# **60th MIG-T meeting Prague 2019-10-15+16**

Location: Czech Office for Surveying, Mapping and Cadastre, meeting room (6th floor), Pod Sídlištm 1800/9, Kobylisy, 18211 Prague 8, Czechia

Logistics: Face-to-face\_ Prague\_Logistics.docx

### Tuesday, 15 October 2019

Time	Agenda item	Document(s)
9:30 – 9: 40	Welcome, approval of the agenda	DOC-1 Draft agenda [DOC-X] [PDF]
9:40 - 9: 45	Minutes of the previous meetings (for endorsement)	
9:45 – 11:00	INSPIRE monitoring (for exchange of views)	
	Overview Geoportal statistics & draft INSPIRE indicators calculation (JRC)     Outlook & planning	PRES-1 GeoportalStats FAQ Best practice (JRC) [PPTX]  PRES-1.1 Indicators calculation [PPTX]  DOC-2 Geoportal Dataset Analytics [PDF]
11:00 – 11:30	Coffee break	
11:30 - 13:00	Data availability / metadata (for exchange of views)	
	Simplification of data-service linking  Metadata 2.0 support in the geoportal  MS experience (CZ, PT, BE)  implementing alternative approach for data-service linking (NL, NO, LU)  implementing additional metadata (BE)  implementing metadata TG 2.0 (NL, BE)  indicator calculation (DE, HU)	PRES-2.1 Simplification data-service linking & metadata 2.0 (JRC).pptx  PRES-2.2 Data-service linking (NL).pptx  PRES-2.3 Data-service linking (NO).pptx  PRES-2.4 Data-service linking (LU) [PPTX] [PDF]  PRES-2.5 Metadata implementation (BE).pptx  PRES-2.6 Metadata 2.0 (NL).pptx  PRES-2.7 Indicators (DE).PPTX
	"As-is" vs. INSPIRE-compliant data sets (and how to document them in MD) (JRC, DE, NL, SK)	[PRES 3] "As-is" vs. INSPIRE-compliant data sets [PDF] [PP TX]
13:00 - 14:30	Lunch	
14:30 - 16:00	Data usability (for exchange of views)	
	<ul> <li>Geoportal "Open data" and "Feature type" viewers (JRC)</li> <li>Initial findings of studies on authentication and data organisation (JRC)</li> </ul>	PRES-4.1 Feature type viewer & spatial scope (JRC).pptx PRES-4.2 Open data & authentication & data organisation (JRC).pptx
	Data Sets and Data Series Challenge (CZ)	PRES-5 Data sets and data set series (CZ).pptx
	Pan-European core data sets – results and experiences (JRC, EEA, ESTAT)	PRES-6.1 CORDA INSPIRE (EEA).pdf PRES-6.2 EU Gazetteer Evaluation (JRC-ESTAT).pptx PRES-6.3 Pan-EU datasets (ESTAT).pptx
	Serving and consuming GML fragments with complex features (LU)	PRES-7 Serving and consuming GML fragments with complex features (LU).pptx

16:00 - 16:30	Coffee break	
16:30 – 17:30	Priority data sets (for exchange of views)	
	Implementation and possible issues (NL, EEA)	PRES-8 Priority data sets (NL).pptx
	Follow-up on the targets (EEA, ENV)	PRES-9 Priority data sets targets & follow-up (EEA).pptx
19:30	Social dinner (paid by participants)	

