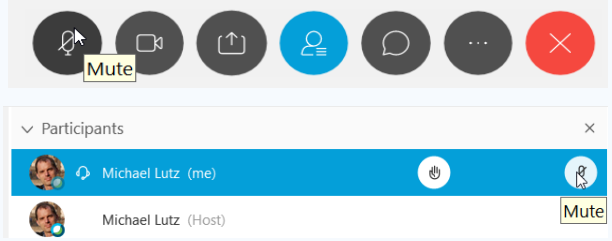
INSPIRE CONFERENCE 2020
DUBROVNIK - CROATIA
Goes virtual 3-12 June

Welcome and some hints for participants

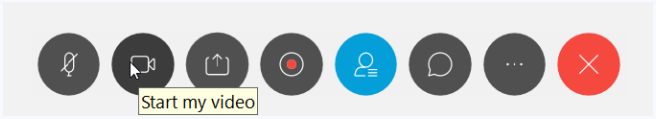
Mute your mic!

To mute and unmute, click the microphone icon next to your name or at the bottom of the screen.



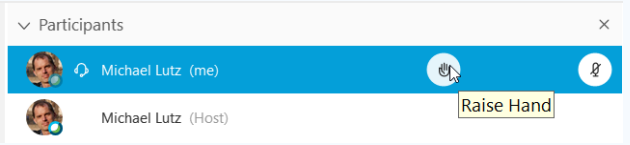
Turn off video

Share your webcam video **only** when you are talking. To do this, click video icon next to your name.



Ask a question

Use “raise hand” functionality to ask a question. Click the hand icon next to your name in the participant list. If this is not available write ‘hand’ in the chat.



European Commission

INSPIRE Geoportal Workshop - Status , Monitoring & Reporting 2019

European Commission

Webinar INSPIRE Geoportal M&R 2019

Programme

- Geoportal, Monitoring 2019 process, results– R. Tomas (30 min.)
- Use of Reference Validator for M&R 2019 – M. Minghini (15 min.)
- Update of the INSPIRE Country fiches 2020 – V. Celt (5 min.)
- Geoportal Helpdesk - D. Francioli (5 min.)
- Geoportal outlook, Monitoring 2020 (10 min.)
- INSPIRE M&R 2019 Survey – results – R. Tomas (10 min.)
- Discussion

JRC INSPIRE Team

INSPIRE CONFERENCE 2020
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INSPIRE Monitoring 2019 - transition year

- Defined by the new Commission Implementing Decision (EU) 2019/1372 of 19 August 2019*
  - Guidance document** for calculation of 19 indicators (new indicators: PDS, Spatial scope, Downloadable, Viewable data sets from EU Geoportal) was prepared (7/2019).
  - The process of MS metadata collection and indicator calculation integrated with the process of publication of MS metadata in EU Geoportal.
  - The first use of Reference Validator for a bulk automated validation of MS Metadata for data sets and services (*MDi 1.1 & MDi 1.2*).
  - The whole activity executed and coordinated by JRC with a big support of MS experts (i.e. MIWP 2018.1 sub group on Monitoring & Reporting, MIG-T, National MD catalogue administrators.)

* https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019D1372&from=EN
** Guidance document for the calculation of indicators (DOC 6)

INSPIRE Monitoring 2019 – process summary

- **Preparatory phase** 10/2019 - 12/2019
  - Geoportal back-end system adaptation including a new system for and automated calculation of monitoring indicators (17 of 19) 15. 12.
- **Collection of MS metadata** for 15.12.2019 - 15.1.2020
  - Publication of summary of harvested MS Metadata per each country
- **Data processing, validation and calculation of indicators** 15.1.- 15.4.
  - Publication of a website* for monitoring the status of MS metadata processing and calculation of all monitoring indicators per each country. 22.1.
  - Reference Validator - 3x new releases: v2020.1 (18.3.), v2020.1.1 (27.3.), v2020.1.2 (15.4.)**

* https://inspire-geoportal.ec.europa.eu/mr2019.html
** https://github.com/inspire-eu-validation/community/releases

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INSPIRE M&R 2019
Geoportal workflow

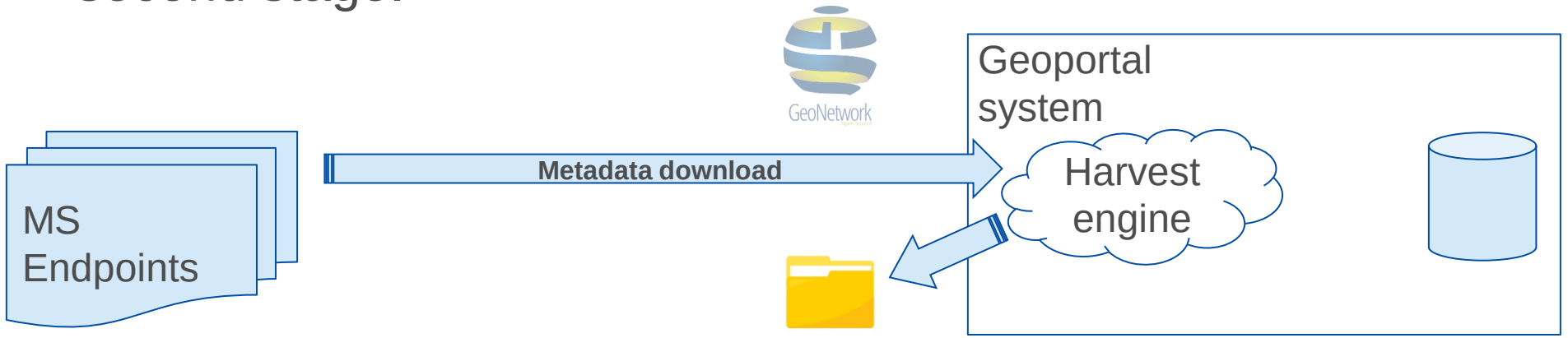
JRC INSPIRE Team

Geoportal system – MR 2019 steps

Step 1

Download of all the Metadata from Member States' endpoints
From 16/12/2019 to 15/01/2020

Only the metadata provided by the registered endpoint were downloaded. The full harvest with that metadata was planned in a second stage.



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Geoportal system – MR 2019 steps

Step 2

Data processing and indicators calculation

From 15/01/2020 to 15/04/2020

2.1

Load the downloaded Metadata in a local Geonetwork instance to be used as source by the Geoportal harvesting system

Geoportal system – MR 2019 steps

Step 2

Data processing and indicators calculation

From 15/01/2020 to 15/04/2020

2.2

Perform a full harvest using the local geonetwork endpoint described at previous point and processing all the resources

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Geoportal system – MR 2019 steps

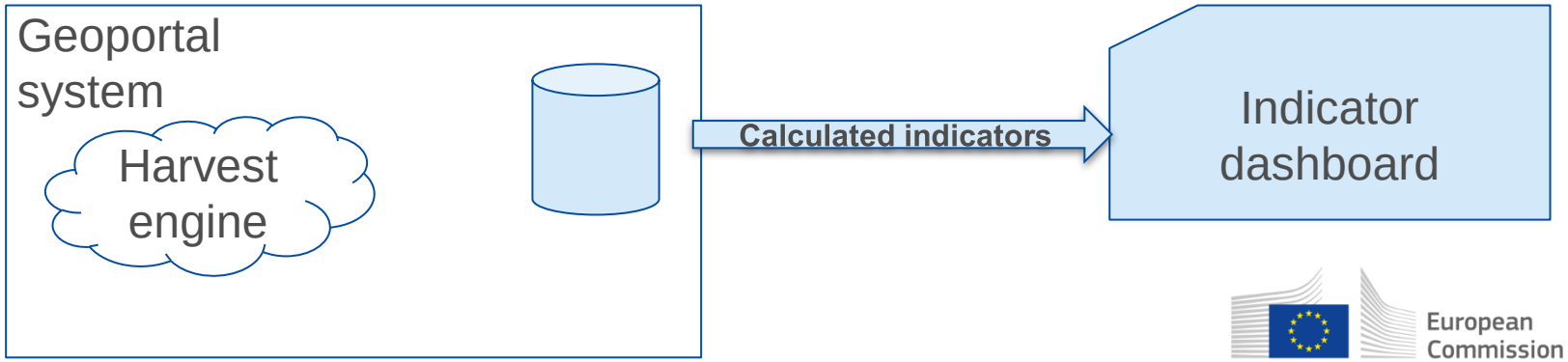
Step 2

Data processing and indicators calculation
From 15/01/2020 to 15/04/2020

2.3

Calculation of the indicators:

From the harvest results (DSi 1.1 - 1.5, DSi 2 - 2.3, NSi 2 - 2.2, NSi 4 - 4.4)



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Geoportal system – MR 2019 steps

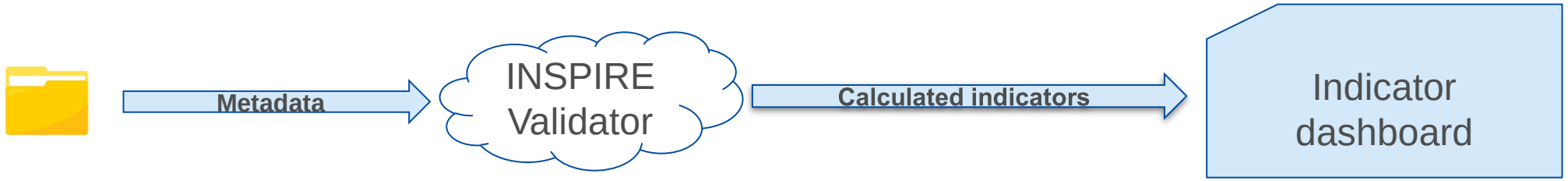
Step 2

Data processing and indicators calculation
From 15/01/2020 to 15/04/2020

2.3

Calculation of the indicators:

From the INSPIRE Validator (MDi 1.1, 1.2)



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INSPIRE M&R 2019 Results

JRC INSPIRE Team

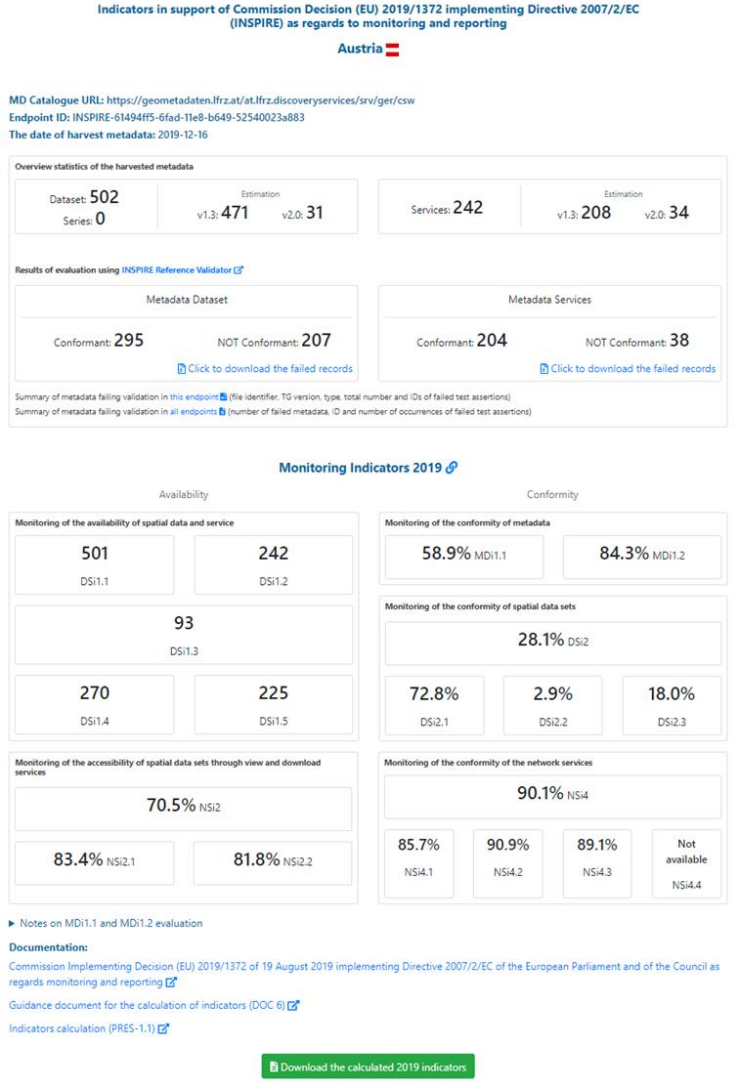
INSPIRE Monitoring 2019 – Dashboard results

35 MD Catalogues harvested (32 National / 3 Regional)

- 159 316 Metadata of data sets records
- 3 203 Metadata of data set series records
- 98 541 Metadata of spatial data services

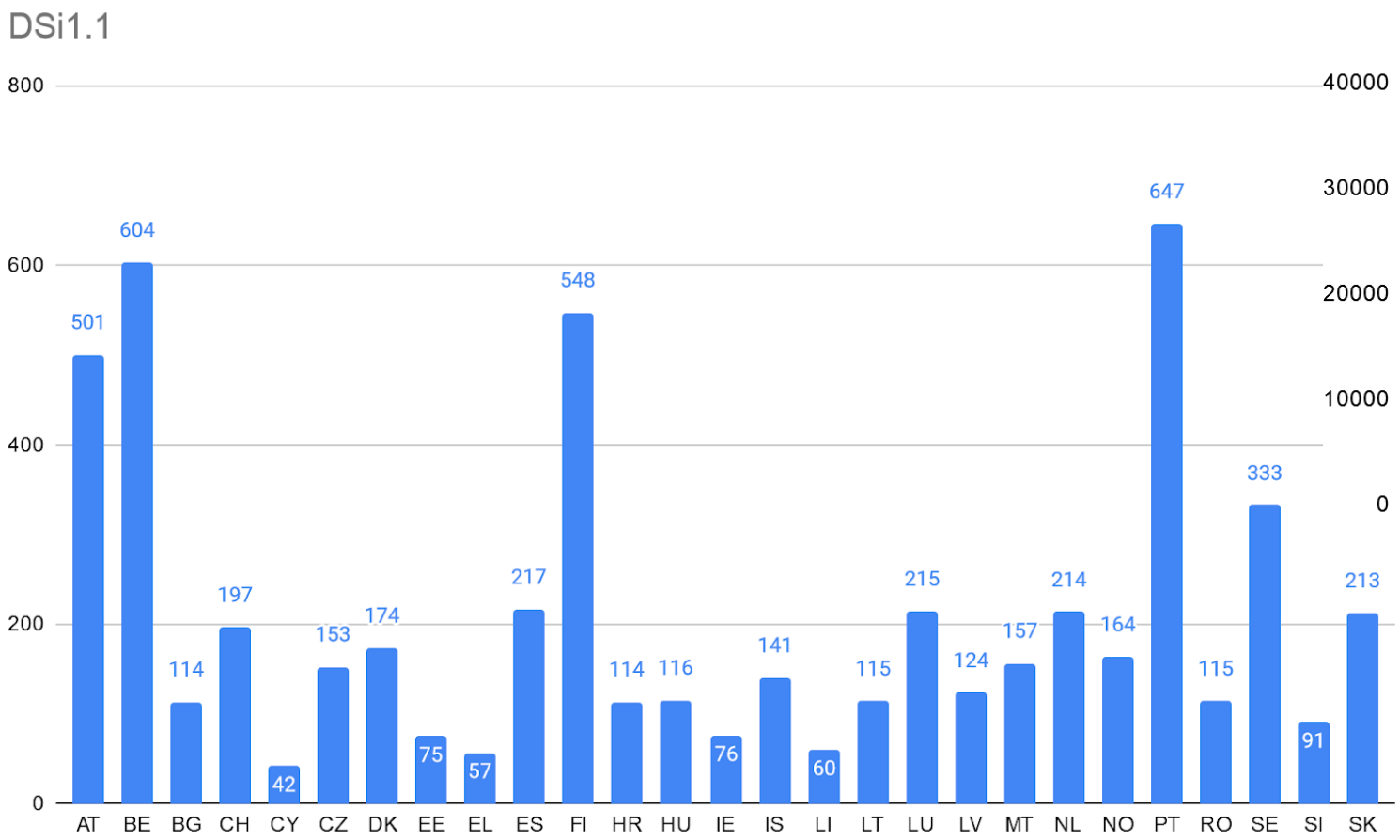
260 000+ metadata records validated by Reference Validator

