DG AGRI process for IACS data sharing

16th Meeting of the INSPIRE Maintenance and Implementation Expert Group (MIG

Mohamed EL AYDAM, Unit A4, DG AGRI

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CONTENT

AGRI A4

DG AGRI process for IACS data sharing

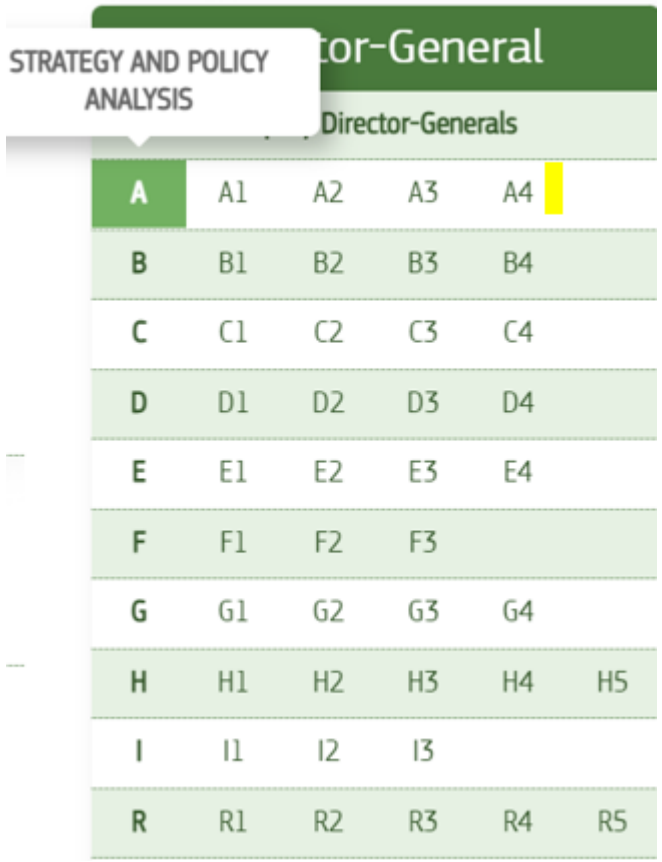
Main achievements

Concluding remarks

European Commission

DG AGRI reorganisation (01/01/2022)

DG AGRI



Unit A4 - Data governance

Data management

Integrate data, coordinate the provision of data services supporting the reporting of CAP analyses, monitoring and evaluation, and ensure the dissemination of relevant information.

Data governance

Ensure the overall governance and coordination of AGRI data processes by enhancing their integration in the European data strategy.

Digitalisation

Coordinate and contribute to activities stimulating the digitalisation of the agricultural sector and facilitating the **sharing of private and public data**.

→ **Implementation of IACS data sharing**

European Commission

DG AGRI process – IACS data sharing

Since 2018

Difficult access to IACS data for evaluation/assessment purposes (especially for environmental questions like assessment of Ecological Focus Area implementation after one year …)

Set up of specific process by DG AGRI in collaboration with other DGs (ENV, CLIMA, ESTAT…) to :

- Ensure efficient access and effective re-use of IACS data
- Target spatial and non personal IACS data
- Implementation framework: primarily INSPIRE (rules and infrastructure)
- Collaboration with Member States (Managing authorities/paying agencies)
- EC (technical) support

DG AGRI process – IACS data sharing

New elements since setup of the process in 2018

- New CAP :
  - With stronger focus on performance (MS encouraged to use more IACS data and not limit IACS data for control purposes) + Area Monitoring System
  - Art 67 (2021/2116): IACS data keeping and sharing (→ INSPIRE; EU statistics)
  - ECA recommendation: (notably) re-use of disaggregated data, improve big data analysis capacity for monitoring/evaluation/assessment purposes
- Green deal
  - IACS data valuable to measure environmental performance when agricultural practices are concerned (Farm to fork, biodiversity strategy, soil, climate change …)
- Digital
  - Opendata/ High value data sets (geospatial categories – reference and agricultural parcels)
  - Contribution G2G / G2B through the (agricultural) common data space

