

# Open Data Maturity 2022: Diving deeper into the policy dimension

Unin. europo academy 29 September 2023 10.00 — 11.30 CET

# Rules of the game



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# Introduction



Marleen Valkenburg Communications and data.europa academy



Nataliya Rozbroj Jasinskaja Publications Office of the EU



Antonio Rotundo Public Officer at the Agency for Digital Italy



Ott Velsberg Chief Data Officer Ministry of Economic Affairs and Communications of Estonia

### doto. europo academy



10.00 – 10.05 Introduction to the webinar and rules of the game – *Marleen Valkenburg* 

10.05 - 10.25	Diving deeper into the portal dimension – Nataliya Rozbroj Jasinskaja
10.25 - 10.50	Open data best practices Italy – Antonio Rotundo
10.50 - 11.15	Open data best practices Estonia – Ott Velsberg
11.15 – 11.25	Q&A – Marleen Valkenburg
11.25 – 11.30	Recap and closing – Marleen Valkenburg



# Diving deeper into the policy dimension

Nataliya Rozbroj Jasinskaja



## Introducing the Open Data Maturity assessment







## Introducing the Open Data Maturity dimensions and indicators 2022 Revised Approach



#### These four dimensions allow a comprehensive assessment of open data developments across Europe



## **Results 2022 (EU27+)**

- In 2022, the average open data maturity score of the EU27+ countries is 75% vs. 78% (2021).
- Policy is the most mature dimension (86%), followed by **portal** (83%), quality (77%), and impact (71%).
- France (97,2%) and Ukraine (96,9%) lead the way of open data developments in Europe.





## Countries clustering 2022 (EU27+)

- The maturity of European countries is concentrated in **the higher end of the spectrum** (above 65%).
- The fast-trackers show highly similar scores, as the cluster is concentrated on a range of 3% (88 to 91 percentage points).
- Remarkable is the journey of
  - Belgium from beginners in 2021 to followers in 2022;
  - Czech Republic from followers in 2021 to fast-trackers in 2022;
  - Italy and Cyprus from fast-trackers in 2021 to trend-setters in 2022.





## **European Union Policy Framework**

) 16 July 2019

The Directive on open data and the re-use of public sector information (Open Data Directive), entered into force on 16 July 2019, replacing the Public Sector Information (PSI) Directive.

#### 21 Dec. 2022 / by June 2024

Commission Implementing Regulation on the High-value Datasets adopted on the 21 December 2022 and to be implemented by June 2024.

EU countries had to transpose Directive (EU) 2019/1024 by 16 July 2021. The Directive introduces the concept of High-value datasets.

) 16 July 2021





## The Policy dimension and its indicators

#### 1. Policy framework Open data policies and strategy are in place at national (and eventually regional 1.1 and/or local) level. The open data policies/strategy have been updated in the past year. The Open Data Directive is implemented at national level. The (national) open data strategy incentivises the reuse of open data by both the 1.2 public and private sectors. The (national) open data policies/strategy incentivise access to real-time and dynamic data, citizen-generated data and/or geospatial data. The (national) open data policies/strategy incentivise the development of data inventories in the public bodies at national, regional, and local levels. Preparatory activities to identify high-value data domains to be prioritised for 1.3 publication are in place. Measures are in place to assist other stakeholders' involvement in this prioritisation process. Preparation to make sure that public bodies holding high-value datasets will denote those datasets as such in their metadata, following the publication of the related EU implementing act, has started. Open data policies/strategy align with the EU overarching priorities (e.g., Green Deal). 1.42. Governance of open data

- An open data governance structure that ensures the publication of open data at all government levels is in place.
  - The governance structure enables the development of open data initiatives also at local and regional levels.