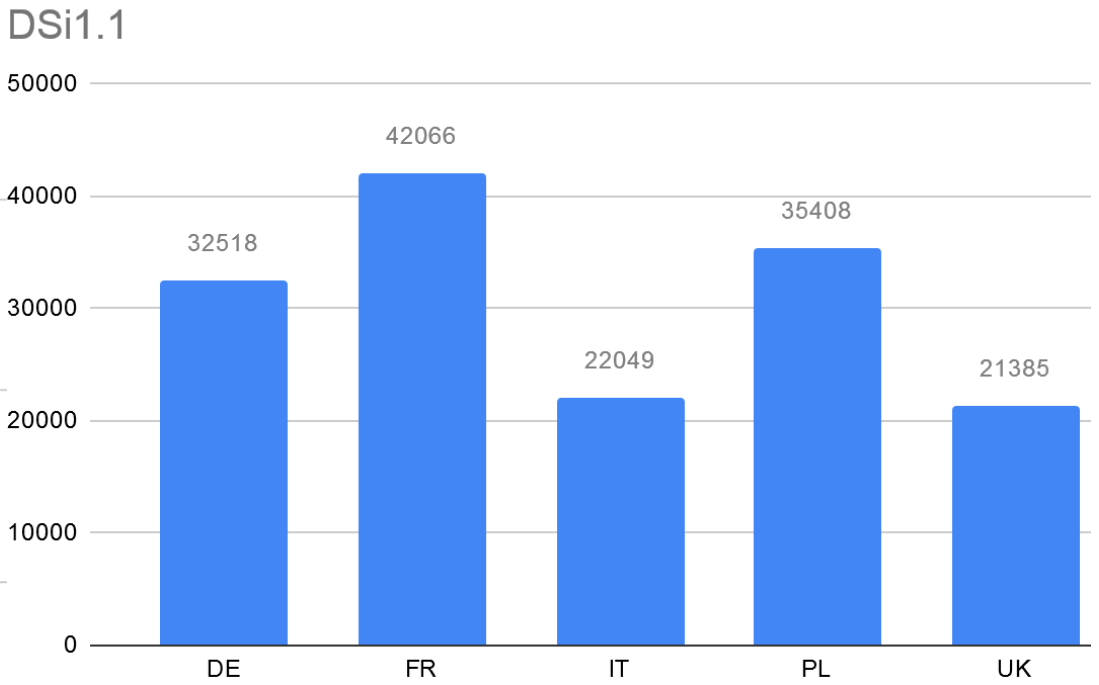
https://inspire-geoportal.ec.europa.eu/mr2019.html



INSPIRE MS Data sets availability

Total: 159 003 MD of data sets, series (DSi 1.1)





https://inspire-geoportal.ec.europa.eu/mr2019.html

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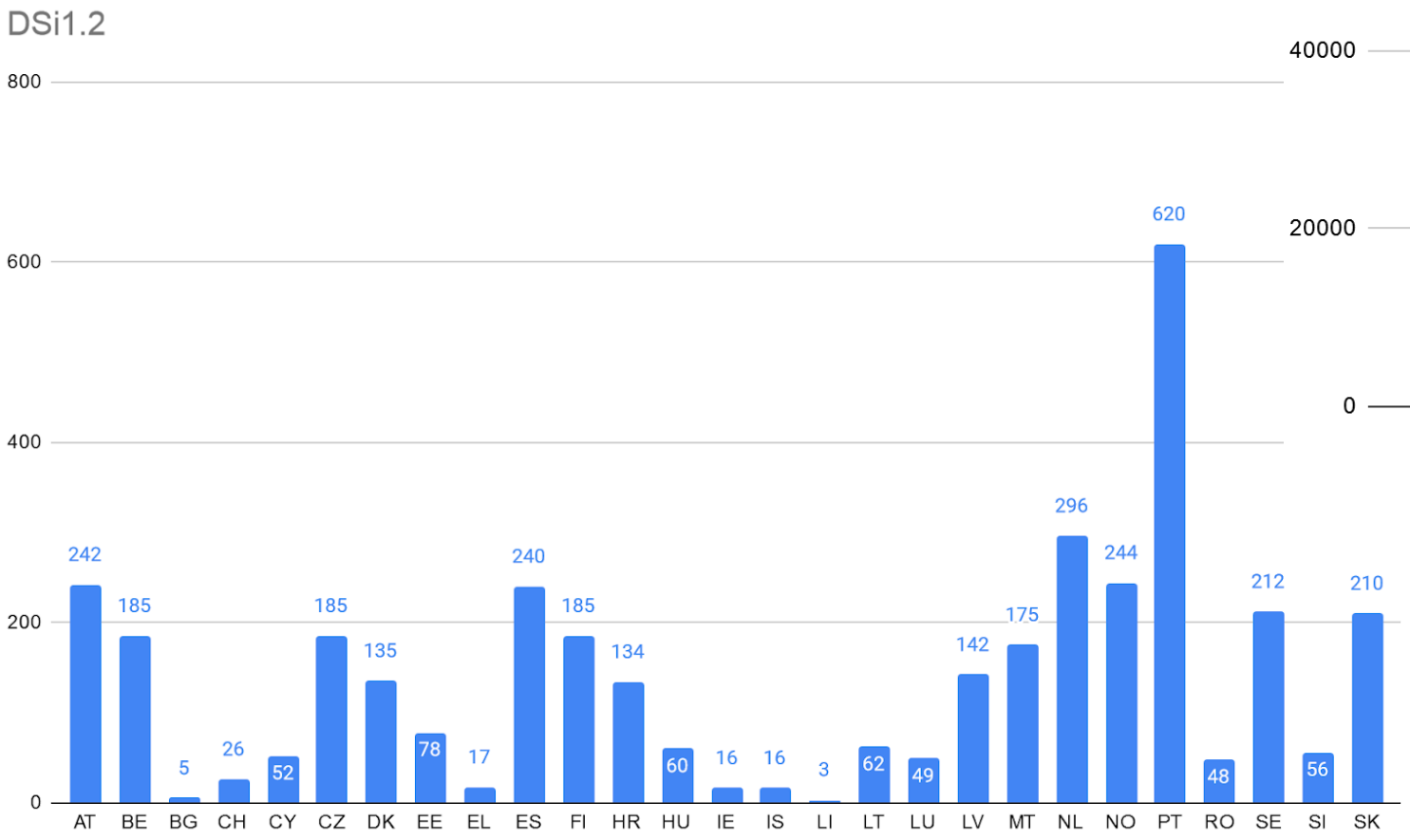
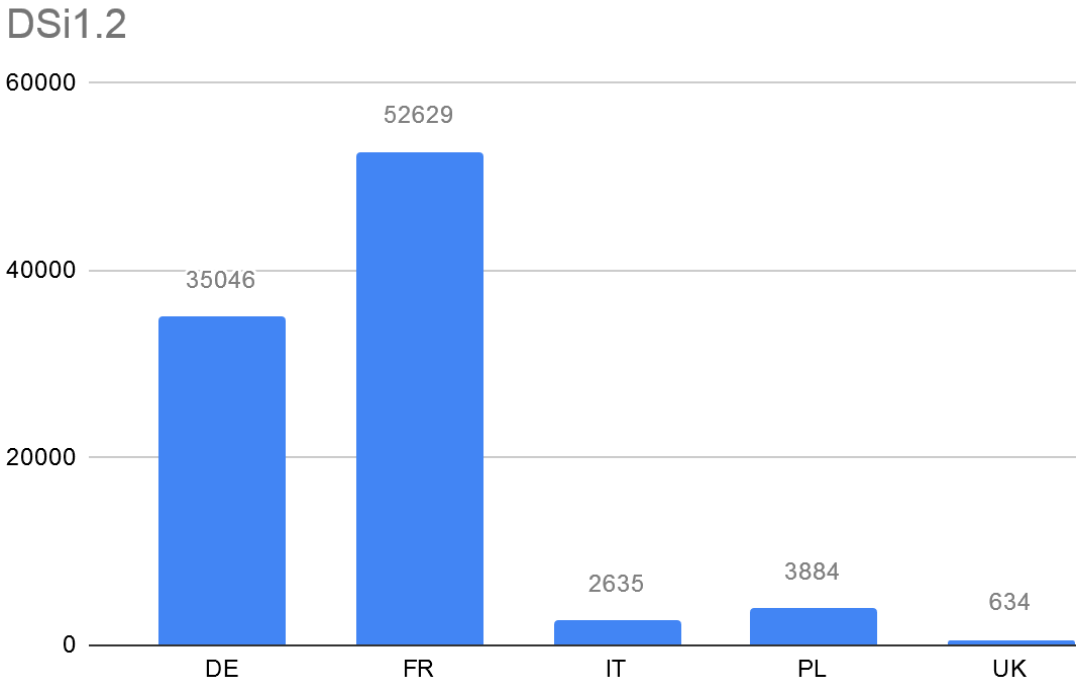
INSPIRE MS Data sets availability

Total: 98 521 MD of services (DSi 1.2)





https://inspire-geoportal.ec.europa.eu/mr2019.html

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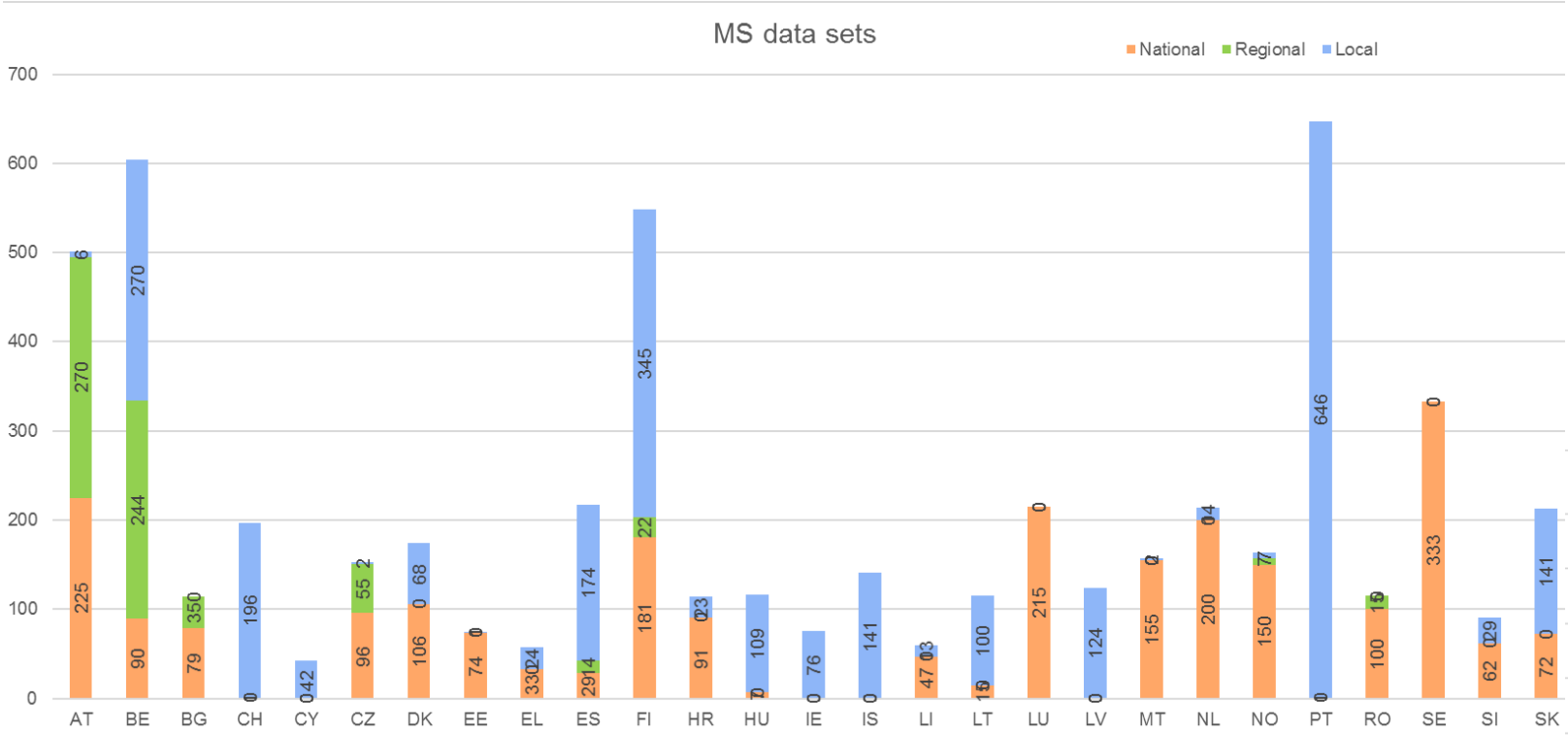
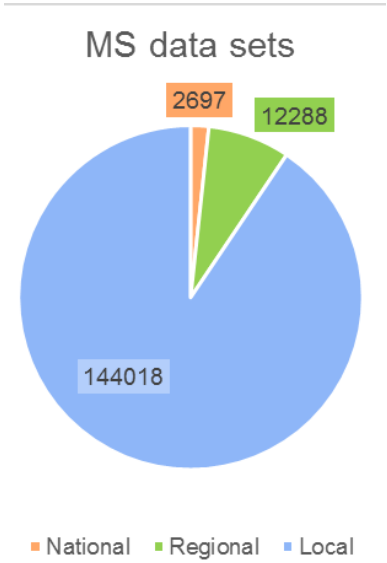
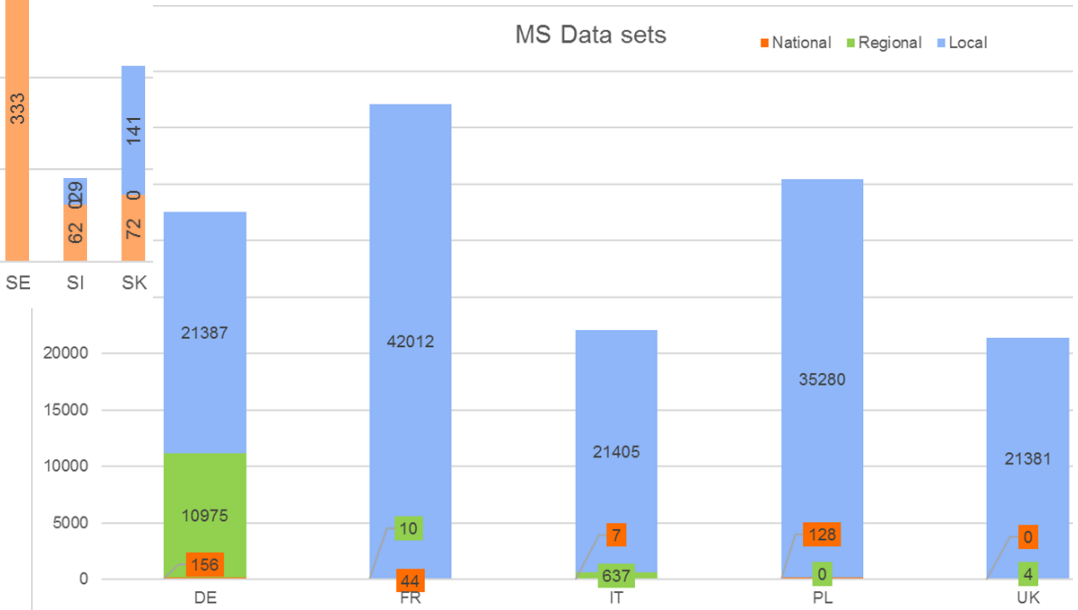
INSPIRE MS Data sets availability
Spatial scope (DSi 1.4; DSi1.5)