## Wednesday, 16 October 2019

9:00 – 10: 30	SDW (for exchange of views)	
	Follow-up action search engine workshop (JRC, PL)	PRES-10 Discovery workshop conclusions (JRC).pptx
	Linked data and PIDs	PRES-11.1 Persistent ids (DE).pptx
	∘ SK	PRES-11.2 Linking data conclusions (IT).pptx
	○ IT ○ DE	PRES-11.3 Linked data and PIDs (SK).ppt
	a 000 ARI Francisco (RIO	PRES-12.1 OGC API - Features (DK).pptx
	<ul> <li>OGC API -Features (DK)</li> <li>JRC study on "Facilitating access to INSPIRE data through standard-based APIs"</li> </ul>	PRES-12.2 INSPIRE API Study (JRC).pptx
10:30 – 11: 00	Coffee break	
11:00 – 12: 30	Fitness for purpose (for information and exchange of views)	
	2017 2 cuttonmen and next stone (IDC)	PRES-13.1 2017.3 Outcomes.pptx
	2017.3 outcomes and next steps (JRC)	[DOC-3] 2017.3 D2.2_Usability of INSPIRE.pdf
	2017.2 adoption and experiences     GeoJSON     Geopackage (AT, ES)	PRES-13.2 2017.2 Outcomes.pptx
		PRES-13.3 GeoPackage (ES).pdf
		PRES-13.4 Geopackage Hackathon (AT).pdf
		Video: Benchmarking GML GeoJSON Geopackage in QGIS
12:30-13:00	INSPIRE Registry	PRES-14.1 Re3gistry v2 (JRC).pptx
	<ul> <li>v2.0 of Re3gistry v2.0 – status and planning</li> <li>http https migration</li> <li>register formats</li> </ul>	PRES-14.2 INSPIRE URIs (JRC).pptx
13:00 – 14: 00	Lunch	
14:00 – 15: 00	(Re-)Organising MIG-T (for exchange of views)	[PRES 15] Re-organising MIG-T [PDF] [PPTX]
	Role & responsibilities and working methods (frequency of meetings etc.)	
15:00 – 15: 30	Coffee break	

15:30 – 16: 15	Information points (for information)  Updates IR-ISDSS – status and planning Study contract "Data ecosystems" Update on ELISE and Innovative Public Services ISA2 actions INSPIRE Helsinki 2019 INSPIRE Conference Dubrovnik 2020 Reference validator	PRES-16 Information points.pptx
16:15 – 16: 30	Conclusions and next steps	

#### Minutes

The minutes summarise the main conclusions and actions from the meeting. Actions are indicated in the minutes using check boxes and are tracked in the "Open actions" section below.

The meeting was attended by experts from Austria, Czechia, Portugal, Slovenia, Denmark, Finland, Netherlands, Germany, Estonia, Sweden, Spain, Italy, Hungary, Poland, Norway, Greece, Belgium, Slovakia, France, Bulgaria, the European Environment Agency (EEA), DG Environment and the Joint Research Centre (JRC).

#### Main conclusions

The meeting clearly showed progress with the implementation of INSPIRE.

On one hand this was reflected in a keen interest of Member States (MS) in the indicators, which will for the first time be automatically calculated based on the metadata available in the geoportal (rather than based on self-declaration of the MS). There is therefore a growing demand for and growing expectations in terms of reliability and stability of the central infrastructure components, in particular the geoportal backend & tools and the reference validator. It became also clear that clear communication about versioning and releases of these tools is crucial.

On the other hand, the growing emphasis on usability in the geoportal and the attempts (by ESTAT, EEA and JRC) to build pan-European data sets on selected themes (e.g. administrative units, geographical names or transport networks) clearly illustrates that are still many hurdles to be overcome for the INSPIRE infrastructure to be really usable. These include availability and accessibility of the data (missing metadata, restrictive/unclear licence conditions, access control mechanisms, pricing), technical issues with services, lack of harmonisation.

One topic that was intensively discussed was the overall implementation approach of several MS focussing on meeting INSPIRE legal requirements and building in parallel a national infrastructure that contains richer data and higher quality services. It was agreed that this topic should be discussed at the next MIG meeting, including the level of ambition of the Commission for the INSPIRE infrastructure (in particular regarding data harmonisation) and how to integrate INSPIRE representations and services better into the existing national infrastructures.

There was keen interest in the work on an alternative encoding for simple Address and Environmental Monitoring Station data based on GeoJSON under action 2017.2. AT and ES have extended this work to GeoPackage, which can be used to exchange complete data sets as SQLite data bases, at different levels of complexity. Also, there was strong support to develop a Good Practice document for download services based on the new OGC API – Features standard. It was agreed to propose this as a new action for the MIWP to the MIG.

