert identification with required thematic and technical knowledge
- ✓ 2.3 Analysis of source data
- ✓ 2.4 Process of mapping INSPIRE data models
- ✓ 2.5 Determine responsibilities for harmonisation processes
- ✓ 2.6 Selection and dissemination of the most appropriate software tools for the harmonisation process

✓ WP3 Metadata



- ✓ 3.1 Establish responsibility for creating Metadata
- ✓ 3.2 Update Irish metadata profile
- ✓ 3.3 Training on INSPIRE required Metadata files
- ✓ 3.4 Technical recommendations about metadata
- ✓ 3.5 Keywords related to the Priority Datasets
- ✓ 3.6 INSPIRE metadata validator
- ✓ 3.7 Official Irish Catalogue of INSPIRE data and services and other catalogues
- ✓ 3.8 Dissemination of results from the INSPIRE geoportal Metadata analysis

✓ WP4 Network Services



- ✓ 4.1 Consistency of the services available through the geoportal with M&R activities
- ✓ 4.2 Definition of responsibility for each dataset
- ✓ 4.3 Provide support and training to data providers. Tools & technical specifications
- ✓ 4.4 Application of the Portrayal requirements for the view services publication
- ✓ 4.5 Services are published according to the "Quality of services"
- ✓ 4.6 INSPIRE Service validator

✓ WP5 Data and Service sharing



- ✓ 5.1 Data and service publishers following the "Implementing rules on data and service sharing"
- ✓ 5.2 Metadata with conditions applying to access and use
- ✓ 5.3 Provide access to spatial datasets and services without delay
- ✓ 5.4 Services with under payment access or sensitive data
- ✓ 5.5 Relations with Open data initiative
- ✓ 5.6 Relations with Linked data

✓ WP6 Spatial Data Services



- ✓ 6.1 Availability of adequate metadata for each network service
- ✓ 6.2 Extended capabilities node
- ✓ 6.3 INSPIRE validator and other requests

✓ WP7 Transformation of metadata and data



- ✓ 7.1 INSPIRE specifications, technical guidelines
- ✓ 7.2 Tool analysis
- ✓ 7.3 Formats analysis
- ✓ 7.4 Maintenance and reuse
- ✓ 7.5 Selection of the most appropriate software tools. Recommendations

✓ WP8 Validation of metadata, data and services



- ✓ 8.1 Knowledge on INSPIRE specifications for metadata, data and services
- ✓ 8.2 Official and non-official tools analysis
- ✓ 8.3 Other type of validations
- ✓ 8.4 Dissemination of the results of validation



Actions

✓ Short term actions. 2019

1. Improving as much as possible the Irish **Monitoring And Reporting** results by **May 2019**:
 1. Updating Irish Metadata Profile for data and services
 2. Updating Geoportal (ISDE, Primary data sets list, making MD accessible for M&R)
 3. Focusing on Priority data sets
 4. Defining data sharing conditions for data sets.
 5. Increasing the number of INSPIRE compliant metadata: Dashboard. Validated
2. Designing a sustainable INSPIRE Implementation approach to be presented in the **Action Plan: 2019**
 1. Roles and responsibilities
 2. Contact with INSPIRE EU bodies
 3. Creation of technical guidelines and fora. Training/Workshops
 4. Include guidelines and reference documentation in the Geoportal



Actions

✓ Long term actions. 2020

Once the data has been identified, including PDS, their data sharing characteristics defined, the metadata created for data and existing services and made accessible at the geoportal.ie and included in the M&R:

1. Data transformation (excluding PDS annex II and III)
2. DS Validation
3. Network services
4. NS Validation
5. Spatial data services



What we have done

- ✓ We started from scratch.
 - ✓ Identifying the data sets
 - ✓ Assigning responsible.

We completed the first picture !!!