Total: 159 003 MD of data sets, series (DSi 1.1)

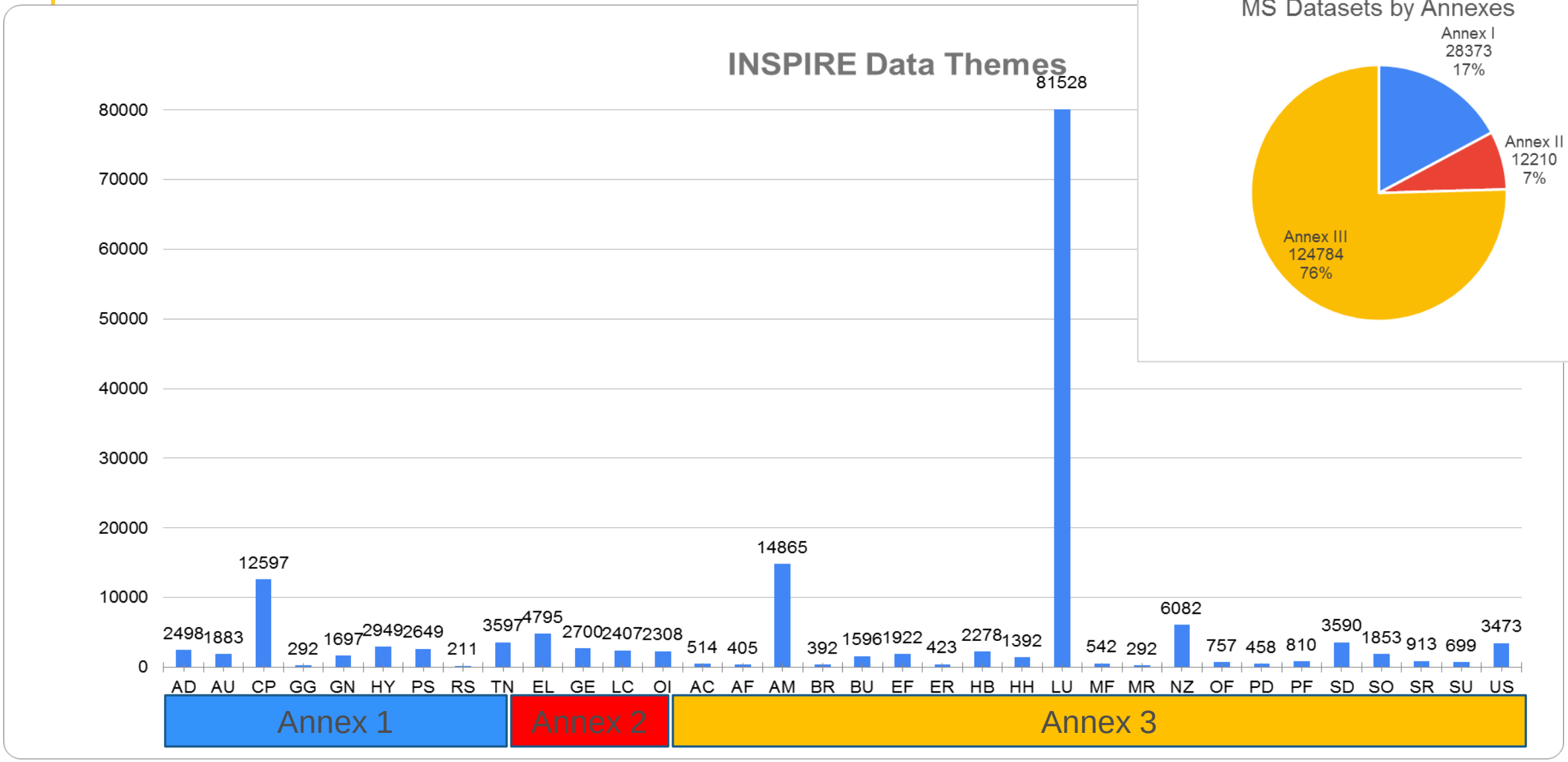


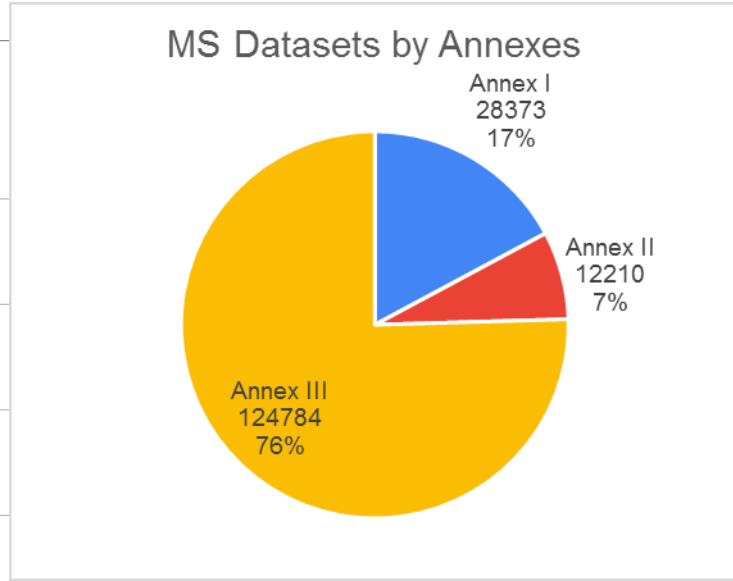




https://inspire-geoportal.ec.europa.eu/mr2019.html

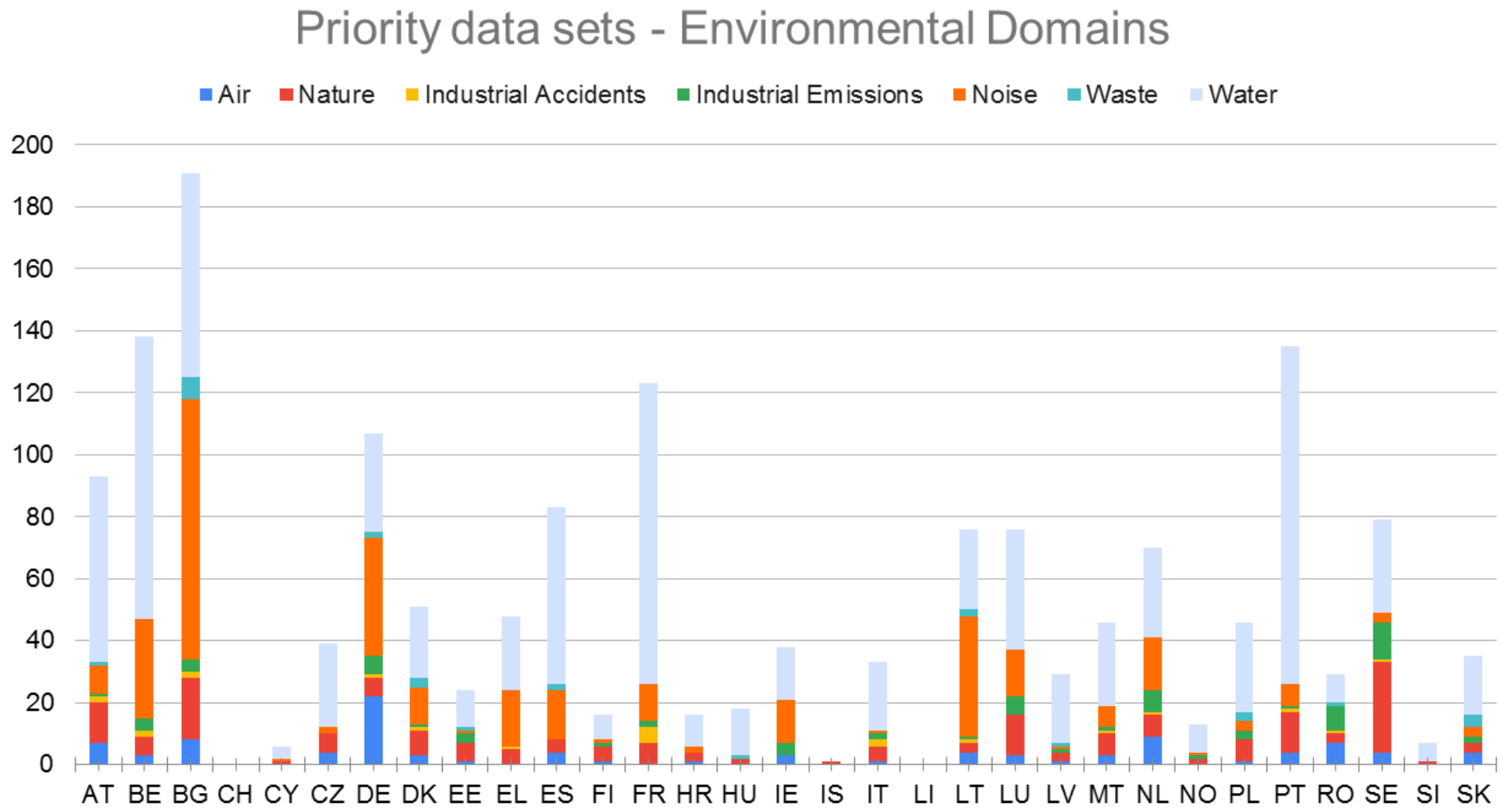
INSPIRE MS Data sets availability by data themes





INSPIRE MS Data sets availability Priority data sets (DSi 1.3)

Total: 1660 MD of Priority data sets (DSi 1.3)



https://inspire-geoportal.ec.europa.eu/mr2019.html

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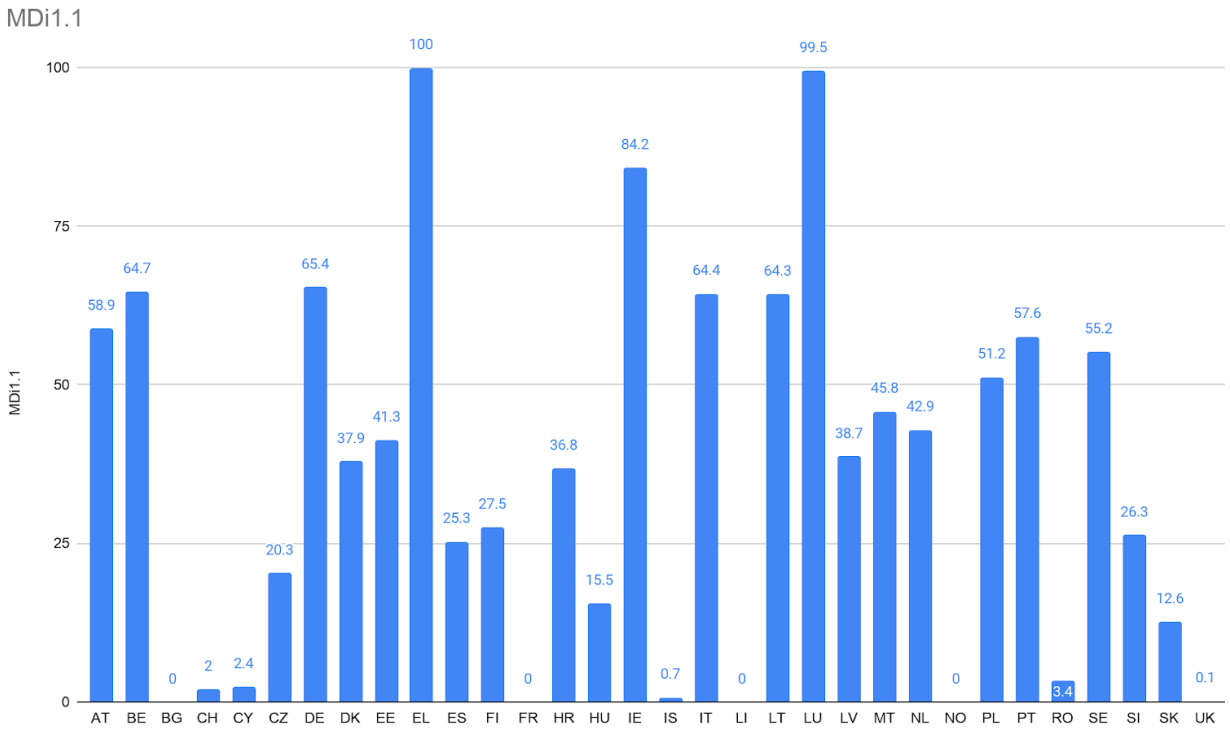
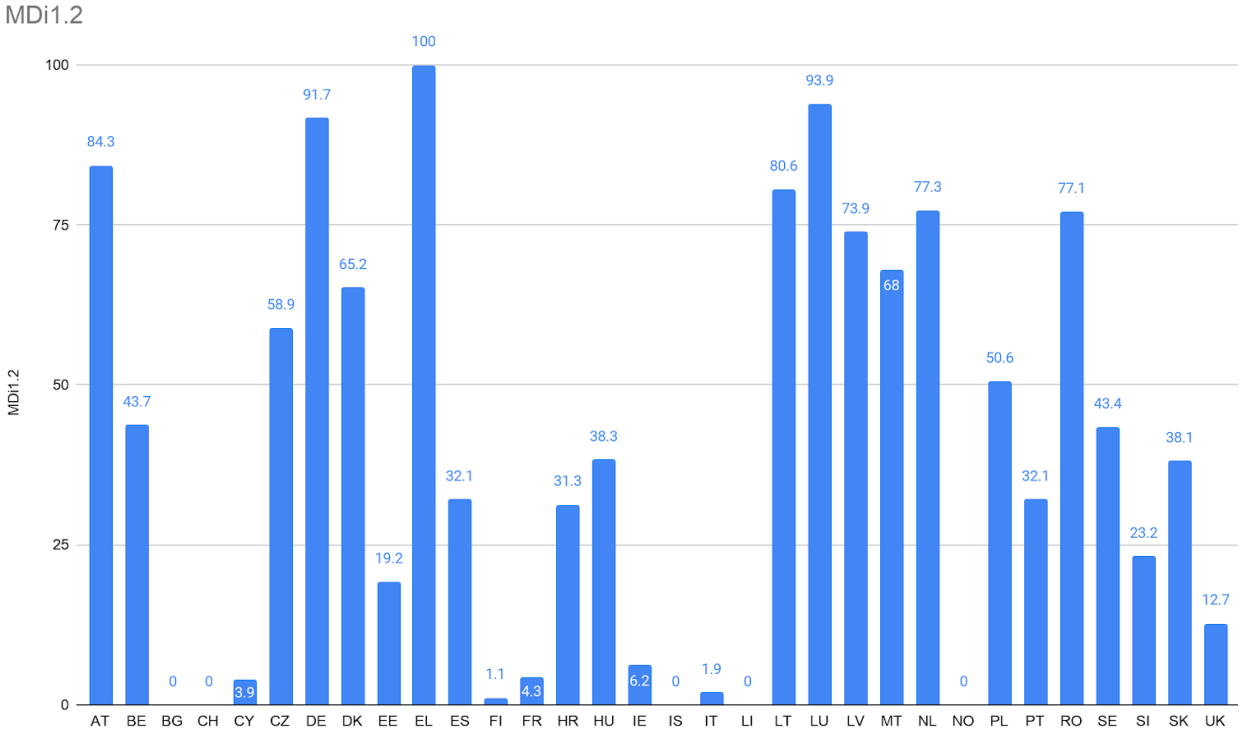
INSPIRE MS Metadata conformity (MDi 1.1-2)

use of Reference Validator

Total nr. of tested MS records: 257 524 (159 003 MD of data sets, series & 98 521 services (MDi 1.1 & 1.2)