- Details of the person or team responsible for the open data activities in your country are publicly available.
  - A document describing the responsibilities and working approach of the national (and eventually regional and/or local) open data team is publicly available.
  - A regular exchange between the national open data team and team maintaining the national and/or local portal(s) is ensured.
- Open data officers are appointed at each public body level.
  - A regular exchange between the national open data team and open data officers is ensured.
  - A regular exchange between the open data officers and data providers and reusers is ensured.

#### 3. Open data implementation

2.2

2.3

1	<ul> <li>Data publication plans exist at public body level and progress against these plans is monitored at national level.</li> <li>The number of public bodies that still charge above marginal costs is monitored.</li> </ul>
2	<ul> <li>Measures are in place to address the challenges encountered in implementing the aforementioned open data policies/strategy.</li> <li>Holders of dynamic data are assisted in providing real-time access to their data.</li> <li>Holders of geo-spatial data are assisted in making this data publicly available.</li> <li>Citizens/organisations are assisted in providing access to citizen-generated data.</li> </ul>
3	<ul> <li>Training activities for civil servants working with (open) data are in place.</li> <li>The trainings provide a certification and/or are formally recognised as professional development for civil servants.</li> <li>Society-wide open data literacy initiatives are in place.</li> </ul>



## Policy results 2022 (EU27+)





- In 2022, the average score for EU27 countries (at 86%), is the highest average score among the four dimensions.
- The average score for the EU-27 has been stable over the past three assessments, ranging between 85 % and 87 % in the 2020–2022 period.
- ✓ 16 Member States score above the EU27 average; Cyprus, Spain, Ireland, Poland, Italy, France, Slovenia and Estonia all score above 95%; Ukraine scores 100%.



## **Policy Framework Resuls**



96%-100% have open data policies, open data strategies, action plans, criteria for open data implementation.



81%-89% outline measures for the publication of and access to real-time or dynamic data and geospatial data; 33% for citizengenerated data..

96% working on identifying highvalue data domains to be prioritised for publication.

92% align with one or more of the **European Commission priorities** for 2019-2024.

EU27 and candidate countries in protocol order; EFTA is alphabetical order Belgium Indicators Bulgaria O Framework Czechia Governance Denmark Germany Implementation -0 Estonia Ireland Greece Spain France 0 Croatia Italy **\_**0 Cyprus Latvia Lithuania Luxembourg Hungary Malta Netherlands Austria Poland Portugal Romania Slovenia Slovakia Finland -0 Sweden Iceland Norway Switzerland Bosnia and Herzegovina Montenegro Albania Serbia Ukraine 0 Percentage (%) Source : data.europa.eu, Open Data Maturity Report 2022.

Open data policy indicators, percentage scores

88% **Policy Framework** 



85%-89% outline measures to support the reuse of open data, also by the private sector.





## Governance of open data results



100% have a governance structure for participation and inclusion of various open data stakeholders

96% indicate that the national

wider network of open data

and align.

open data (portal) team and the

officers regularly meet, discuss,



85% have open data contact points in their governance structures.

78% have the document describing the responsibilities of the national, open data team; retrievable online.



70% the governance structure, including the people and the team responsible for open data activities, are published online and accessible to the public.



96% at least some local and regional public bodies conduct open data initiatives.



86% Governance of open data



## **Open data implementation results**



85% have data publishing plans and monitoring mechanisms.



78% have processes to ensure that the open data strategy and actions are implemented. **56% indicate the status of implementation as satisfactory,** 37% as neutral, and the remaining 7% as unsatisfactory.



85%-89%, have processes to support real-time and/or dynamic data and geospatial data holders in publishing their data.



96% have set up training activities to refine the data skills of civil servants working with open data.