DG AGRI process – IACS data sharing

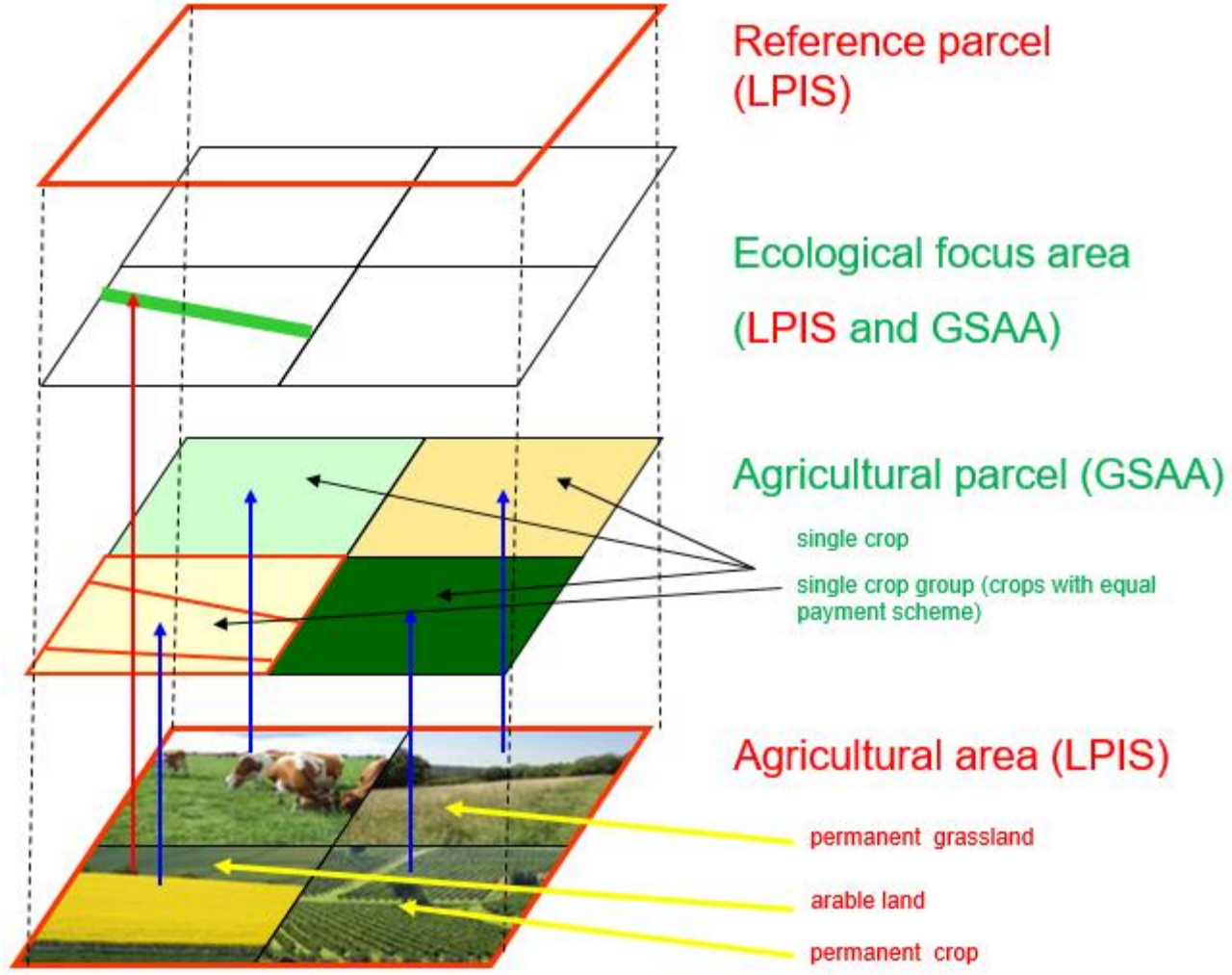
New issues/opportunities

- Ensure efficient access and effective re-use of IACS data
- Target spatial and non personal IACS data
    - **Animals? Images? Agricultural facilities?**
- Implementation framework: primarily INSPIRE (rules and infrastructure)
    - **In the context of the revision: new themes that fit better with IACS data; alignment INSPIRE, HVD and CAP : synergy needed for the implementation by the MS**
- Collaboration with Member States (Managing authorities/paying agencies)
    - **Need to enlarge to other public bodies; third data source issue (livestock, different registers)**
- EC (technical) support
    - **New agreement with JRC and support of DG ENV (2023 → 2026)**

IACS (spatial/non-personal) data (background)

IACS components:

LPIS (stable)
GSA(A) (yearly)



Land cover
(Maximum eligible) area

EFA (mapped in LPIS)

- Hedges, wooded strips or trees in a row
- Patches of trees, including shrubs or stones
- Field margins with a width of between 1 and 20 m, on which no agricultural production is produced.

Land use *(crop/crop group)*
Rural development (irrigation, animal welfare, organic…)

European Commission

Common Agricultural Policy (background)

Integrated Administrative Control System (HZR 2021/2116)

The new IACS will be an integral part of the new CAP

3 main elements: **LPIS** (Identification System for Agricultural Parcels), **GSA** (Geo-Spatial Application) and the **AMS** (Area Monitoring System)

- **To assess performance : AMS** will monitor regularly and systematically agricultural activities and practices on agricultural parcels. This monitoring, combined with **GSA** (and underpinned by **LPIS)** will feed the **annual performance report** of MS

- **To assess quality :** the 3 **QAs** (Quality Assessments) guarantee that IACS can provide assurance and that the **aggregate data** provided in the **annual performance reporting** is reliable and verifiable

Common Agricultural Policy (background)

IACS data sharing (EU Regulation 2021/2116 – Article 67)

3. Member States shall ensure that data sets collected through the integrated system which are relevant for the purposes of Directive 2007/2/EC of the European Parliament and of the Council ([1]) or for monitoring Union policies are shared free of charge between its public authorities and made publicly available at national level. Member States shall also provide the institutions and bodies of the Union with access to those data sets.