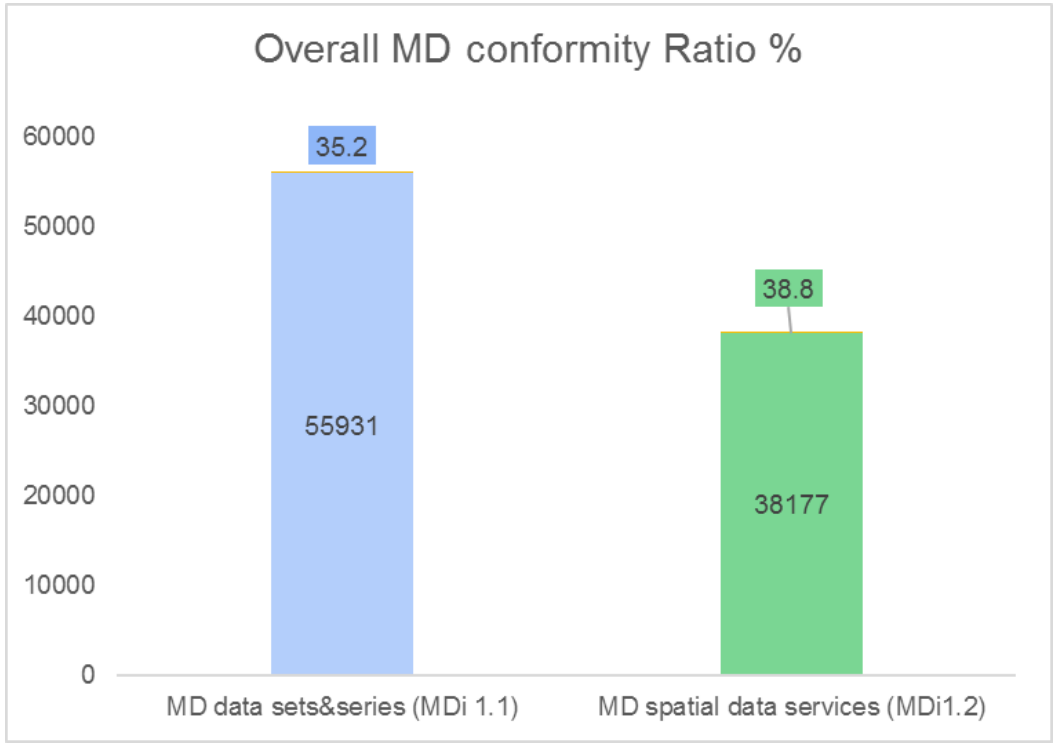


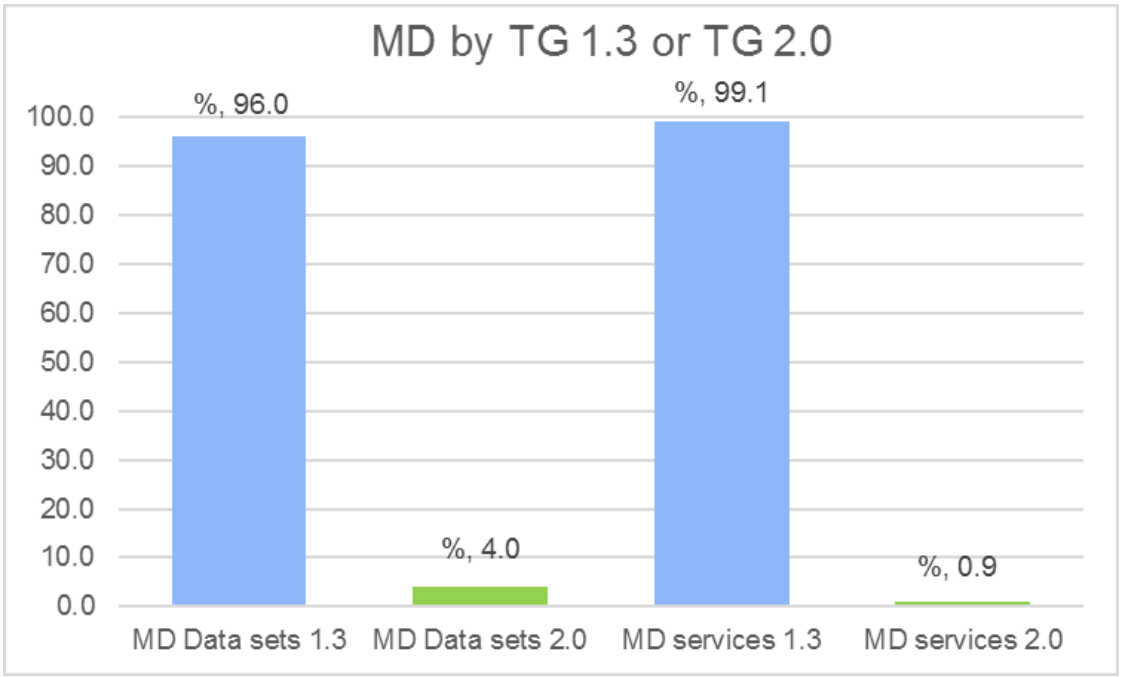
https://inspire-geoportal.ec.europa.eu/mr2019.html

European Commission

INSPIRE MS Metadata conformity
use of Reference Validator

Total nr. of tested MS records: 257 524 (159 003 MD of data sets, series & 98 521 services (MDi 1.1 & 1.2)



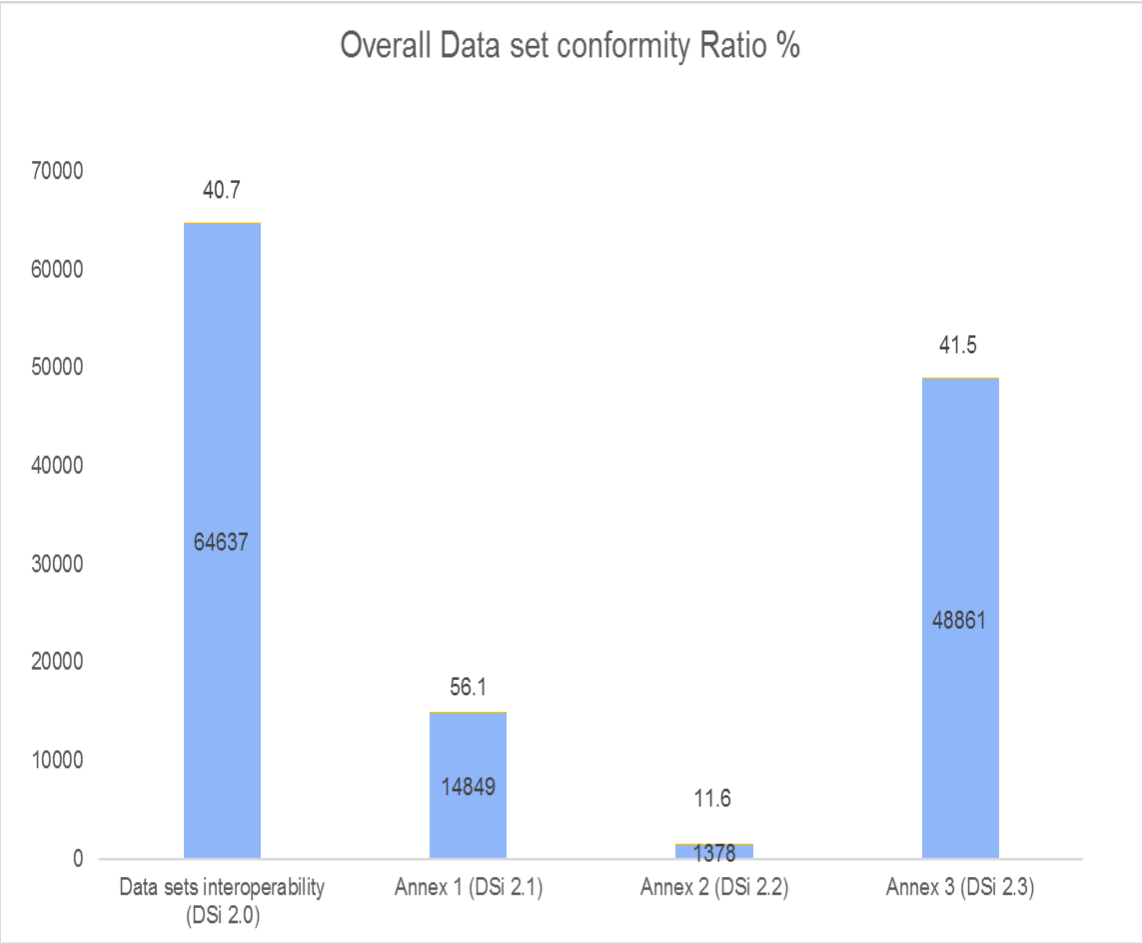


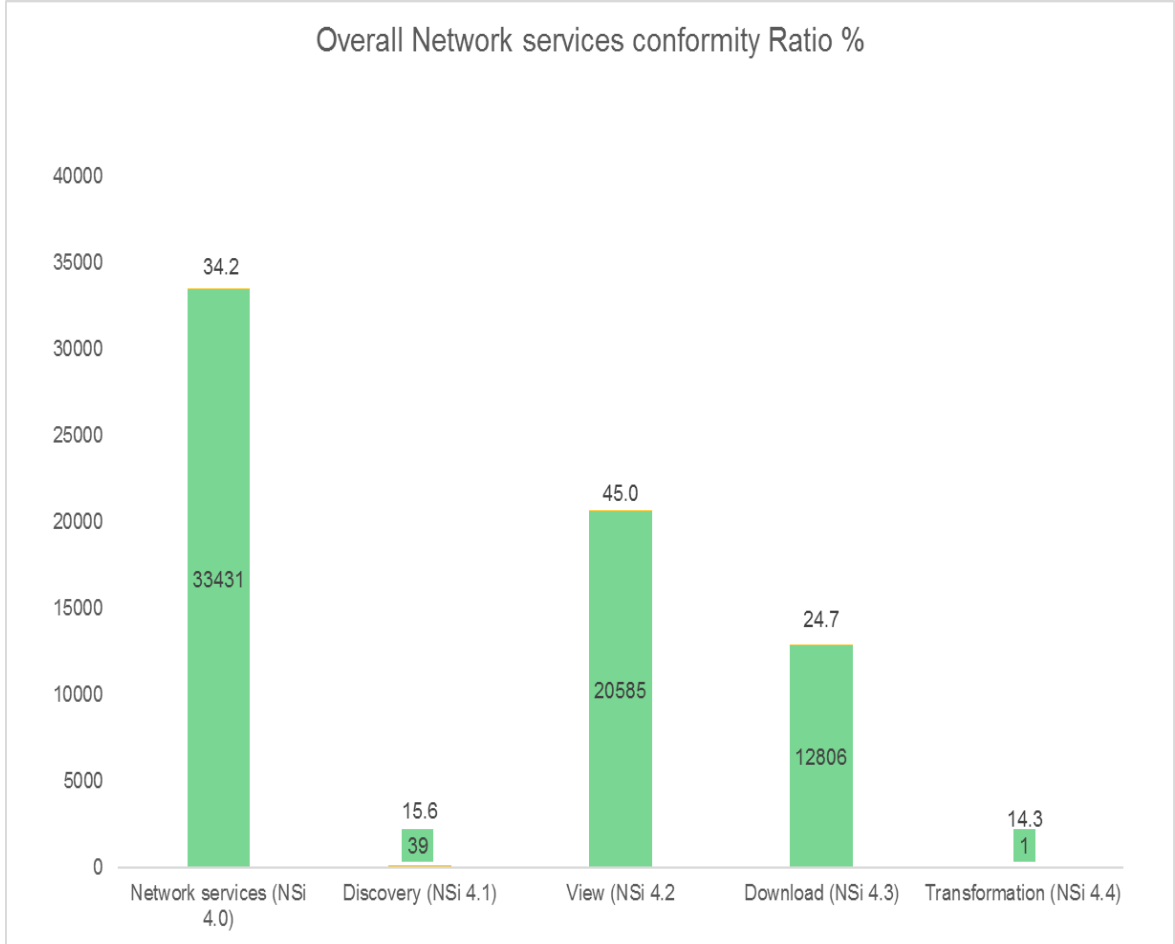
https://inspire-geoportal.ec.europa.eu/mr2019.html

European Commission

INSPIRE MS data sets, services interoperability conformity (DSi 2.0-2.3 & NSi 4.0-4.4)