It was further agreed to close the ad-hoc MIG-T actions on improving the discovery of geospatial data in mainstream search engines and one persistent ids and linked data, ideally with short summary reports of the outcomes.

Finally, it was agreed to reduce the number of regular MIG-T meetings to 4 per year (2 face-to-face and 2 virtual), and to have additional ad-hoc meetings or webinars on dedicated topics (proposed by MS), as needed.

#### Important dates

- Release of new geoportal version (indicator calculation and feature type viewer): 08 Nov 2019
- MS Testing of new geoportal version: 20 Nov 2019
- Final release of indicator calculation: 02 Dec 2019
- Deadline for harvesting and confirming calculated indicators: 15 Dec 2019
- Geoportal & validator workshop: end of January / beginning of February 2020

#### **Detailed notes**

Welcome and approval of the agenda	The agenda was approved without changes.
Minutes of the previous meeting	The minutes of the previous meeting were approved without changes.

#### INSPIRE monitoring -Overview Geoportal statistics

- Some front-runners, but many countries lagging behind, in particular for downloadable and priority data sets see detailed statistics in DOC-2 Geoportal Dataset Analytics [PDF].
- Data providers' checklist (with some clarifications, e.g. add Atom to graphics) and FAQ welcomed.
- · SOS and WCS not a priority right now.
- JRC explained nature of recent issues with harvesting and promised to improve on communication of planned updates.
- JRC explained stricter rules for downloadable data sets (checking now also whether a linked service actually responds), which has negatively affected the number of dpwnloadable data sets in some countries
- What is the priority of moving linkage checker into reference validator?
  - o Probably not this year, main priority is on stability of validator and improving performance of metadata validation

#### INSPIRE monitoring -INSPIRE indicators calculation

- JRC presented the proposed calculation of each indicator introduced in the new M&R Decision see (PRES) and the
  proposed timing for MS testing (4-15 Nov) and release (29 Nov).
- ENV stated that the focus of the monitoring is on trends how is implementation progressing (or degressing) in terms of implementation - rather than on absolute numbers
- There was a request to access the raw data to check correctness of calculation of indicators by some MS. This
  information is already available through the error messages in the harvesting reports. The JRC will investigate the
  possibility to provide more detailed information through the planned API to the Geoportal (to be discussed in the
  geoportal workshop planned in early 2020).
- There was a discussion on the possibility for countries with large number of data sets (e.g. FR, DE) to provide several
  catalogues instead of just one national discovery service. This is already working well in other countries (e.g. BE, AT).
- All countries with large numbers of data sets to reflect on this possibility and provide feedback to JRC.
- The EC confirmed that the indicators will be published in the INSPIRE in your country section of the IKB (as part of the country fiches).
- EC and EEA to discuss whether a copy could also be stored in Reportnet for archiving purposes.
  - The JRC confirmed that the harvesting to be used for the indicator calculation needs to be performed and the indicators have to be confirmed by MS at the latest by 15/12 of each year. Depending on the date of availability of the indicator calculation, in 2019, there will be some flexibility, however.
- The JRC confirmed that for identification of PDS and Spatial scope, either anchor + code list (this is the preferred option)
  or agreed free text can be used.
- The EC confirmed that the calculation of MD conformity element will be based on the agreed tests (action 2017.4) of the
  reference validator, while for data and services the conformity statement will remain a self-declaration. However, also
  here MS are strongly encouraged to use the reference validator to evaluate conformity.
- JRC encouraged to set up national validation endpoints to support validation. This also allows the definition of additional (national) validation rules.