4. Member States shall ensure that data sets collected through the integrated system which are relevant for the production of European statistics in accordance with Regulation (EC) No 223/2009 of the European Parliament and of the Council ([1]) are shared free of charge with the Commission (Eurostat), the national statistical institutes and, where necessary, with other national authorities responsible for the production of European statistics.

Achievements

AGRI:

Agri-food data portal

JRC/AGRI (+ENV):

1) Discoverability

2) Interoperability

3) Effective re-use of data

Achievements

AGRI FOOD DATA PORTAL

Agri-food Markets

Market data on national and European agriculture provided by the European Commission's agricultural and rural development department. Browse through multiple visualisations about imports, exports, prices and production.

Explore >

CAP Indicators

The indicators help measure the Common Agricultural Policy performance. The EU policy provides financial support to farmers in member states, develops the rural community and ensures an environmentally sustainable farming.

Explore >

Farm Economics

Economic reports on EU farming, based on data from the Farm Accountancy Data Network (FADN). Learn about productivity, profitability, subsidies, economic structure and finances of European farms.

Explore >

Geoportals

A discovery hub providing links to access the Member States' geoportals that publish spatial data collected in the context of the Integrated administration and control system (IACS).

Explore >

EU financing

Information on the financial aspects of the Common Agricultural Policy: how much money is spent on market measures, direct support and rural development over the years?

Explore >

Country factsheets

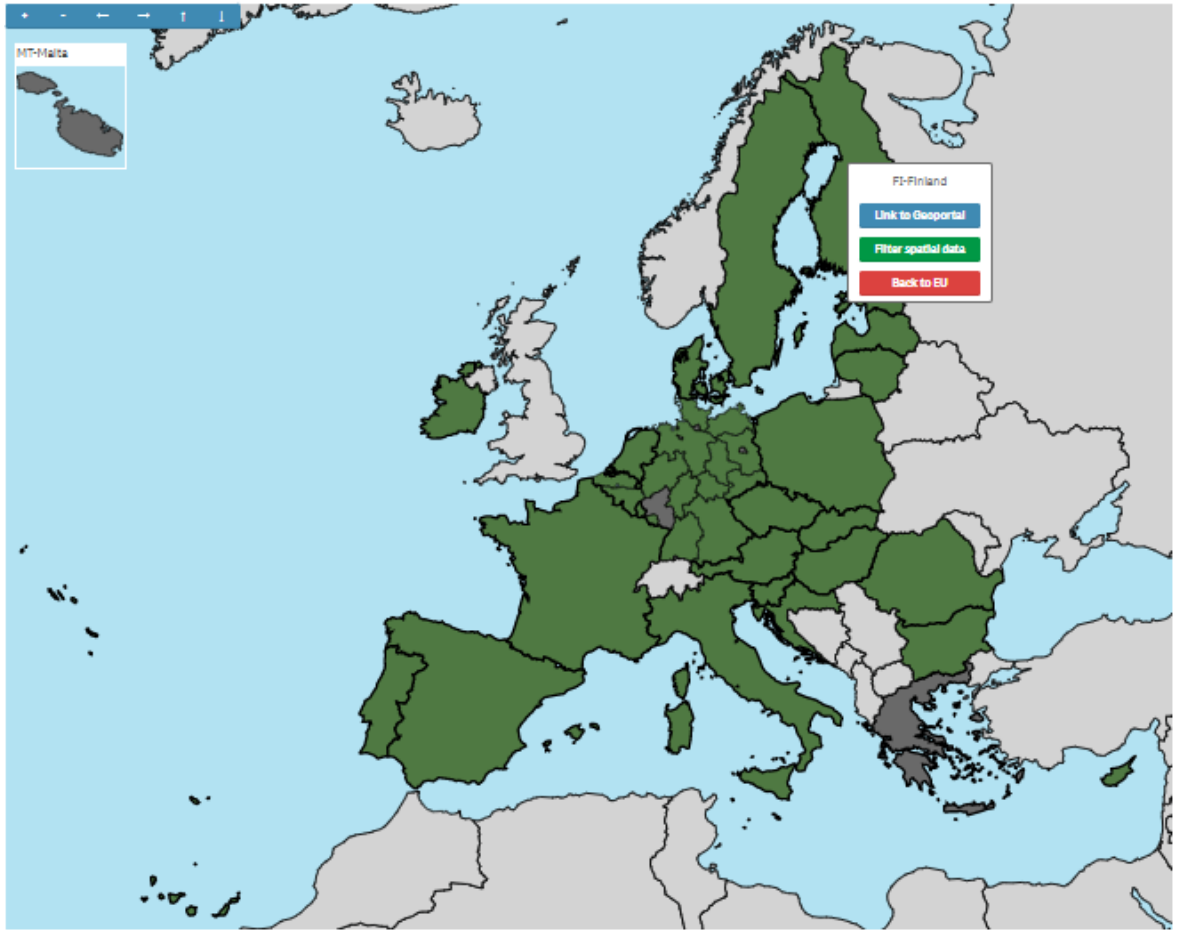
The factsheets provide an overview of the agricultural sector and rural development at EU and country levels based on the ten specific objectives and indicators used to measure the performance of the CAP.