- ✓ Creation of the Dashboard





Dashboard

9



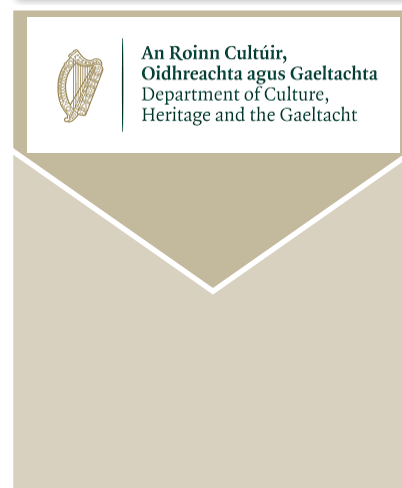
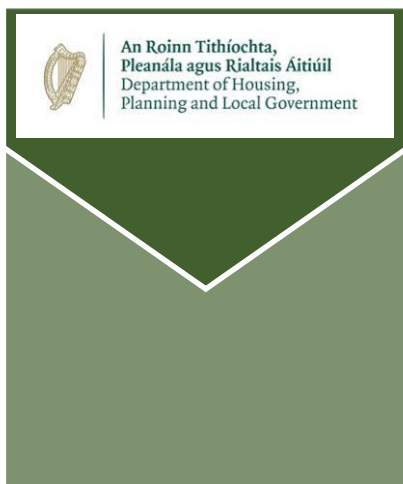
What we have done

- ✓ Support in the M&R process: right and on time.
- ✓ Bring people back into the project: Workshops, training, distribution of responsibilities.
- ✓ Creating awareness about the status and news on the implementation of INSPIRE: info about MIG meetings, new metadata templates, how to publish INSPIRE web services, etc.





Stakeholders - Identification of responsible





How shall we organize all the work to be done and start?





TOOLS

- ✓ Agile methodology based on Kanban
- ✓ Workflow using Team Foundation System (TFS)
- ✓ Backlog of the task and activities
- ✓ Dashboard of INSPIRE implementation status



INSPIRE info

Metadata

SDS

Services

User stories



What we have done

METADATA

- Metadata profile updating, already outdated.
- MD files were generated for all identified layers

HARVESTING

- Publications (harvesting) in INSPIRE.
- Very good results. Radical change of image.

PRIORITY DATA SETS

- Considering the new requirement of the directive on Priority Data Sets (PDS).
- Classification of the DS according to them

TRANSFORMATION

- Harmonisation of the PDS according INSPIRE DS.
- Transformation of the PDS and publication



Technologies

✓ Geonetwork for metadata



✓ Geoserver Implementation on the cloud using AMZ



✓ ESRI technology for Geoportal



✓ FME & HALE for Transformation





Annex II & III implementation

- ✓ Many of the PDS related to Annex II and III.
 - ✓ Identified on the Dashboard
 - ✓ Made accessible
- ✓ Harmonisation of the data and service specifications. On going
- ✓ Services already published.
- ✓ Themes:
 - ✓ *Annex 1 – 13 DS – 4 PDS Hydrography, Protected sites.*
 - ✓ Annex II - 6 DS – No PDS (3 Geology – 2 Elevation – 1 Orthoimagery)
 - ✓ Metadata
 - ✓ Annex III – 50 DS (10 themes) – 36 PDS
 - ✓ Noise & Air quality – 6 Services already working.



TOTAL Conformity with INSPIRE

✓ ANNEX I

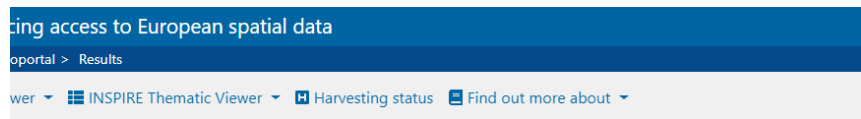
- ✓ 1 Annex I.8 - Hydrography

✓ ANNEX III

- ✓ 2 - Annex III.11 - Area management / Restriction / Regulation zones and reporting units
- ✓ 2 - Annex III.5 - Human health and safety
- ✓ 1 - Annex III.11 - Area management / Restriction / Regulation zones and reporting units
- ✓ 1 - Annex III.7 - Environmental monitoring facilities



Themes



Filter dataset by: ☐ Downloadable ☐ Viewable ☐ dataset with National coverage ⓘ

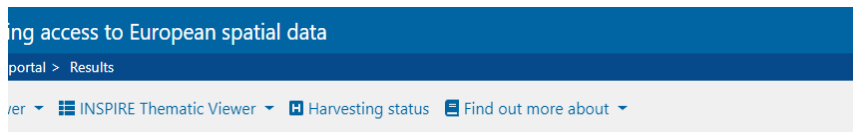
Show dataset titles in: original MD language ▼