82%

Open data implementation



# Open data best practices of Italy Antonio Rotundo



## Open Data Maturity 2022: Diving deeper into the policy dimension

## **Best practices from Italy**

Antonio Rotundo

29 September 2023



## **National framework**





## **Open data, the normative context**

#### Directive (EU) 2019/1024

on open data and the re-use of public sector information



### Europe is asking us to do it - No, we already established that!

#### **Timely alignment with EU legislation – Example on spatial data**

Italian Decree 2011	Regulation (EU) 2023/138
Interoperable at EU level, conformant to INSPIRE Regulation	datasets within the scope of the INSPIRE data themes
Metadata conformant to the Italian metadata profile (aligned with and conformant to Regulation (EC) No 1205/2008)	metadata describing the datasets shall contain at least the metadata elements set out in Commission Regulation (EC) No 1205/2008.
PAs responsible for updating	in their most up-to-date version
Available in conformance to the provisions of the Code for Digital Administration and EU and national legislation on open data, including rules about open and machine-readable format and the open licences.	in an open, machine-readable format under the conditions of the Creative Commons BY 4.0 licence or any equivalent or less restrictive open licence



## **Three-Year Plan for ICT in PA – Guiding principles**

## public data a common good

the information heritage of the public administration is a fundamental asset for the country's development and shall be enhanced and made available to citizens and businesses, in an open and interoperable format





## The goals of the ICT Three-Year Plan for data





## Monitoring of the ICT three-year Plan



Grafico: Gruppo di lavoro Dati.Gov.it • Fonte: AGID • Scaricare i dati • Creato con Datawrapper

#### in valori assoluti:





## **National Open Data Guidelines - Process**





## **National Open Data Guidelines - Governance**

OD Group Establishment

> Role of the digital transition manager

**Coordination** with other figures in the digitization process

### **Roles and responsabilities**

- It is not possible to define a single model for managing the data opening process
- An essential role is assigned to the digital transition manager (RTD)
- The establishment of a **Working Group** in which to involve all domain owners dealing with data is recommended
- Coordination with other figures involved in the PA digitization process (such as data protection officer, responsible for document management, responsible for security, ...)



## Work in progress

- **Guidance document** on publishing and reusing high-value datasets (to be published at the end of October)
  - Engagement of data owners for addressing legal and/or technical barriers
  - Identification of HVDs and definition of a common path to apply the Regulation
- Alignment of metadata profiles to the arrangements of Regulation (EU) 2023/138





rotundo@agid.gov.it



agid.gov.it



# Open data best practices of Estonia

Ott Velsberg



# Open Data in the Public Sector: The Estonian experience



**Dr. Ott Velsberg** Government Chief Data Officer 29.9.2023



Majandus- ja Kommunikatsiooniministeerium





## #eEstonia digital government agenda 2030

OBJECTIVE	Best experience				
LEAPS	Switch to life-event based and proactive services	Al-powered government	Human-centric digital government	Green digital government	
FOUNDATIONS	Management and user-centricity of public services	Data-driven governance and reuse of data	Futureproof digital government platforms	Centrally provided basic IT services	
	Systematic experimentation with new ways	Open innovation and development of govtech community	Empowering digital change in public sector	Targeted international cooperation	

## Principles

- We protect people's basic rights
- We cherish Estonian culture and language
- We maintain trustworthiness
- We are technology neutral
- We build digital society together
- We are innovative



## Important to measure the impact

- European Union data economy atleast €829
   billion by 2025
- Estonia has highest data economy in Europe (10,5% GDP)
- €1.3 triljon in savings in manufacturing by 2027
- Saving of €120 billion a year in healthcare
- Over 500 million jobs will be replaced

...

The European Data Market Monitoring Tool Six Key Indicators of Market Development



Source: European Commission (2023)

## **GCDO** Data Initiatives





#### **Important aspects to consider:**

- requirements for data descriptions and data quality process
- **Real-time (dynamic) data** must be made available **via** an application programming interface (API)
- User needs must be taken into account when publishing data
- Additional high-value datasets
- Machine-readable data must be accessible via the Estonian Data Portal
- Reuse conditions must be available and based on controlled vocabulary
- Obligation to disclose information on **exclusive agreements**