Explore >

European Commission

Achievements

Detailed spatial information from MS

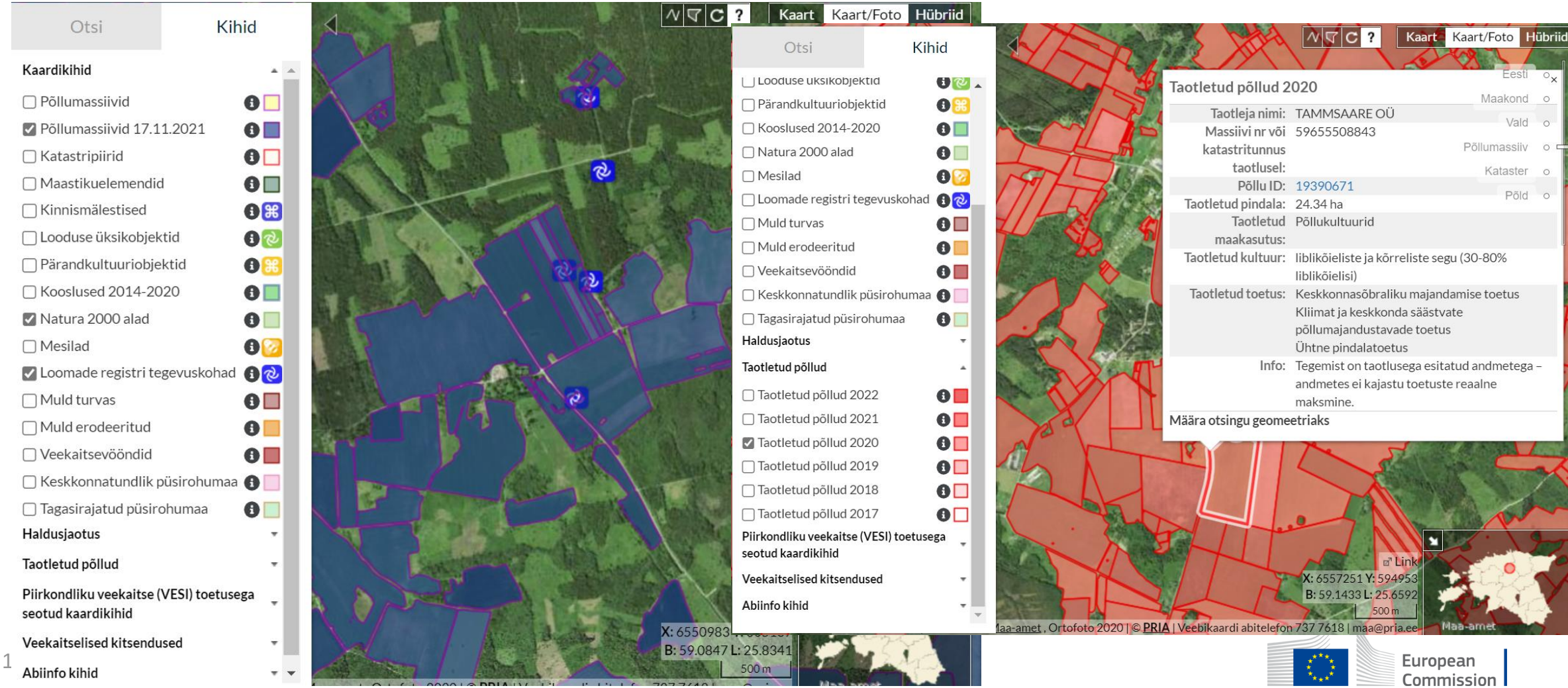


To display the spatial data for an area, please select a single area on the map or in the table below.