Total: 257 524 MD of data sets, series, services





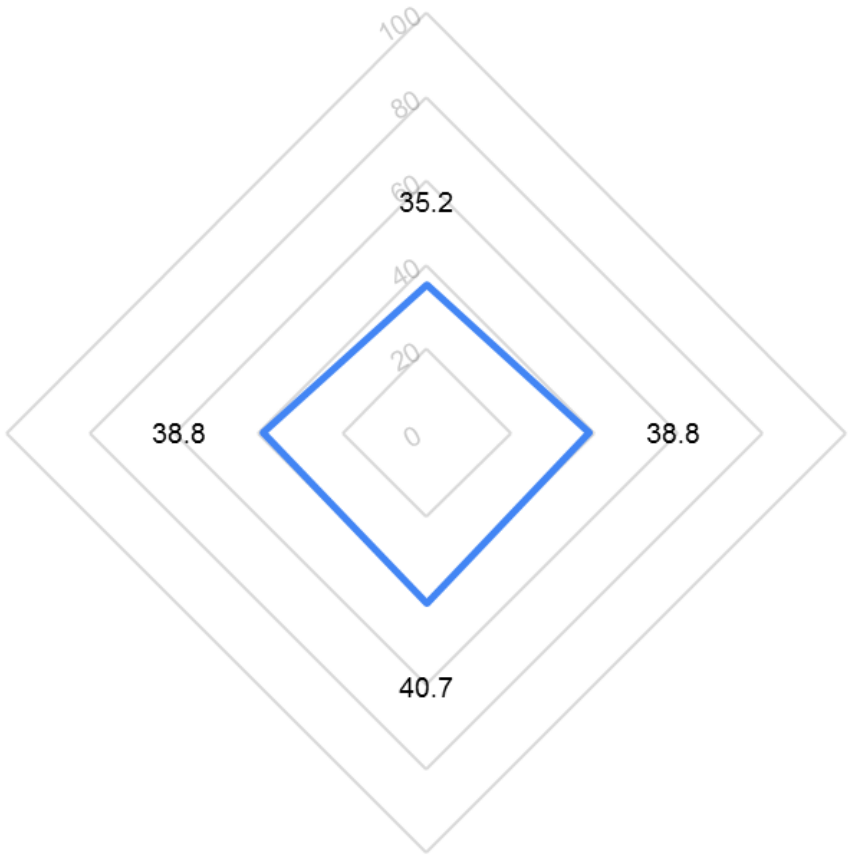
https://inspire-geoportal.ec.europa.eu/mr2019.html

European Commission

INSPIRE Overall MS Resource conformity (MDi1.1-1.2; DSi 2.0; NSi 4.0)

Total: 257 524 MD of data sets, series, services (MDi 1.1 & 1.2)

MD data sets



Spatial data services interoperability

MD services

Data sets Interoperability

https://inspire-geoportal.ec.europa.eu/mr2019.html

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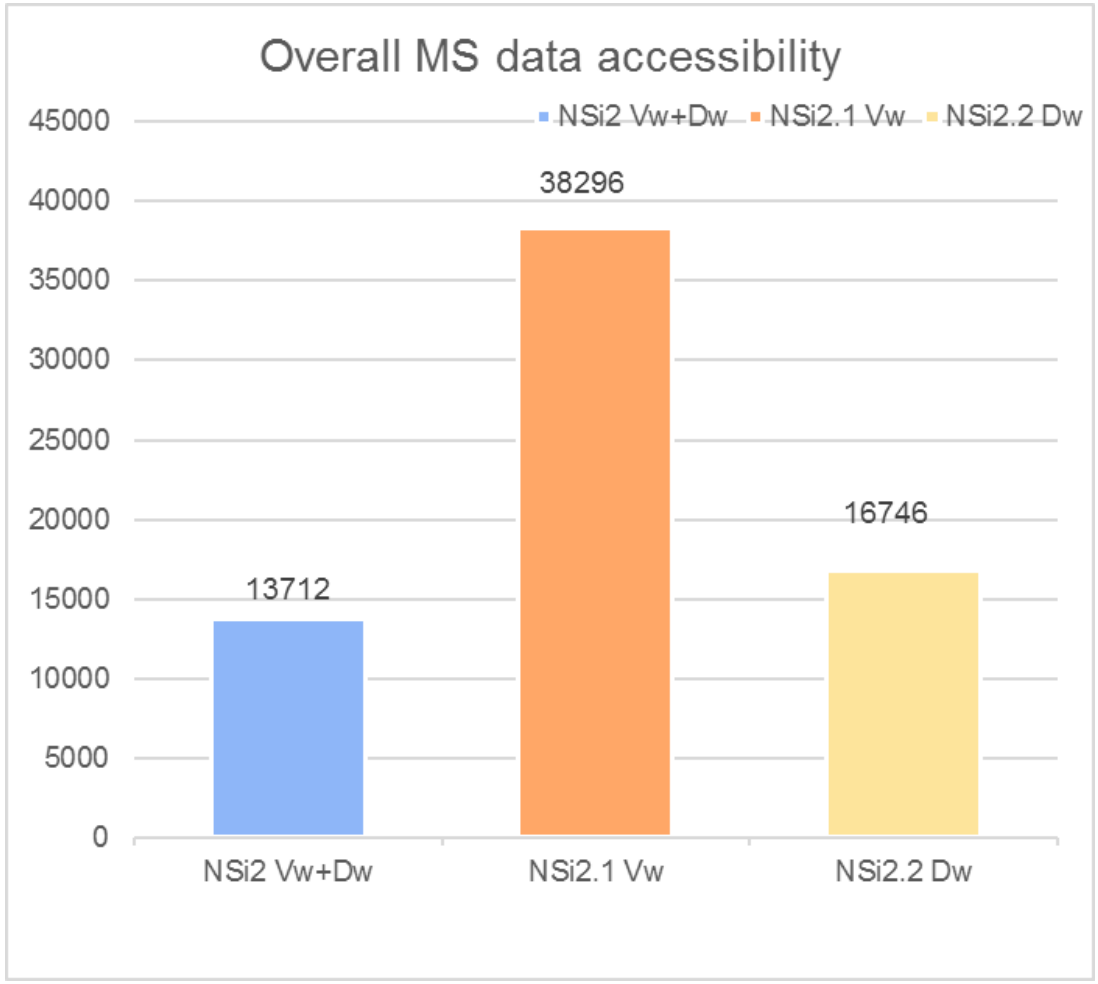
INSPIRE MS Data sets accessibility (NSi 2.0-2.2)

Total: 55 042 MS data sets accessible



https://inspire-geoportal.ec.europa.eu/mr2019.html

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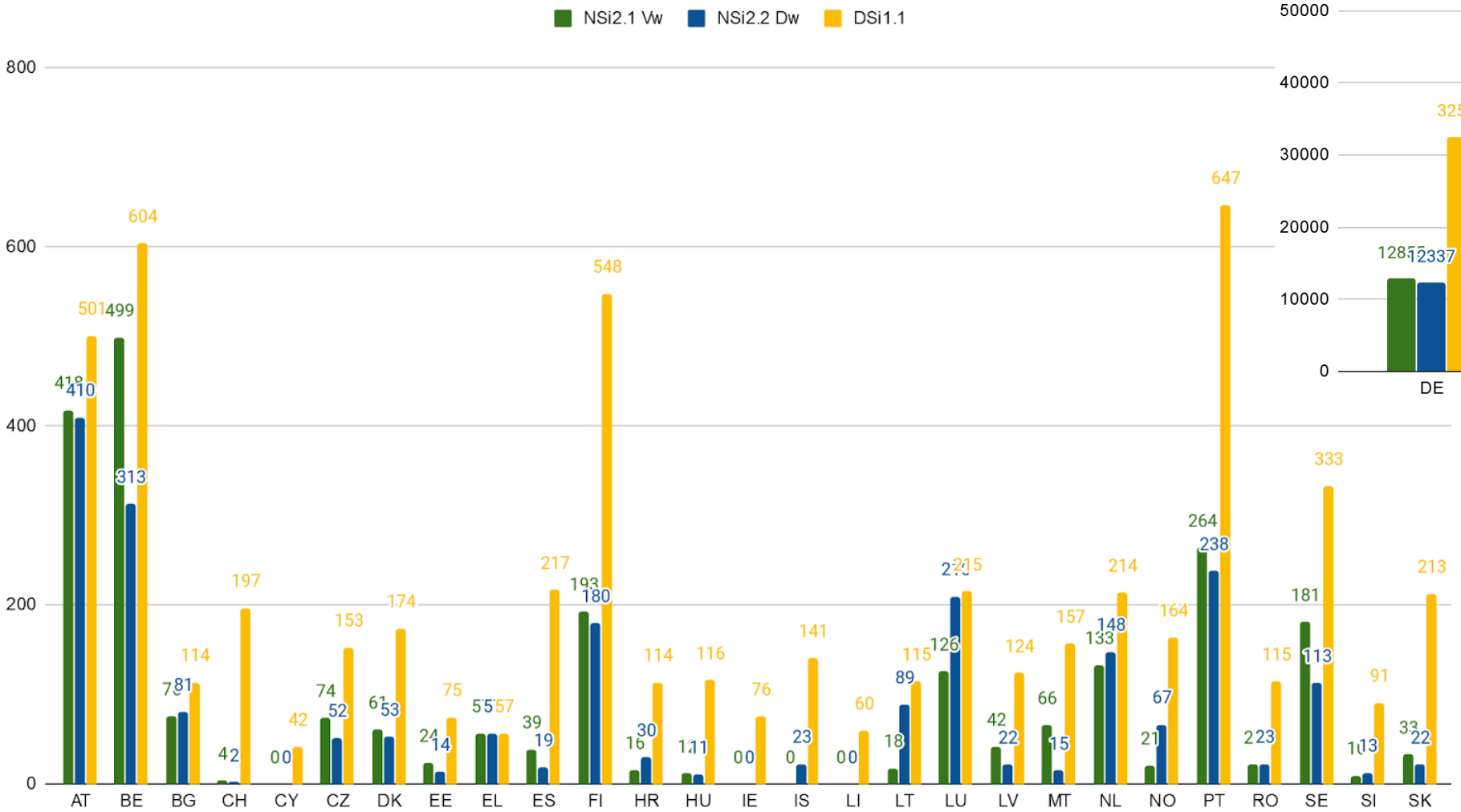
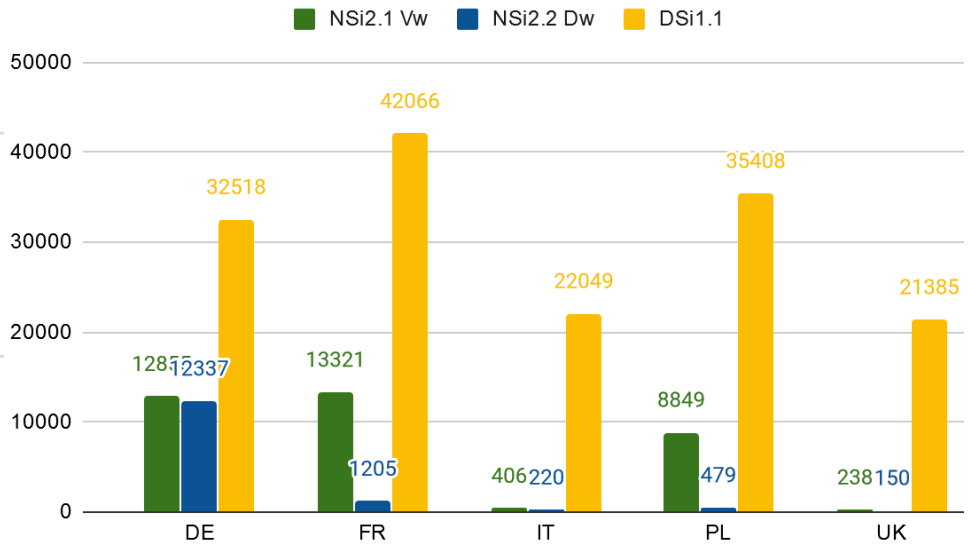
INSPIRE MS Data sets accessibility (NSi 2.1-2; DSi1.1)

Total: 55 042 MS data sets accessible





https://inspire-geoportal.ec.europa.eu/mr2019.html

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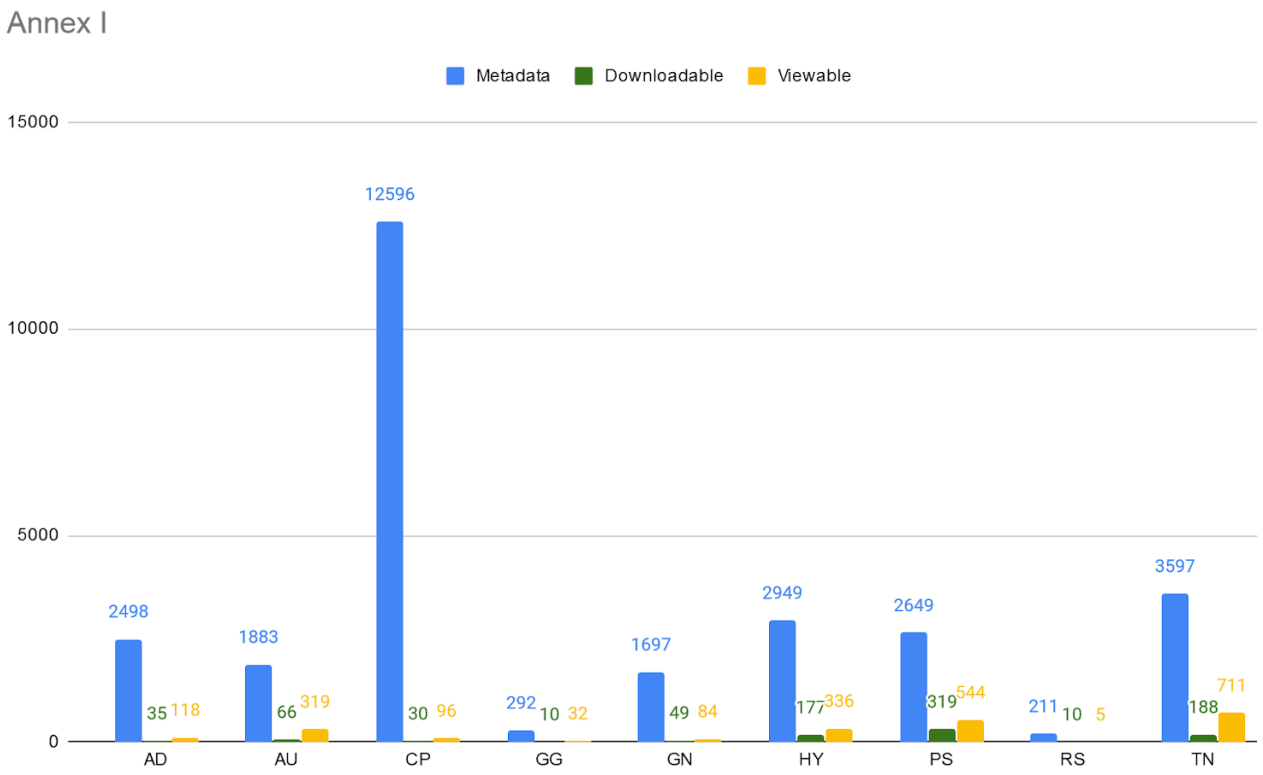
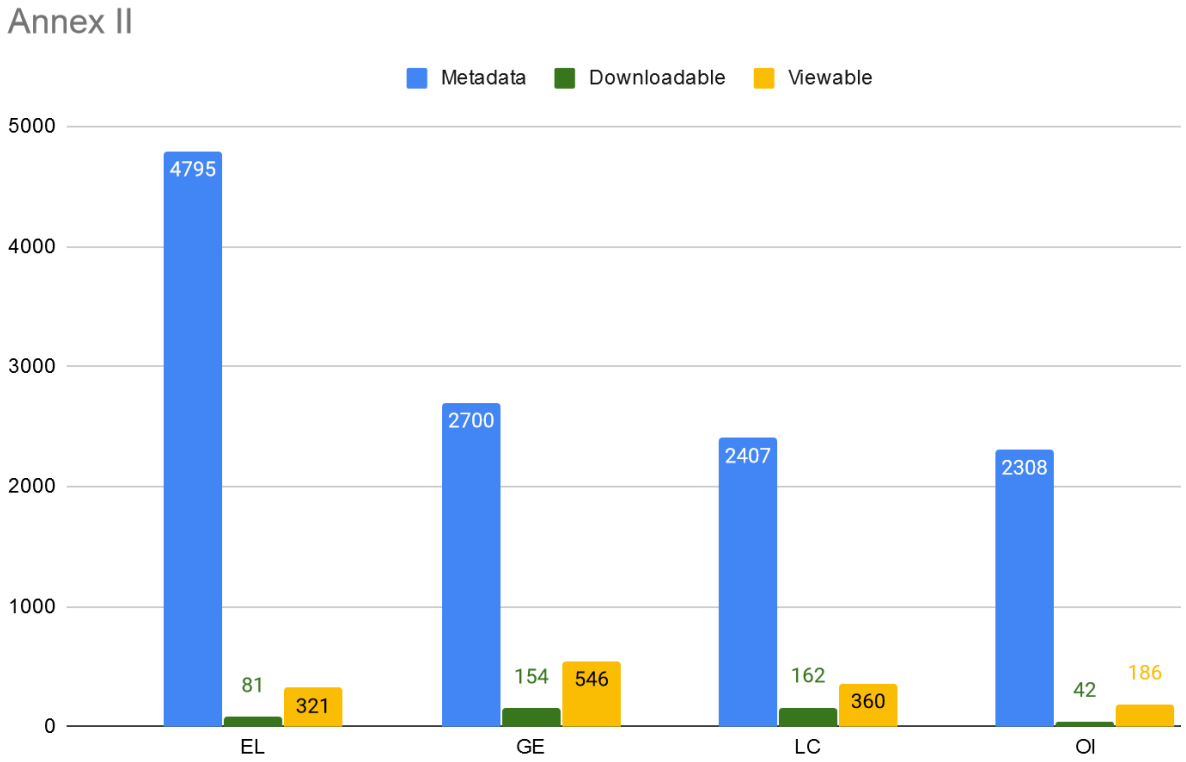
INSPIRE MS Data sets accessibility (DSi1.1;NSi 2.1-2.2)