# MS experience on metadata and indicators

- JRC presented the outcomes of the testing on simplification of data-service linking and the next steps.
  - Volunteering countries to test agreed implementation of the resource locator.
  - JRC to implement support in the geoportal back-end.
  - O Discuss outcomes in the planned geoportal workshop in early 2020.
  - Discuss possible impacts on IRs and TGs including the proposed simplification of service metadata.
  - Present the outcomes to MIG for endorsement
- JRC presented the current and planned support for metadata TG v2.0 in the geoportal. MS are encouraged to mo
  - Geoportal Harvesting Console will offer a selection between 2.0 or 1.3 MD schemas
  - $^{\circ} \ \ \text{Geoportal back-end process evaluates the version and provides ``error \, messages" if \, version \, wrongly \, selected \, and \, becomes a constant of the process of the process$
  - In case of "mixed 1.3/2.0 MD records" in the Discovery service = the Geoportal will accept (some MD info conditions on access & use might be missing)
  - The calculation of the M&R indicators will not be effected
- Several MS presented good examples of automating MD creation and data-service linking as much as possible.
- NO presented a bulk download tool based on atom feeds, available as open source on Github.
- NL presented a MD 1.3-2.0 translation script, only 2 elements need to be added manually
  - The XSLT transformation file NL metadata profile 1.3 (TG INSPIRE 1.3) to NL metadata profile 2.0 (TG INSPIRE 2.0) is available on Github.
- MS are encouraged to share their approaches, scripts and tools in the new "software and tools" section of the Community Forum.
- DE gave a good example on their expectations of the indicator values, based on their own calculations. Other MS are
  encouraged to do a similar exercise.
- HU widened the discussion on indicators reflecting business needs for the EU SDI.

#### "As-is" vs. INSPIRE-The presentation illustrated the issue related to the conformity indicator and proposed a solution based on the notion of compliant data sets "distributions" (as used in DCAT) to avoid the reaction to remove "as-is" data from the infrastructure to improve the indicator value. The main interest should be to monitor the availability of harmonised data sets and ultimately, the coverage of each harmonised feature type. A discussion ensued on the approach used in the MS for implementing INSPIRE, and in particular the obligations on data interoperability. It raised the question of the relationship of INSPIRE-specific services and data representations and the existing (national) infrastructure. The MIG-T concluded that o the discussion clearly shows that we have moved into the implementation phase, $^{\circ}\,$ it should be avoided that as-is data is removed just to improve the conformity indicator, and o this is a wider discussion on the level of ambition of the INSPIRE infrastructure and its relationship with national infrastructures - that should be held in the MIG. EC to inform the MIG on the MIG-T discussion, and confirm the EC's view on the the ambitions of the INSPIRE infrastructure (in particular, with respect to data interoperability and in light of the INSPIRE evaluation in 2021/22). MIG to discuss the relationship between INSPIRE services and data representations and the national infrastructures. Geoportal "Open data" and "Feature type" JRC presented planned update of the geoportal (feature type viewer) planned to be release as beta for testing in viewers November The survey on "Open data" revealed that many different and difficult-to-implement scenarios for identifying open data in the MS. The planned filter in the geoportal is therefore not currently a priority and should be discussed in the planned geoportal workshop. Authentication and data organisation JRC to assess the number of network services with authentication by MS MS to propose solutions (e.g. specific credentials) for allowing the geoportal to access protected services to assess downloadability/viewability JRC to investigate possible filters to be added in the geoportal to identify open, protected & checked and protected & not checked services. Data Sets and Data The presentation highlighted the issues several MS have in organising big data sets (e.g. national cadastre or Series Challenge orthoimagery) for discovery, download and view in INSPIRE. The recommendation is to document such data sets as data set series (with one entry in the national discovery service), pointing to several data sets at a specific level of aggregation (e.g. region, municipality, theme). Different organisational solutions and standards exist for organising the data in download and view services, incl. encodings such as GeoPackage and the new OGC API: Features. All MS are encourage to share and discuss their solution(s) on the INSPIRE Community Forum (in the theme-specific or cross-cutting groups). Pan-European core ESTAT, JRC and EEA presented three examples of creating pan-European data sets to support European use cases data sets - results and raised by policy DGs (e.g. REGIO, GROW). The examples demonstrated the increasing demand, but also that there are experiences (JRC, EEA, ESTAT) still many issues, both technical, organisational and legal. EC informed about the new formal procedure for implementing requests under the Data and Service Sharing Regulation, which will be applied in the coming months. EC informed about the new Open Data Directive and the on-going work to prepare the impact assessment for the Implementing Regulation on High Value Data Sets. All MS are encouraged to contact their counterparts in the PSI group and the Open Data Committee, to coordinate about discussions on the High Value Data Sets. Serving and consuming GML LU to share the implementation experience in the new Tools and Software group on the INSPIRE Community Forum. fragments with complex features (LU)