NUTS	Field	Value	Comment	FIELD...
AT	Geoportal	https://geometadatensuche.inspire.gv.at/met... result?ps=details&sortBy=relevance&any=in...	-	1
AT	WMS link (GIS environment)	https://inspire.lfrz.gv.at/000501/wms? version=1.3.0&request=GetCapabilities	-	2
AT	WMS link (online Geoportal)	http://geometadatensuche.inspire.gv.at/meta... 1998-4759-8e15-684dcc888396	-	3
AT	Shapefile	GeoPackage available	-	6
AT	GML	available	-	7
AT	LPIS data	https://geometadatensuche.inspire.gv.at/met... result?ps=details&sortBy=title&sortOrder=r...	-	8
AT	GSAA data	https://geometadatensuche.inspire.gv.at/met... result?ps=details&sortBy=title&sortOrder=r...	-	9
BE2	Geoportal	http://www.geopunt.be/	-	1
BE2	WMS link (GIS environment)	https://geoservices.informatievlaanderen.be/r...	-	2
BE2	WMS link (online Geoportal)	-	-	3
BE2	WFS link (GIS environment)	https://geoservices.informatievlaanderen.be/... service=WFS&version=1.1.0&request=GetCa...	-	4
BE2	Shapefile	available	-	6
BE2	GML	available	-	7
BE2	LPIS data	available	-	8

Achievements

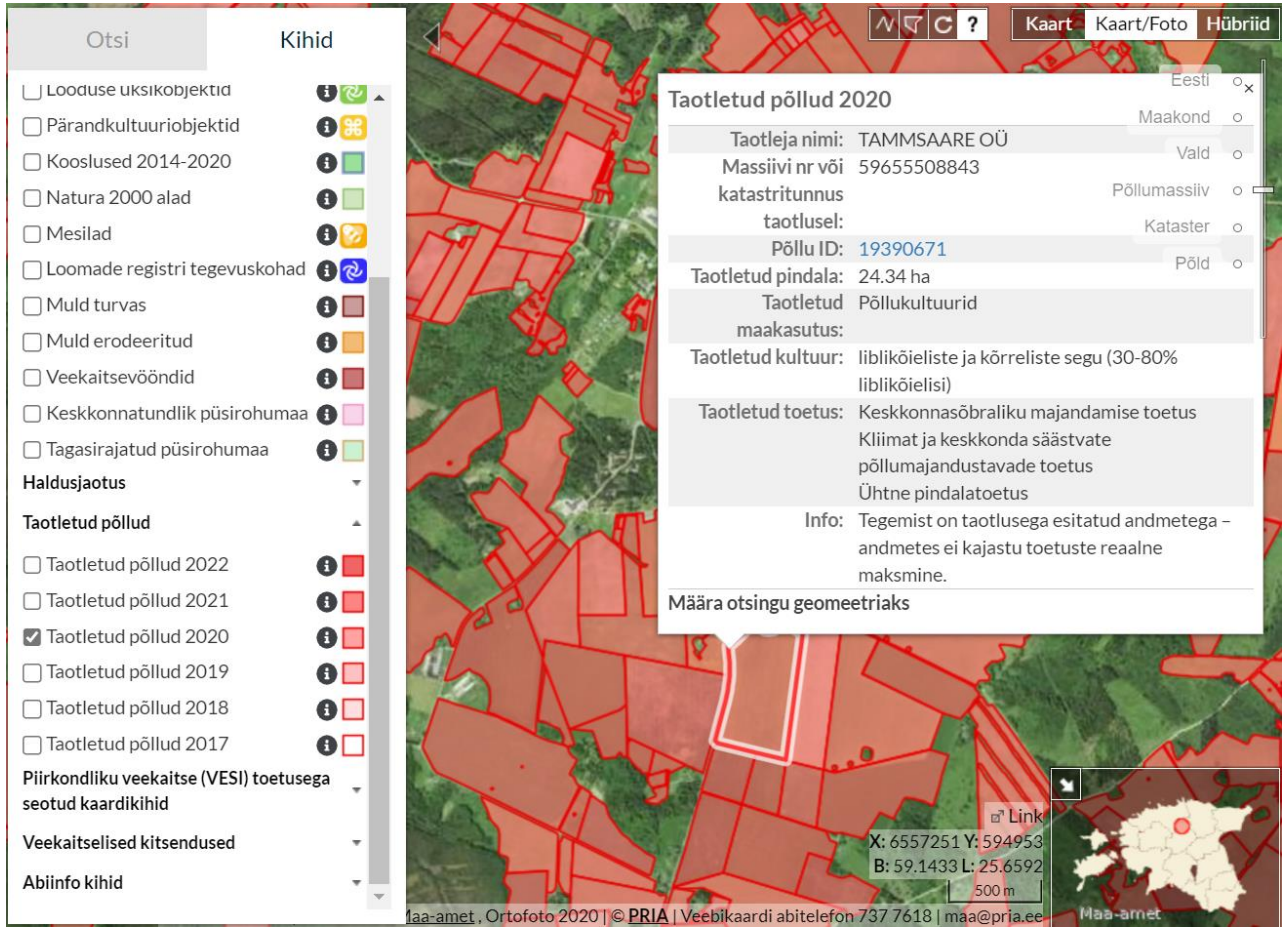
Example of Estonia



European Commission

Achievements

Example of Estonia – farmer declarations



European Commission

Achievements

Next?