https://inspire-geoportal.ec.europa.eu/mr2019.html

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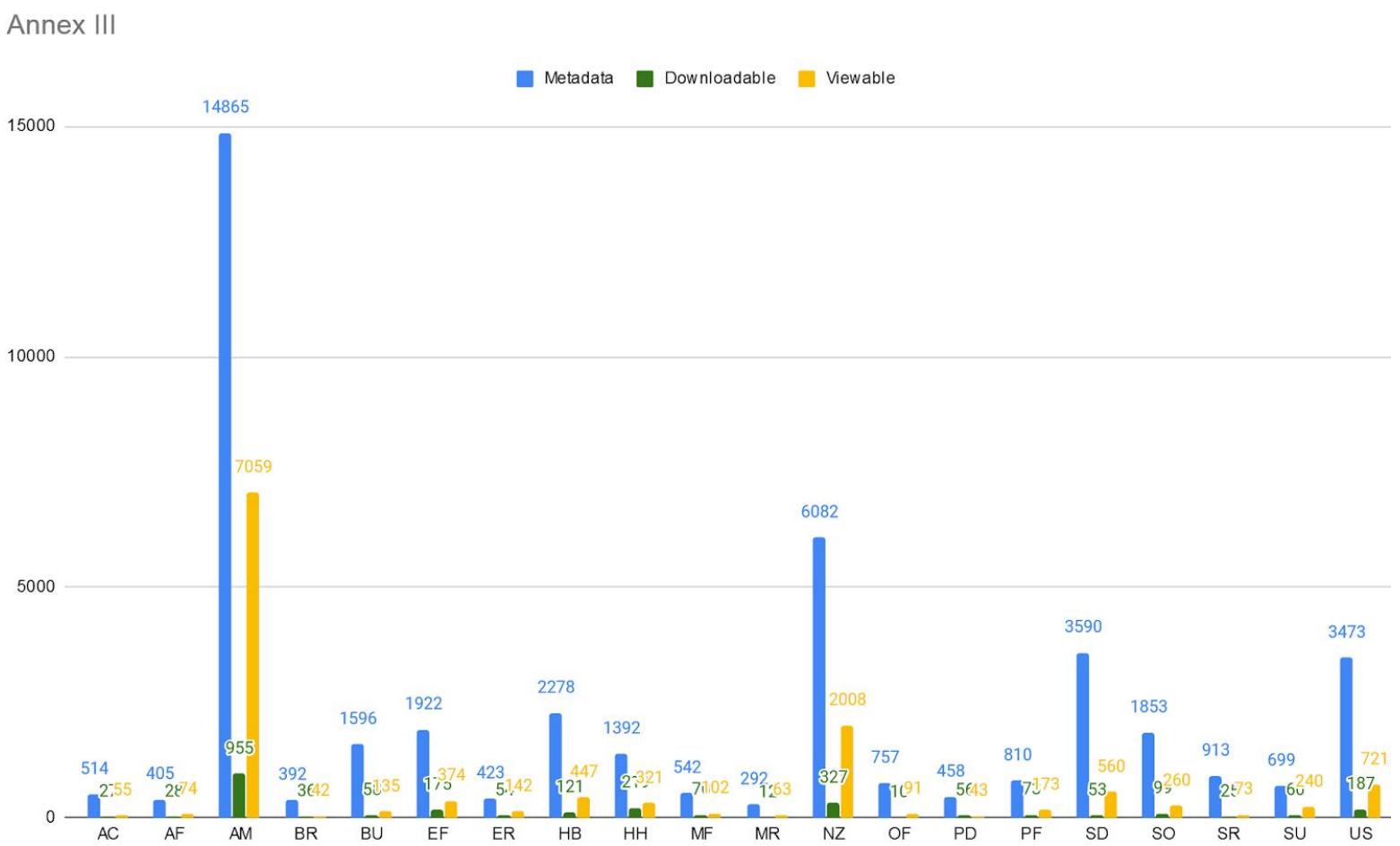
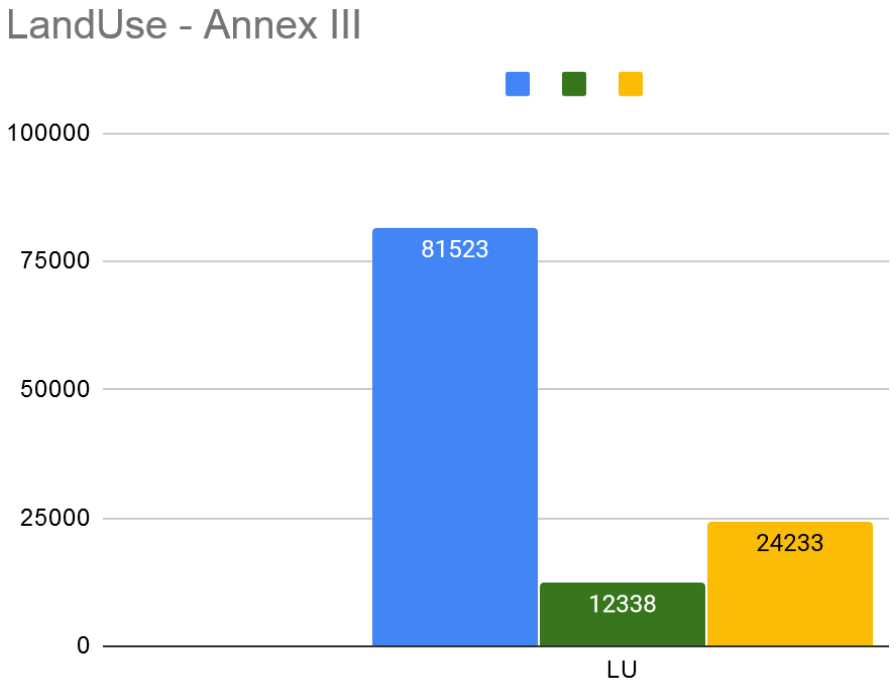
INSPIRE MS Data sets accessibility (DSi 1.1; NSi 2.1-2.2)





https://inspire-geoportal.ec.europa.eu/mr2019.html

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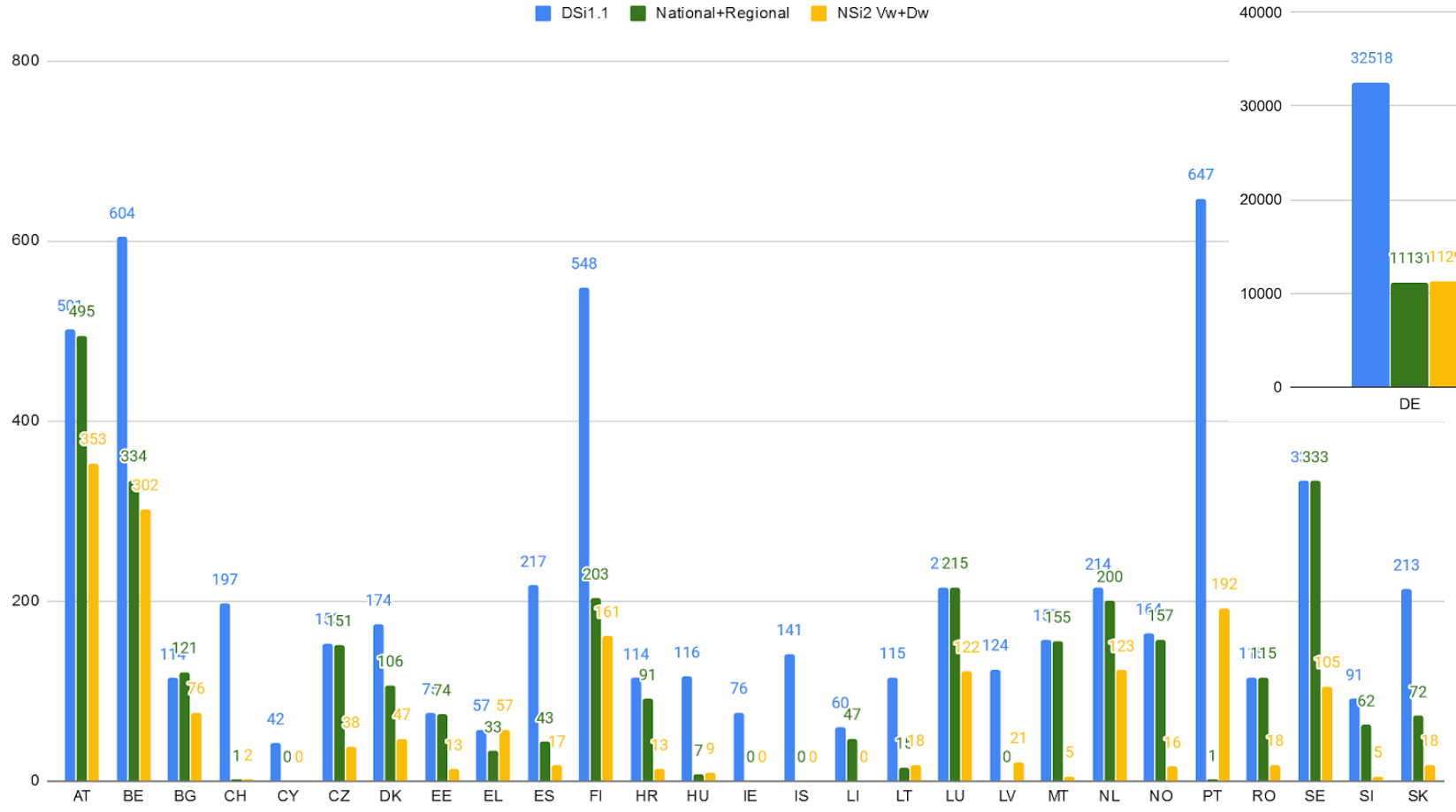
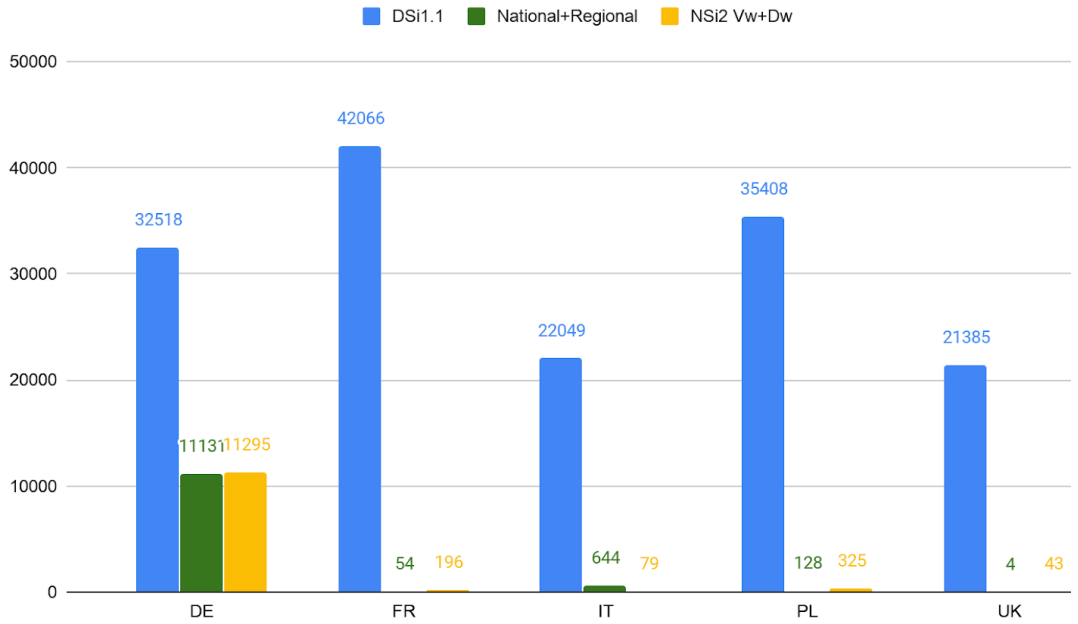
INSPIRE MS National or Regional Data sets accessibility (DSi 1.1; DSi 1.4-5; NSi 2.1-2.2)