Show only: ☐ dataset with National coverage ⓘ

Title	Properties
CSO - NUTS, LAU 1 (IE) (Metadata)	
CSO - NUTS, level 1 (IE) (Metadata)	
CSO - Census 2011 Population of the Republic of Ireland by 1 km x 1 km grids (Metadata)	
OSi - DEM 10m (Metadata)	
OSi - Contours 10m (Metadata)	
CSO - NUTS, LAU 2 (IE) (Metadata)	
CSO - NUTS, level 2 (IE) (Metadata)	
CSO - Census 2006 Place of Work Census Anonymised Records (POWCAR) (Metadata)	

June 2019

PDS wrong classified



Priority Data sets in Ireland

Filter dataset by: ☐ Downloadable ☐ Viewable ☐ dataset with National coverage ⓘ

Show dataset titles in: original MD language ▼

Show only: ☐ dataset with National coverage ⓘ

Title	Properties
CSO - NUTS, LAU 1 (IE) (Metadata)	
CSO - NUTS, level 1 (IE) (Metadata)	
CSO - NUTS, LAU 2 (IE) (Metadata)	
CSO - NUTS, level 2 (IE) (Metadata)	
CSO - NUTS, level 3 (IE) (Metadata)	
INSPIRE WFD Register of Protected Areas - Surface Water Bodies for Drinking Water	
INSPIRE Register of Protected Areas - Bathing Water Areas	



PDS MD error in keyword MD

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<gmd:MD_Keywords>
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  <gmd:keyword>
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</gmd:MD_Keywords>
```



Themes

Enhancing access to European spatial data

INSPIRE > Geoportal

Data Sets Viewer ▾ Thematic Viewer ▾ Harvesting status Find out more about ▾

Data sets by

Country: Ireland

76 | 3 | 7

Title	Show dataset titles in:	Properties
<input type="text" value="Search title"/>	<input type="text" value="original MD language"/>	
Administrative Units		
Geographical Names		
Cadastral Parcels - Leasehold		
INSPIRE Air Quality Management Zones and Agglomerations		
INSPIRE Strategic noise maps. Noise agglomerations		
INSPIRE Air Quality Monitoring Stations		

August 2020

PDS classified

Enhancing access to European spatial data

INSPIRE > Geoportal

Data Sets Viewer ▾ Thematic Viewer ▾ Harvesting status Find out more about ▾

Data sets by

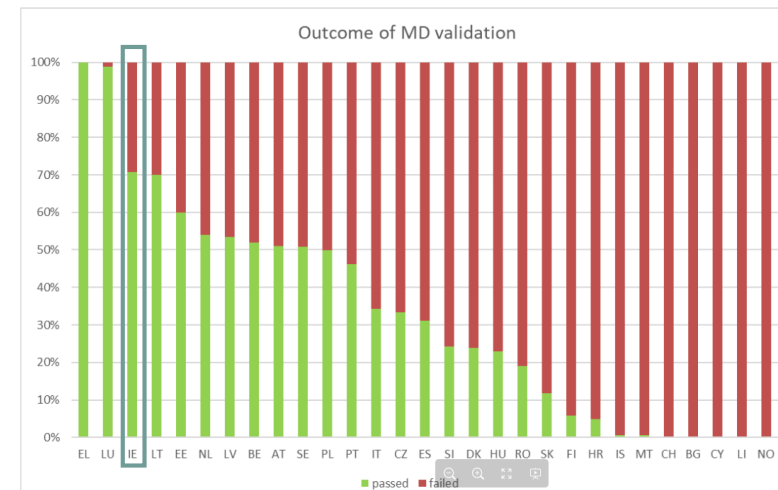
Legislation: Priority Country: Ireland

42 | 0 | 7

Title	Show dataset titles in:	Properties
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INSPIRE Air Quality Management Zones and Agglomerations		
INSPIRE Strategic noise maps. Noise agglomerations		
INSPIRE Air Quality Monitoring Stations		
INSPIRE Strategic noise maps. Noise contour map for major roads – Lden		
INSPIRE Strategic noise maps. Noise contour map for major railways – Lden		
INSPIRE Water Framework Directive River Network Routes		



MD Conformity



What's next?

- ✓ Continue with the transformation of PDS
- ✓ Publication of new services
- ✓ SODOTO workshops:
 - ✓ See One
 - ✓ Do One
 - ✓ Teach One



Thank you for your attention