Member States will be contacted in January 2023 to update the information on the agri-food data portal

Achievements

Collaboration with the JRC (and support of DG ENV 01; MoU AGRI/ENV)

AA IACS 65

JRC Team

B6: J. Escriu (WP1 leader), A. Kotsev, M. Minghini, E. Epure

D3: P. Wojda (project coordinator), S. Scarpa, J. Martín Jiménez, D. De Medici, F. Matthews, D. Vieira, D. De Rosa, C. Schillaci, P. Panagos, A. Jones, L. Montanarella, M. Van Liedekerke

D5: K. Tóth (WP2 leader); P. Milenov, R., G. Baiamonte, R. Vinas Abad (D.1 - contribution)

Achievements

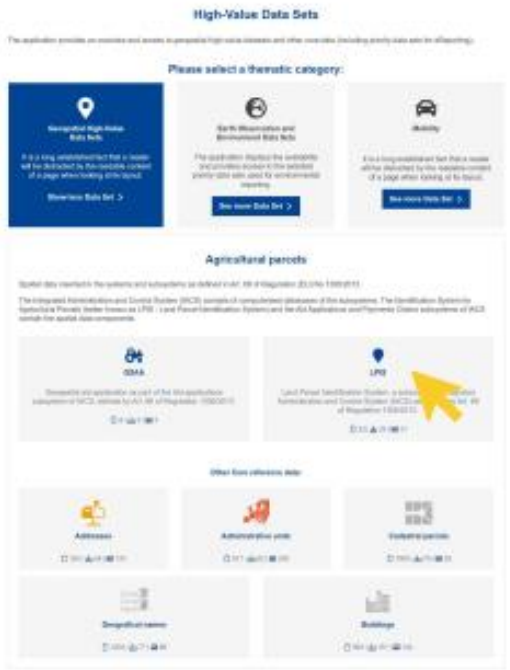
1) Data discoverability

- **Technical Guidelines** on IACS Spatial Data Sharing, Part 1 – Data discovery:
  https://op.europa.eu/en/publication-detail/-/publication/f09b0355-f7c5-11ea-991b-01aa75ed71a1/language-en
- **IACS data metadata code list** available in the INSPIRE Registry:
  https://inspire.ec.europa.eu/metadata-codelist/IACSData
- HVD filtering in the **new INSPIRE Geoportal** for directly **accessing IACS Metadata**.
- **Workshop "INSPIRE Discoverability Clinic"** with PAs (technical experts) celebrated on 8th June 2021.
  - How to? - Make data discoverable / Explore data sets through the INSPIRE Geoportal / Look-up resources on the INSPIRE Registry
- **IACS Metadata tests** in the INSPIRE Reference Validator:
- https://inspire.ec.europa.eu/validator/test-selection/index.html (Advanced options)
- Several ad-hoc meetings with national and regional PAs, pushing for IACS Data discoverability through the INSPIRE Geoportal.

Achievements

1) Data discoverability

New INSPIRE Geoportal user interface
(ready to be published when the Implementing Act on HVDs enters into force)



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

European Commission

Achievements

2) Data interoperability

1) LULUCF

https://marswiki.jrc.ec.europa.eu/wikicap/index.php/File:Methodological_Report_on_Resolving_Interoperability_in_Reusing_IACS_Data_in_LULUCF.pdf

2) Crop classification

https://marswiki.jrc.ec.europa.eu/wikicap/index.php/File:Classif_pilot_Report_JRC_CsD_final.pdf

3) Landscape feature (ongoing)

Performance and Monitoring Evaluation Framework of the new CAP – indicators C.21 and I.20 → **inventory and quantification of the LF area needed**

Assessing if EFA layer of LPIS and/or third party datasets (topographic, forestry, other databases) are fit for the purpose