### Priority data sets Many participants required clarification of the number of priority data sets, use and mapping to INSPIRE themes to avoid confusion and duplicated efforts with on-going implementation. DG ENV and EEA will organise a MIWP 2016.5 web-conference in November 2019 to address several issues raised, e. g. use of priority data sets for eReporting and access to up-to-date data, time stamp, clarity on number of data sets, mapping to INSPIRE themes, accounting: datasets vs. referenced data, derogations (including EFTA countries). It was proposed to provide a document on mapping between the environmental (thematic) directives and INSPIRE themes that could be published in Reportnet (EEA to consider). Analysis of PDS implementation will be provided for the next MIG meeting to decide on further work. One of the main messages was that the purpose and the use of the priority data is not limited to the reporting use case. The main objective is to provide access to historical and up-to-date data underpinning policy evaluation, development and implementation (including reporting) in different thematic areas related to the environment. Follow-up action search engine JRC and PL to summarise the main findings from the workshop in a short report. The example for PID management workshop presented by DE should be included as an example. • The MIG-T endorsed the proposal to close the ad-hoc action. Linked data and PIDs IT and other contributors to summarise the main findings from the ad-hoc action in a short report. • The MIG-T endorsed the proposal to close the ad-hoc action. OGC API - Features The MIG-T proposes to the MIG to include a new action on creating a Good Practice document describing how to set up an INSPIRE download service based on OGC API - Features. DK, FI and JRC to create an initial draft of the Good Practice document for INSPIRE download services based on OGC API - Features. 29 Nov 2019 • The GP document should focus on step-by-step instructions (without requiring INSPIRE-specific extensions to the adopted standard) needed to meet the INSPIRE requirements. The mapping to the NS IR should be put in an annex. DK, FI and JRC to draft an action fiche for submission to the MIG 15 Jan 2020 2017.3 outcomes and Results from usability tests are made available. The can-i-use tool contains the latest data. next steps The testing framework developed by the action is to be reused for: New versions of tested software products Analysis of the usability for alternative/additional encodings such as e.g. GeoPackage Proposal to the MIG to endorse the outcomes of the action and close the action. 2017.2 adoption and · For the new UML-to-GeoJSON encoding rule and theme-specific GeoJSON encodings for AD and EF to be proposed as experiences Good Practice documents by the MIG, implementation examples in several MS are needed. All MS are encouraged to inform JRC about implementations (or plans for implementation) of the new GeoJSON encodi ngs, ideally through the action's Github space. · To avoid different flattening rules being used for different encodings, new additional/alternative encodings should re-use the common model transformation rules (as already used in GeoJSON). The work on Geopackage by ES and AT raised a lot of interest, an in particular the plans in ES to develop an alternative /additional encoding rule following the GeoJSON example. Also SK is working on alternative encodings for AU and GN and is planning work on TN, HY, AD. NO proposed to also investigate whether similar rules might be applied for a PostGIS encoding. ES and AT are encouraged to continue their work on encoding rules for Geopackage and present a formal encoding rule for discussion in one of the next MIG-T meetings or a dedicated webinar. **INSPIRE** Registry · The proposed solution for the http https redirect issue was welcomed. (Re-)Organising MIG-T The MIG-T shared the analysis of the current situation and welcomed the proposed re-organisation. Also the proposal to focus on short and dedicated actions to keep people interested was supported. It was proposed to create a link to technical discussions in the PSI/Open data expert group and/or Committee. MS are encouraged to organise monthly or bi-monthly national workshops to inform the national stakeholders about discussions in the MIG(-T) and to create inputs

Information points

MS to read and distribute to national stakeholders the information in PRES-16 Information points.pptx

## Open actions

## Task report

Looking good, no incomplete tasks.