# High-value data must be available for free and in machine-readable format!

- Six categories:
  - Geospatial data
  - Land and environment
  - Meteorological information
  - Statistics
  - Businesses and corporate ownership
  - Mobility

- Additional categories:
  - Language data
  - Public tenders
  - Elections
  - Legislation
  - Healthcare
  - Court documents
  - Energy
#### Reusable core components





#### Citizen-centric data governance



Requirements



Solutions



Support

#### Impact assessment toolset

- + Monitoring the use of personal data
- + Requirements on data management
- + Privacy impact assessment
- + Privacy-by-design

- + PET
- + Synthetic data
- + Data tracker
- + Consent service
- + Anonymization
- + Data science environment

- + AI and analytics sandbox
- + Data and AI panel
- + Up- and re-skilling
- + Data literacy
- + Experience sharing

- + Principles of responsible data processing
- + Algorithm Impact Assessment Methodology

# Synthetic data

The data is generated from real data and has the "same" statistical properties as the real data.

- Statistical similarity 0.998
- Correlation 0.83

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	1	6.0	Harju maakond	07.10.2021	19.07.1988	YHEKYTUSELINE	N3	SADUL	DIISEL	DIISEL	VOLVO	XC70	100585356	VALGE
	2	2.0	Harju maakond	07.10.2021	06.04.1939	YHEKYTUSELINE	N3	SADUL	DIISEL	DIISEL	VOLVO	XC70	100680082	VALGE
	3	4.0	Harju maakond	07.10.2021	17.12.2005	YHEKYTUSELINE	N3	SADUL	DIISEL	DIISEL	VOLVO	XC70	100588489	VALGE
•	4	4.0	Harju maakond	07.10.2021	09.08.1983	YHEKYTUSELINE	N3	SADUL	DIISEL	DIISEL	VOLVO	XC70	100524855	VALGE
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	9	8.0	Harju maakond	07.10.2021	29.04.2005	SEGAKAHEKYTUSELINE	N3	SADUL	DIISEL	DIISEL_HYBRIID	VOLVO	XC70	100696456	VALGE

#### Skills and competencies

- + You can never do enough!!!
- + Data expert network with 500+ participants (regular webinars, best-practice exchange)
- + Annual events: Data Camp, Open Data Forum, Al meetup
- + New ways of experimenting (hackatons, competitions)
- + Public e-courses on key topics (incl. data literacy, AI, open data, data governance)
- + Regular in-person trainings
  - + More than 500+ attendees in 2022
  - + All sessions recorded and published on YouTube



#### Expert support

#### + National competence centre on data

- + Hands on support: data management, incl description, quality, lifecycle; and data publishing
- + Hands-on support: implementation of data analytics, AI, privacy enhanching technologies
- + Facilitating access to domain experts in academia and the private sector
- + Providing support for carrying safely out experiments (i.e. sandbox) and pilots





### **Common tools**

#### Agency data catalogue tool

- + Maintain an overview of datasets
- + Automate the creation and update of detailed data descriptions
- + Manage semantic assets (vocabularies, classifiers)
- + Maintain an overview of reuse options and restrictions
- + Manage business rules and data quality measurements

#### National Data Portal (In-development)

- + Publish dataset descriptions
- + Publish and encourage the reuse of semantic assets (i.e. vocabularies, ontologies)
- + Publish information on reuse (incl availability of services, PETs, data services and open data sets)
- + Possibility to request restricted data
- + Knowledge sharing and guidance

# How to know if we succeed?

Standardised models on Data Office competences, governance and operations

Maturity assessment methodology
Regular data audits
Data health dashboard



#### Lessons learned

- + Consult and provide practical support
- + Education and upskilling are critical
- + Demand driven approach
- + Set and use (global) standards!
- + Define clear ownership
- + Continous monitoring and improvement



### Thank you!



Let's connect!



ott.velsberg@mkm.ee

### **Questions & Answers**





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> 27 October 2023 10.00 - 11.30 Cet





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