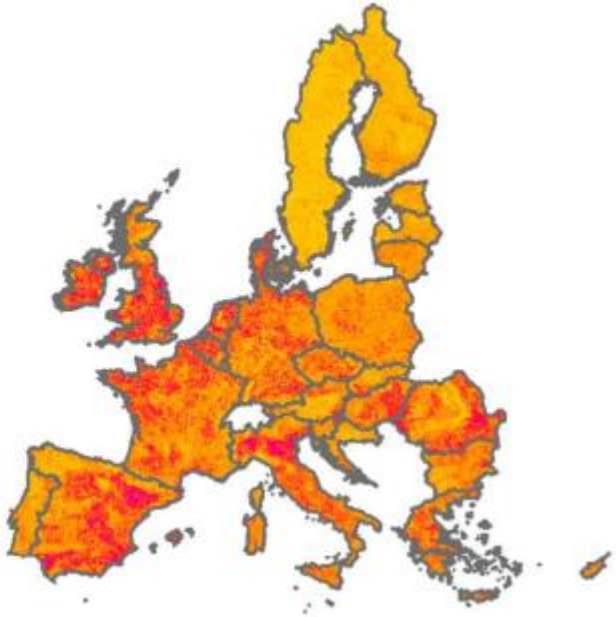
Pilots in Lt, Ro, Cz, Es, Nl

Semantic mapping/ aggregation in 4 categories:

woody, grassy, wet and stony features

Achievements

3) Re-use of data : soil health use cases



IACS (parcels) data → soil health indicators

Achievements

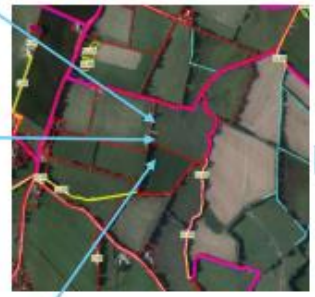
3) Re-use of data : soil health use cases

Soil organic carbon

Soil erosion

IACS: LPIS & GSAA

- Spatial location of agricultural features
- Practices



- Sewing/harvest date
- Cover (residue management, tillage)

ESDAC

- Soil properties

Soil health models

- Metadata
- Discoverability
- Accessibility
- Interinteroperability
- EU Common Data Space

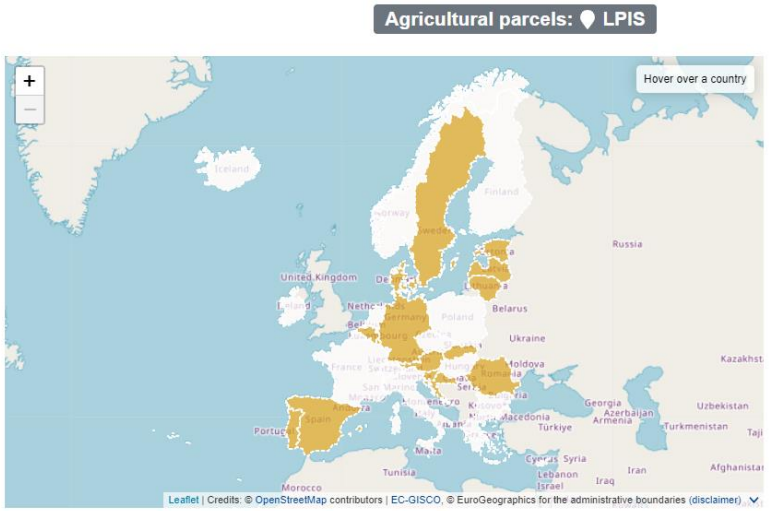
Soil pollution

Land degradation index (SGD)

→ **Reports will be made available soon**

European Commission

INSPIRE mock up – (LPIS & GSAA)



INSPIRE Geoportal Dataset Statistics

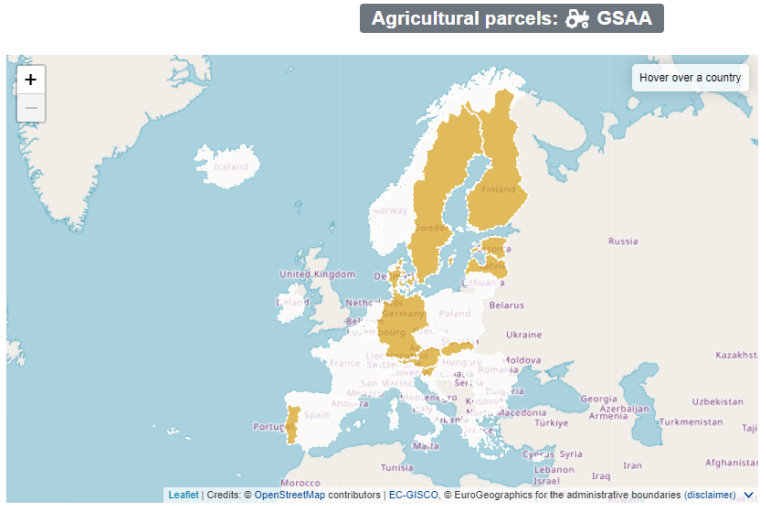
- 78 Metadata records
- 65 Downloadable Datasets
- 63 Viewable Datasets