https://inspire-geoportal.ec.europa.eu/mr2019.html

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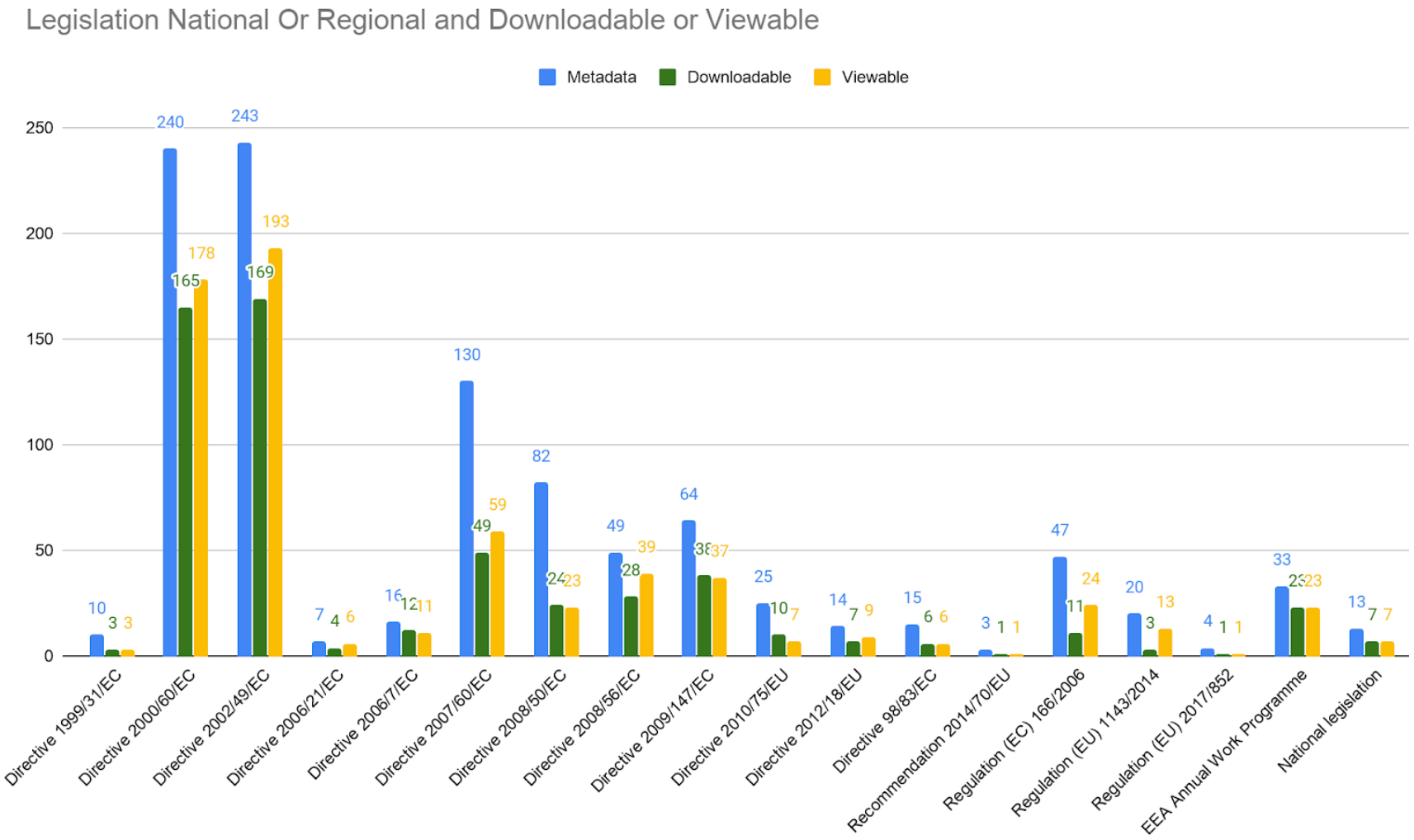
INSPIRE MS Priority National or Regional Datasets – accessibility (DSi 1.3-5; NSi 2.1-2.2)



https://inspire-geoportal.ec.europa.eu/mr2019.html

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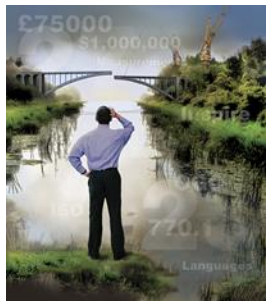
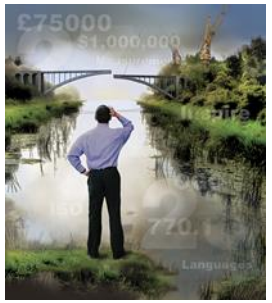
INSPIRE Monitoring 2019 Lessons learnt

- The time / resources for a proper **preparatory phase** of such a complex system was clearly **too short**.
- The level of MS **MD conformity is low** (cc. 35%) & still in TG 1.3. (95+%)
  - The **use of INSPIRE Reference Validator** by MS before the Monitoring was minimal.
  - The **stability** of MS **services** needs to improve.
- The level of MS **data accessibility** (download, view) is still low (cc. 30%).
- The gap between the nr. of existing spatial data services (cc. 100 000) and data accessibility is still big. (resource linkages, protected services, stability).



INSPIRE Monitoring 2019 Lessons learnt

- **Very good feedback** and overall positive interactions with MS experts led to better mutual understanding of the MS & as JRC Geoportal MD systems.
- **Substantial improvements** of INSPIRE Reference Validator as well as further simplification of Geoportal back-end.
- The introduction of the new indicators (i.e. keywords for spatial scope, PDs) **increases data usability potential** + provides a better overview of EU SDI data availability/accessibility.
- The **reliable base line** for the EU Spatial data infrastructure has been jointly set up (good reference for monitoring progress towards agreed INSPIRE landing zones, INSPIRE evaluation, ...).



The IT systems improvements, gained knowledge on both sides, represent a **good perspective for** smoother **INSPIRE Monitoring 2020 exercise with better results.**

European Commission

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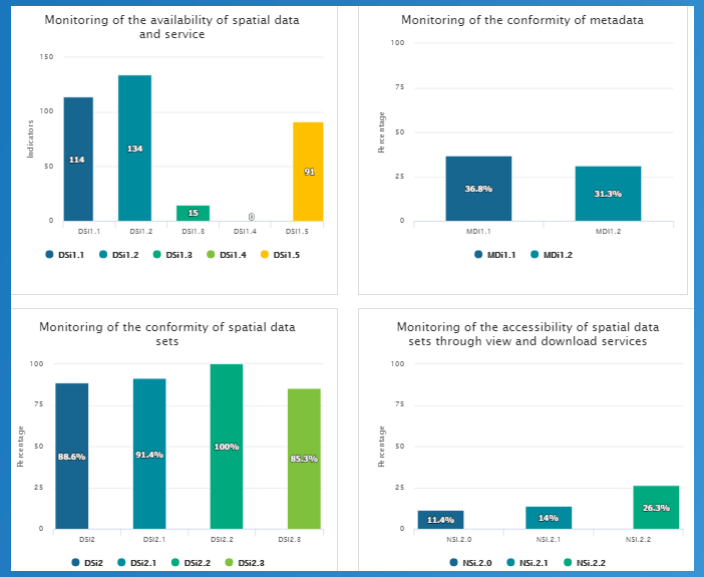
Update of the INSPIRE Country fiches 2020



Joint Research Centre

INSPIRE Reporting 2020 – update (Country fiches)

- The online system for updating was opened 02 March – 30 April 2020
- The visualisation for calculated indicators were added to the respective country fiches 15 April 2020
- MS and EFTA country fiches published in the INSPIRE Knowledge Base (HTML + PDF)
  - https://inspire.ec.europa.eu/INSPIRE-in-your-Country
- The system of archiving Monitoring & Reporting in ReportNet (EEA) is being fine-tuned
- Example…

European Commission

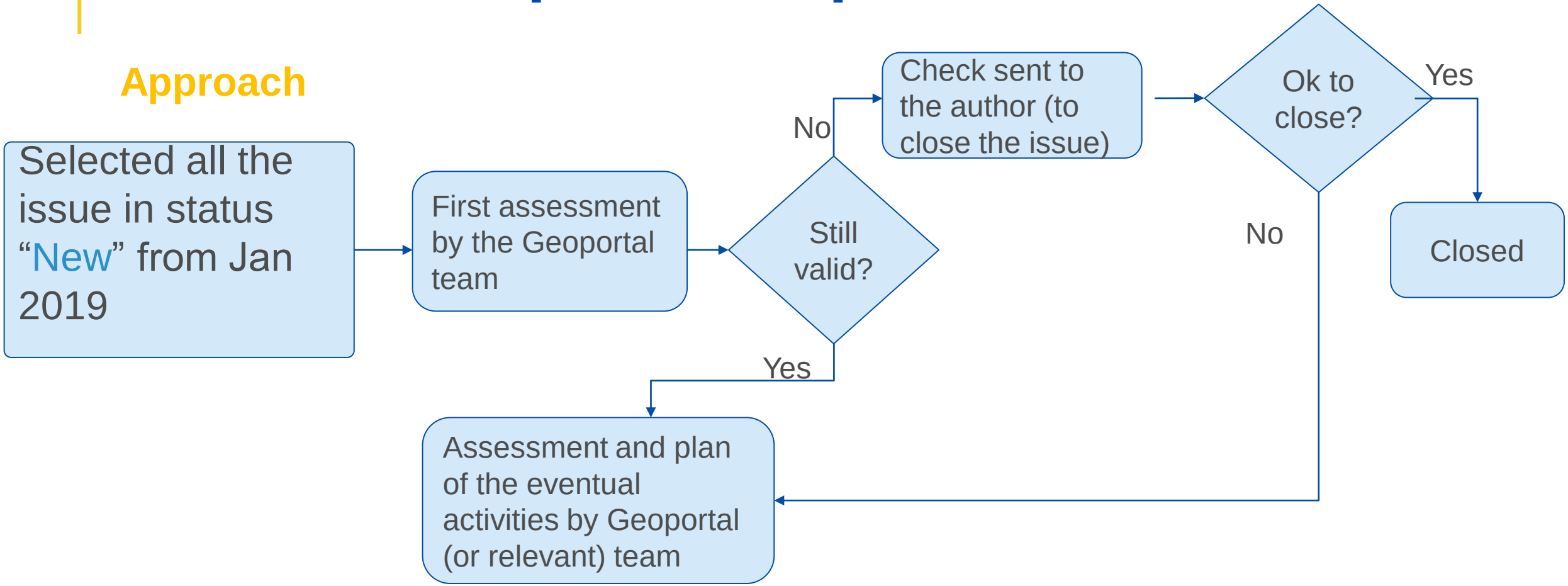
INSPIRE Geoportal helpdesk

JRC INSPIRE Team

Joint
Research
Centre

INSPIRE Geoportal helpdesk assessment

Approach



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INSPIRE Geoportal helpdesk assessment

Statistics

Total number of issues from January 2019: 434
Issues partially addressed (still in status “feedback”): **228**
Total number of issue from 15 December 2019 till now: 118

Assessment on issues in status “New” started at the beginning of May 2020

- Issues in status “**New**”: **60**
- Already closed: **20**
- Check to close sent to the author: **22**
- To be addressed by Geoportal team: **8**
- Internal discussion needed: **10**

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INSPIRE Geoportal helpdesk assessment

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Please send your feedback

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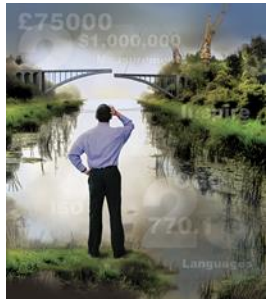
INSPIRE GEOPORTAL M&R 2020 planning

JRC INSPIRE Team

INSPIRE GEOPORTAL / Monitoring 2020 planning

Harvesting, MD processing, indicators calculation:

- Use of Reference Validator + Linkage checker before.
- The JRC SW tool for the bulk validation will be provided shortly including calculation of the MDi 1.1-2 for the endpoint.
- Harvesting of large MS Catalogues will currently remain on request only (DE, IT, FR, PL, UK?).
  - The discussion on what to harvest, store, archive has started.
- Calculation of indicators except (MDi1.1-2) is already integrated in the harvesting process.
- The list of MD elements used for the calculation of indicators will be prepared.



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INSPIRE GEOPORTAL

Geoportal backend on-going activities:

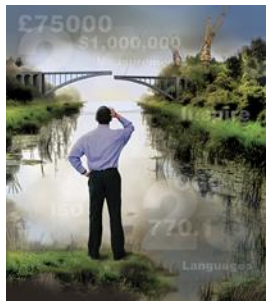
- Adaptation of the system for the agreed simplification option (i.e. using MD resource locator-only for linking the resources).
- Extension of the system for SOS, WCS, OGC API - Features..
- Distinguish protected services, harmonised data sets from As – Is.
- Continue with the Alfa version of the Feature Type Viewer.

Geoportal frontend:

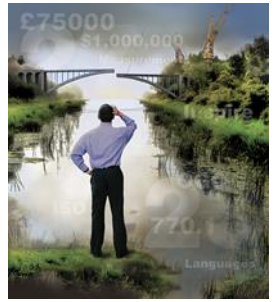
- Updated of the EU Goeportal frontend based on the above extensions.

Helpdesk:

- Supporting user feedback platforms integration (Helpdesk, Forum, Joinup, IKB).



INSPIRE GEOPORTAL



Use of OS SW (GeoNetwork) for GEOPORTAL

- Received positive results of the feasibility study to replace the Geoportal (whole, or some parts) by GeoNetwork.
- Continue with the second phase investigation (e.g. prototype) based on the upcoming GeoNetwork V 4.0

INSPIRE Infrastructure for Spatial Information in Europe

GeoNetwork
open source

European Commission

INSPIRE Monitoring 2019 – Survey results

JRC INSPIRE Team

INSPIRE Monitoring 2019 User survey

- Launched on the 11th May 2020,
- Closed on the 22nd May 2020
- **19 countries have answered**:

Belgium, Austria, Greece, Finland, Bulgaria, Luxembourg, Slovenia, Estonia, Romania, Sweden, Netherlands, Cyprus, Italy, Spain, France, Germany, Slovak Republic, Portugal, Ireland

- Link to the survey: https://ec.europa.eu/eusurvey/runner/Monitoring_2019

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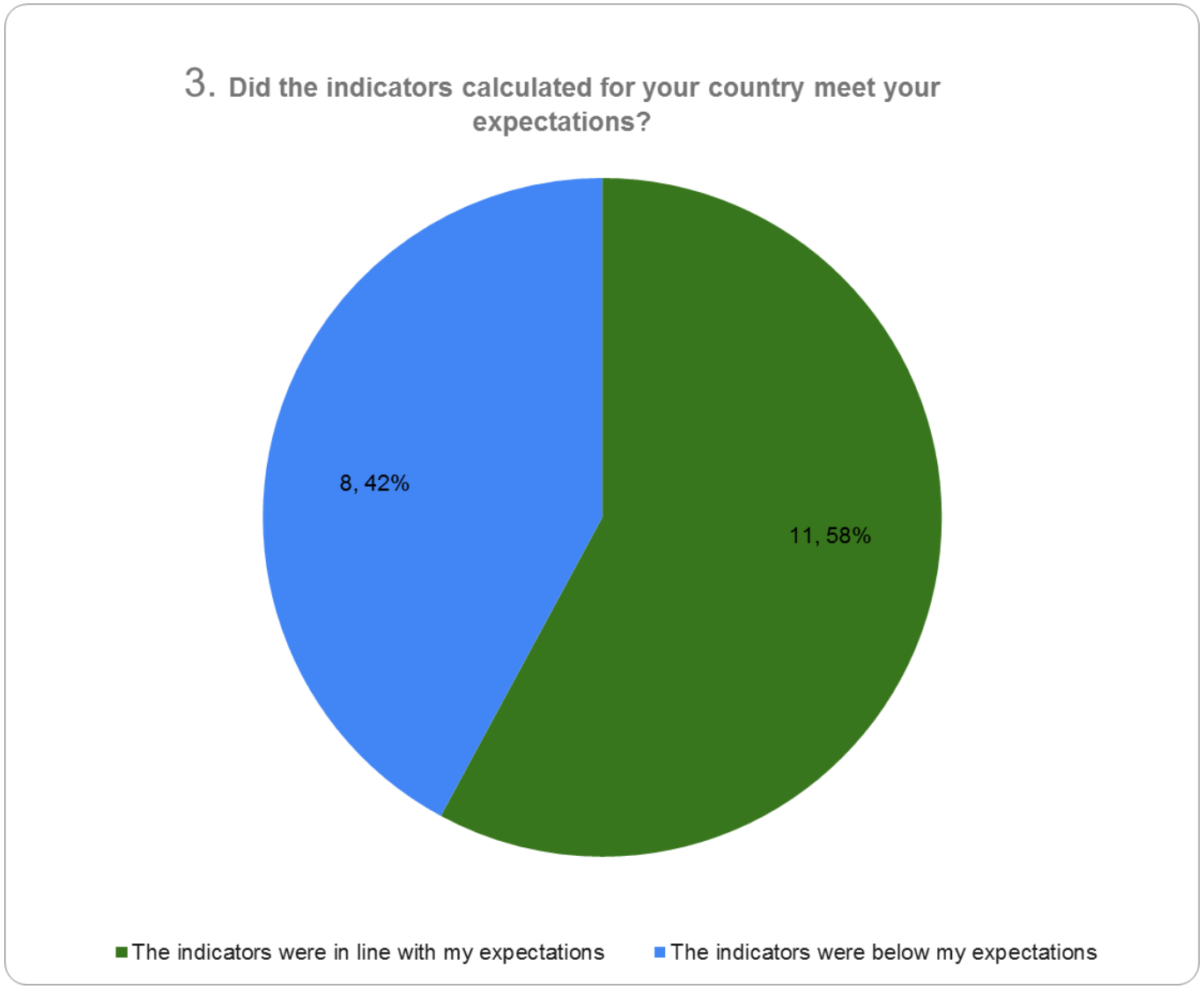
INSPIRE Monitoring 2019 – Survey results Question 3