Spatial scope coverage: ☐ National ☐ Regional

2022-11-23

16 MS sharing already datasets (LPIS)

Data sets by

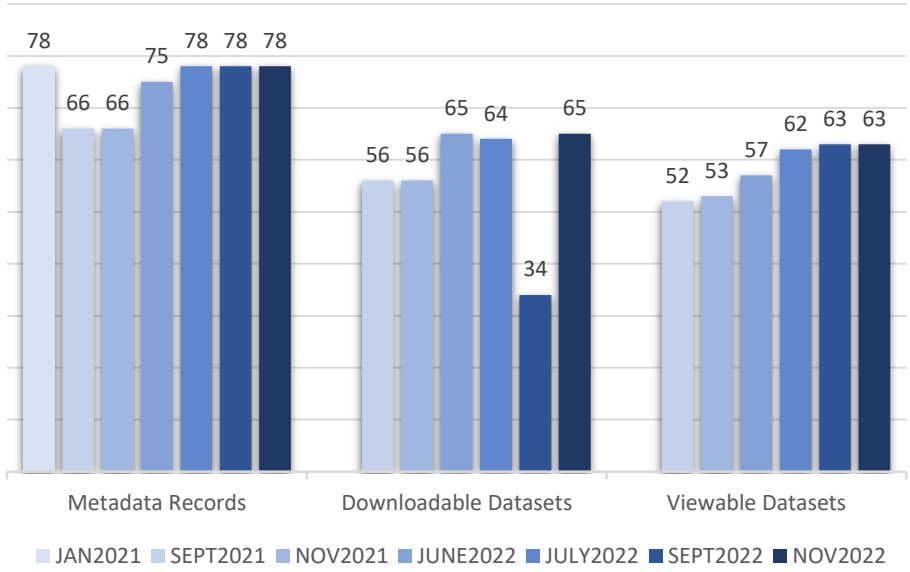


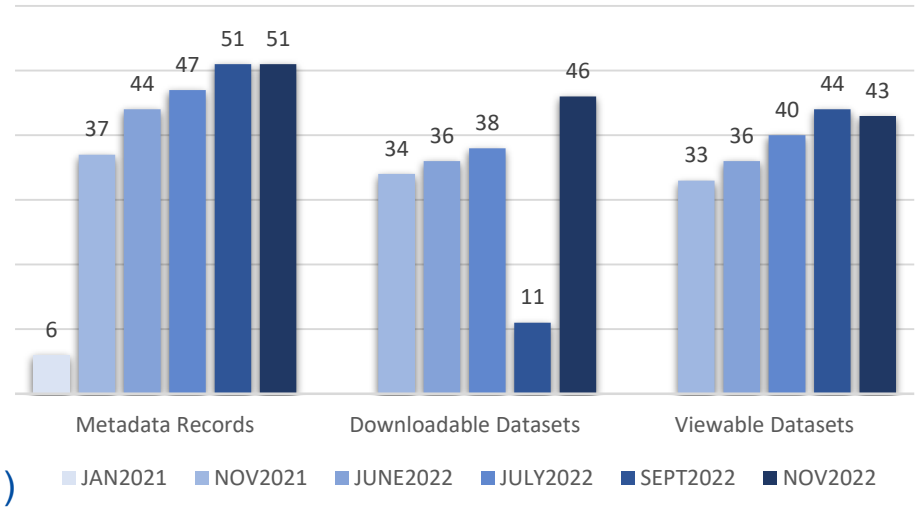
INSPIRE Geoportal Dataset Statistics

- 51 Metadata records
- 46 Downloadable Datasets
- 43 Viewable Datasets

Spatial scope coverage: ☐ National ☐ Regional

11 MS sharing already datasets (GSAA)





- INSPIRE implementation for IACS: positive trend ↑
- Commission will continue to provide support (TG, pilot use cases, training, visit to PA…)

Concluding remarks

DG AGRI process :

- Collaboration with EC DGs AND MS (Paying agencies) will continue
- Events/exchange between Paying agencies and other public bodies
- Adaptation needed due to new CAP (data type, data sharing provision, performance/indicators)
- Perspective: ECA (big data analysis; re-use of disaggregated data)
- EU data policies (INSPIRE, Opendata/HVD, EU statistics, Digital Europe Programme/common data space) → ensure synergy!
- Take stock of outcome of different projects: NIVA, SEN4STAT, MEF4CAP…

Activities:

- Ongoing activities with JRC (IACS 65) will end early 2023 (discoverability, interoperability,

- **Continuation** in collaboration with JRC → **Spatial Agricultural Information system**:
  - Data **sharing** : enlarge to other public data and not limiting to Paying agencies/IACS (third sources : organic, animal registers…)
  - Data **integration** : (satellite images, soil data bases (ESDAC, LUCAS….)
  - Data **publication**: to demonstrate capacity in big data analysi (data protection rules and confidentiality)

Thank you

Mohamed.el-aydam@ec.europa.eu

European Commission