FEEDBACK

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Reasons for not performing well (Q4)

- Change of metadata validation method compared to the past (use of Reference Validator vs. self-declaration) **(2)**
- Technical issues on MS and/or EC side on harvesting of metadata catalogs **(4)**
- Lack of time, resources & know-how at the national level **(5)**
- Too high complexity of data-service linking, lack of an automated procedure to compute the indicators (especially on the linkage between data and services) **(3)**
- Difficulty to use the INSPIRE Reference Validator **(1)**

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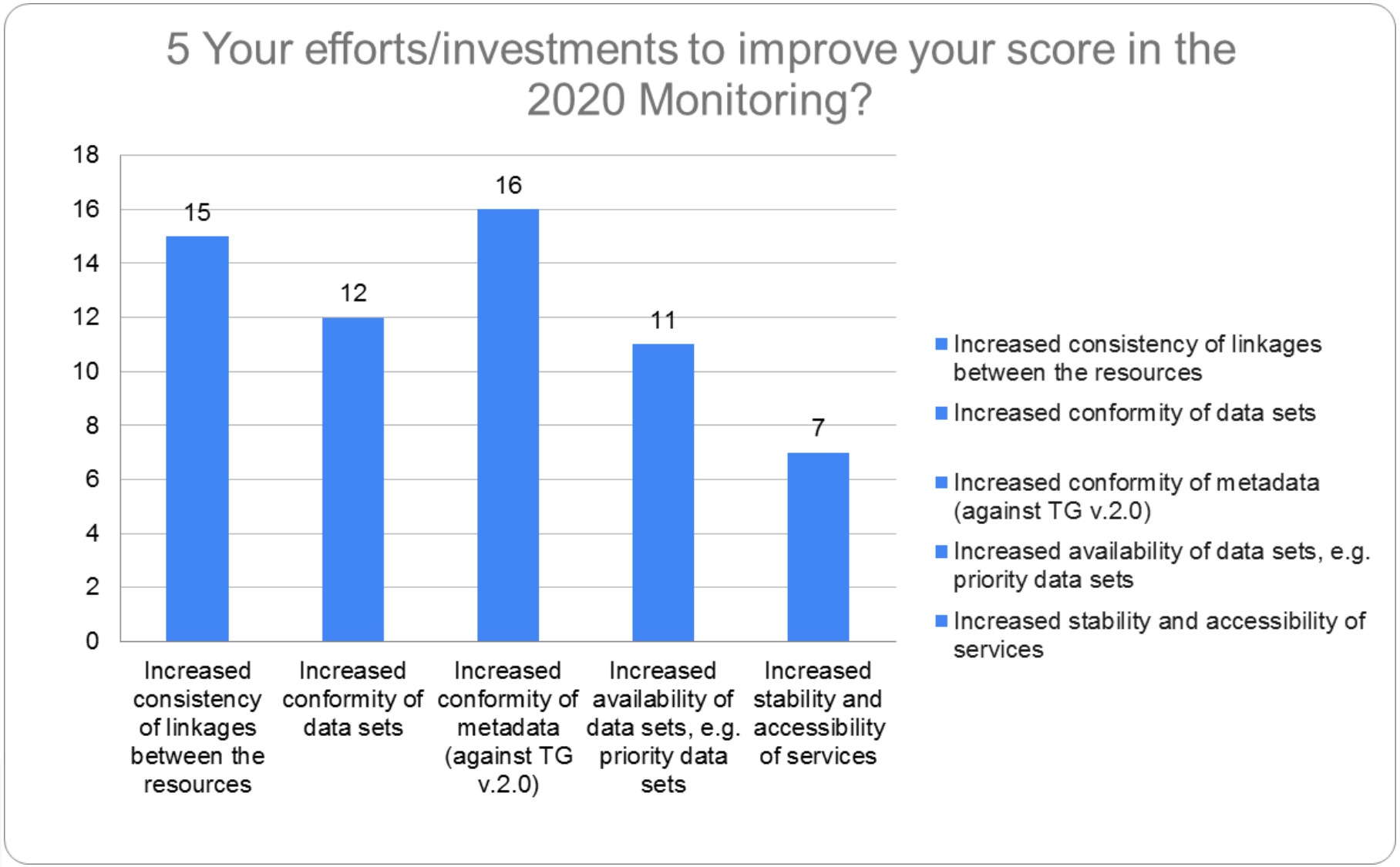
INSPIRE Monitoring 2019 – Survey results Question 5



FEEDBACK

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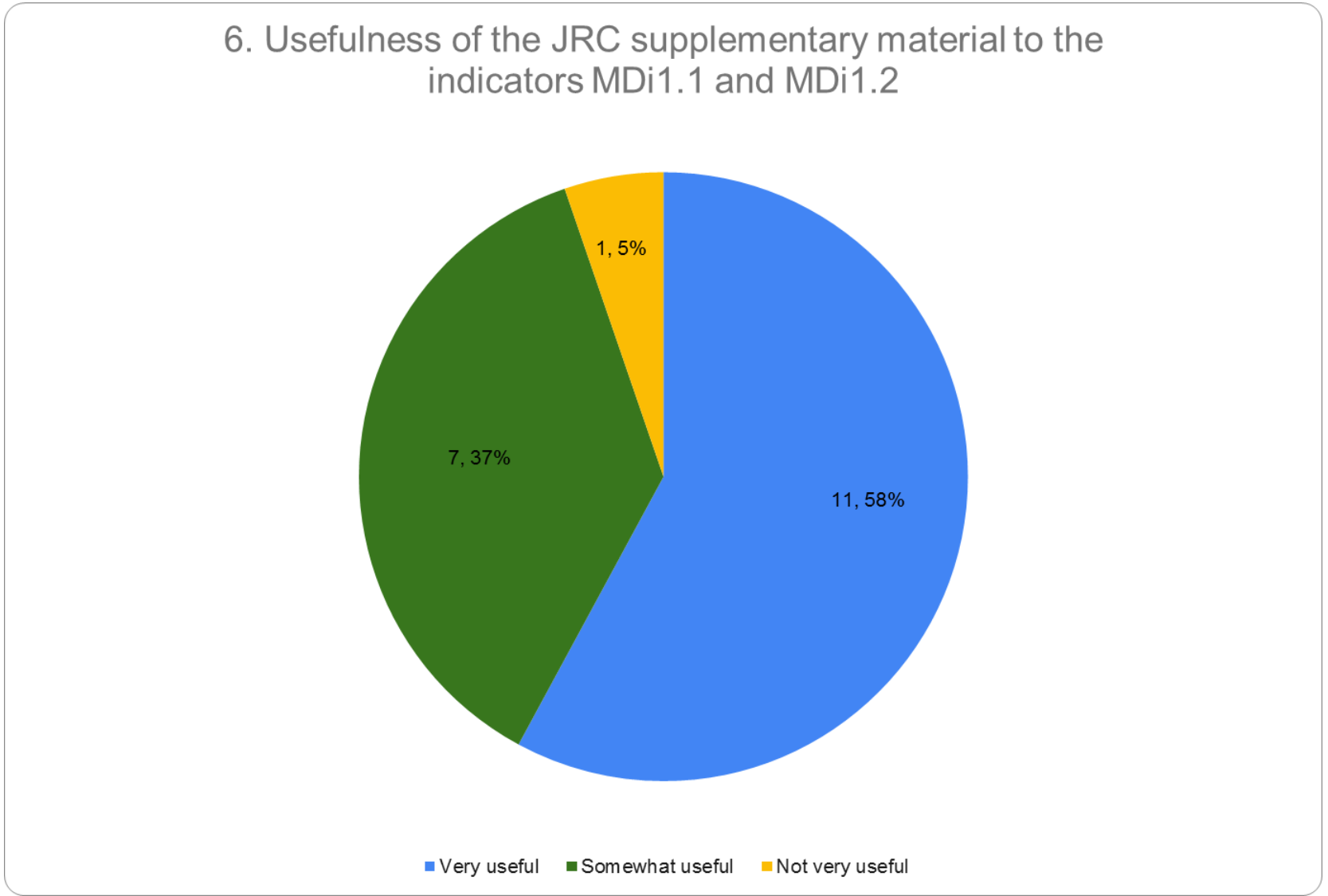
INSPIRE Monitoring 2019 – Survey results Question 6



FEEDBACK

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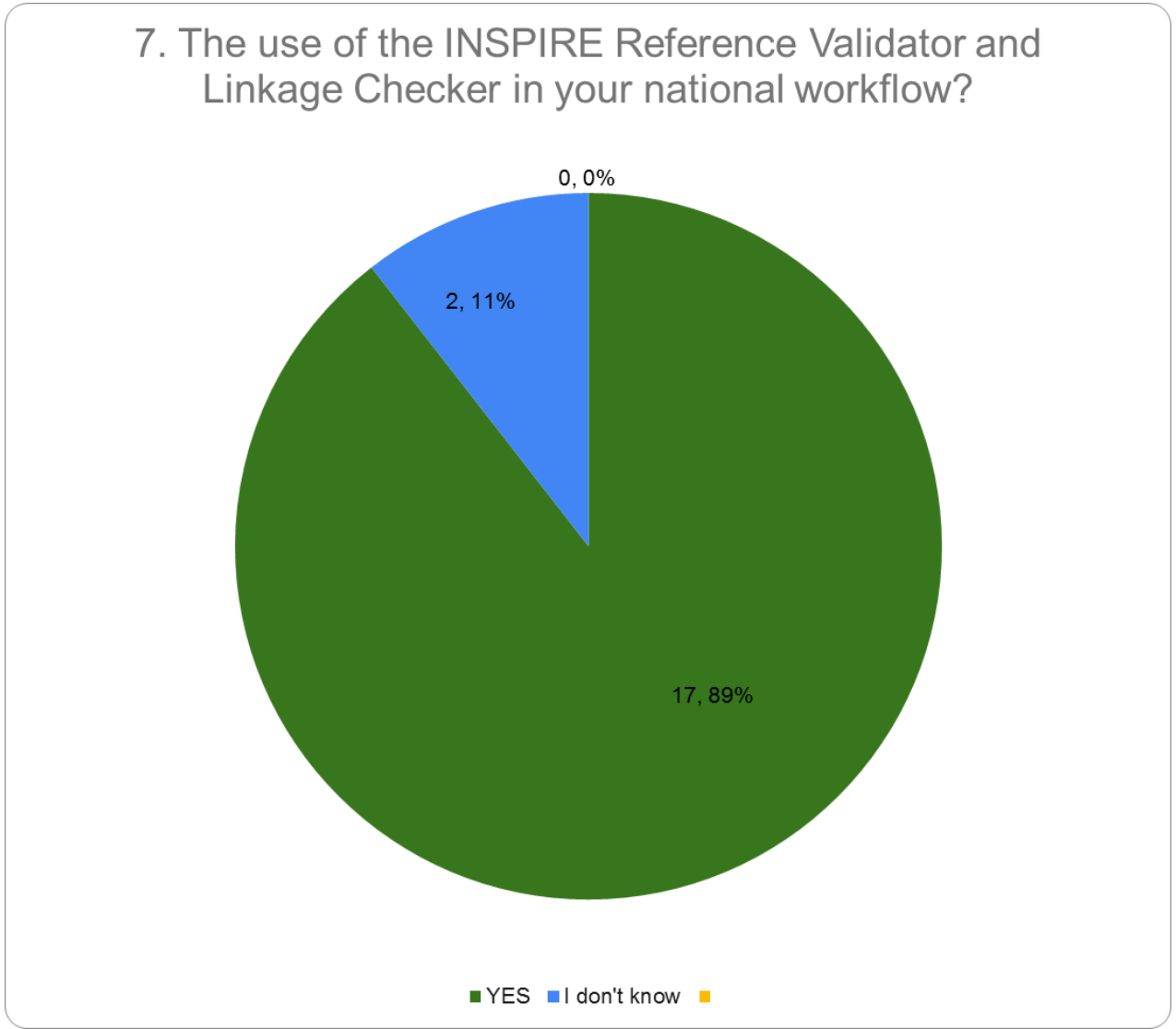
INSPIRE Monitoring 2019 – Survey results Question 7



FEEDBACK

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Suggestions to improve Monitoring process (Q8)

- Organisational:
  - Transparent roadmap of the Monitoring tools (Geoportal & Validator) provided in advance; tools ready some months (3) before the Monitoring deadline **(3)**
  - Improved support & communication with MS **(5)**
- Technical:
  - Alignment of checks made by the Geoportal and the Reference Validator **(1)**
  - Regular provision of an automated calculation of indicators, e.g. after each harvest; move calculation of MDi1.1 and MDi1.2 in the harvest console **(3)**
  - Switch to MD 2.0 (as per requirements) OR better distinction of MD 1.3 and 2.0 **(2)**
  - Improve the supplementary material for MDi1.1 and MDi1.2 **(2)**
  - Make the harvesting process faster **(2)**
  - Availability of source code/documentation of the algorithms for calculation of indicators **(2)**
  - Provision of an automated procedure to test linkages of many metadata at once **(1)**

Thank you!

Upcoming:

- **JRC Technical report** summarising results, lessons learned from Monitoring 2019 exercise – Summer 2020.
- **INSPIRE Reference Validator – Status & next steps; on 9.6. 2020 from 9.00**

JRC-INSPIRE-SUPPORT@ec.europa.eu

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