

2025 Open Data Maturity Report



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Chapter 1: Introduction

Background: open data policy in the European Union

The Open Data Directive (<u>Directive (EU) 2019/1024</u>) encourages EU Member States to make as much publicly accessible information as possible available for reuse. Moreover, the directive establishes minimum standards to harmonise national rules and practices, reduce barriers to reuse and facilitate innovation through public sector data reuse.

The open data directive embraces the potential to generate important social, economic and environmental benefits by promoting innovative uses of public information, particularly through high-value datasets (HVDs). The implementing regulation on HVDs (Commission Implementing Regulation (EU) 2023/138) specifies six specific categories of HVDs: geospatial, earth observation and environment, meteorological, statistics, companies and company ownership, and mobility. The regulation mandates that HVDs be accessible free of charge, in machine-readable formats, and with minimal legal or technical restrictions. Public sector bodies must provide them via application programming interfaces (APIs) and, where applicable, as bulk downloads.

Measuring open data in Europe

Under the European Data Portal initiative, the Publications Office of the European Union and the Directorate-General for Communications Networks, Content and Technology conduct an annual survey of national representatives to evaluate the maturity of countries in the field of open data and to document their year-on-year progress. Thirty-six European countries participated in the 2025 open data maturity (ODM) assessment, including EU Member States (EU-27), EFTA countries, and EU candidate countries.

- The **Member States** are Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland and Sweden.
- The **EFTA countries** are Iceland, Norway and Switzerland.
- The **candidate countries** are Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Ukraine.

The structure of this report

This short report presents key findings and trends from the 2025 Open Data Maturity Report, providing a concise overview for those seeking essential insights. First, we will summarise how the assessment measures open data maturity, followed by an overview of results by country group. We will then provide an explanation and a summary of results for each of the four ODM dimensions (policy, portal, quality and impact), including both quantitative and qualitative highlights per country group. Lastly, we will offer a brief interpretation and contextualisation of the results.

Chapter 2: Methodology

The ODM assessment evaluates the progress and effectiveness of open data initiatives across four thematic dimensions that are intended to capture the end-to-end value chain of open data: **policy**, **portal**, **quality** and **impact**. Since 2018, the questionnaire to assess the four dimensions has been revised to adapt to policy changes and the progress of European countries in their ODM. Each of the four dimensions is subdivided into indicators, which are subthemes of the dimensions. The definitions of the four open data dimensions are summarised in Table 1.

Table 1: Dimensions of the ODM methodology and their indicators

Dimension	Description
Policy	Examines countries' open data policies, governance models, and implementation measures. This dimension comprises three indicators: (a) policy framework , (b) governance of open data and (c) open data implementation .
Portal	Examines national open data portal functionality, user-centred improvements, data availability across domains, and strategies for portal sustainability. This dimension comprises four indicators: (a) portal features , (b) portal usage , (c) data provision and (d) portal sustainability .
Quality	Assesses the measures by portal managers to ensure systematic metadata harvesting, quality monitoring, compliance with the DCAT-AP standard, and effective data deployment on national portals. This dimension incentivizes ensuring open data is high-quality, machine-readable, properly licensed, suitably formatted, and supports a linked data approach. This dimension comprises four indicators: (a) metadata currency and completeness, (b) monitoring and measures, (c) DCAT-AP compliance and (d) deployment quality and linked data.
Impact	Analyses the willingness, preparedness and ability of countries to measure both the reuse of open data and the impact created through this reuse. This dimension comprises three indicators: strategic awareness , (b) measuring reuse and (c) impact created , within the areas of (i) government, (ii) society, (iii) environment and (iv) economy.

Data for the assessment is collected through a voluntary questionnaire sent to the open data representatives of the participating countries, working in collaboration with the European Commission and the Expert Group on Public Sector Information. The questionnaire examines processes, activities, initiatives, and outputs that characterise a mature open data ecosystem. Questions with available data from the previous year were pre-filled in the country questionnaire, allowing respondents to either confirm the validity of last year's answers or provide updated information.

Responses are then validated by the research team to ensure completeness, relevance, and adequate justification with supporting evidence. Subsequently, a consultation round is conducted with respondents to clarify data and allow them to review and validate the results. In 2025, the methodology was unchanged from the previous year. The latest methodology update was implemented in 2024. The survey process is summarised in Figure 1.

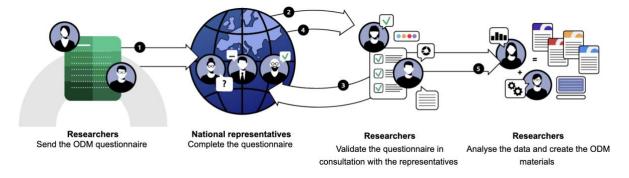


Figure 1: Data collection and validation process of the ODM assessment.

Chapter 3: Overall open data maturity

In 2025, countries across Europe continued on average, to improve their open data maturity (ODM). The average score for all participating countries rose by 1 percentage point (pp) from 2024, reaching 81 % in 2025 (Figure 2). **France** (100 %), **Lithuania** (98 %) and **Poland** (97.8 %) are the three most mature countries overall in 2025. The fourth spot is taken by **Ukraine** (97.1 %) in 2025.

Cyprus and **Portugal**, each with a maturity score of 95 %, have entered the top 10. The maturity scores of countries in the top 10 are within 5 pp of each other, demonstrating the similarly high levels of maturity of these countries. This narrow range also arises from countries continuing to improve year-on-year. Overall, 25 participating countries improved their maturity level over the past year, eight countries remained the same, and one experienced a drop in their overall maturity score.

EU Member State trends

With an increase of 3 pp, the EU-27 average reaches 86 % in 2025. This increase can be attributed to increases in most Member States' scores. Specifically, the quality and the portal dimensions recorded the largest year-on-year increases in maturity on average (+ 4 pp), followed by the policy and impact dimensions (+ 2 pp each). The policy (93 %) and portal (85 %) dimensions remain the most mature dimensions, while the quality dimension (83 %) moves up to third, making the impact dimension (82 %) the least mature dimension on average.

The biggest climber is **Malta**, which increased its overall maturity score by 19 pp compared with 2024. This rise in Malta's overall score is driven by increases across all four dimensions, with the most notable being on the quality (+ 31 pp) and portal (+ 30 pp) dimensions. The second-largest climber is **Germany** (+ 11 pp), which saw substantial increases in the **impact** (+ 21 pp) and **portal** (+ 18 pp) dimensions. The third-largest climber is **Romania**, which increased its overall maturity score by 6 pp. While there were no changes in the **portal** and **impact** dimensions, Romania's overall advancement was driven by improvements in the **policy** (+ 16 pp) and **quality** (+ 9 pp) dimensions.

Sweden (– 2 pp) experienced a decrease on its overall maturity score. This was driven by declines in both the **policy** (– 3 pp) and **impact** dimensions (– 7 pp), both stemming from the discontinuation of activities that were previously supported.

European Free Trade Association country trends

In this year's ODM assessment, **Norway** is both the highest-scoring (92 %) and the most improved EFTA country (+ 3 pp). This increase in Norway's overall score is driven by its improvement of 10 pp in the **impact** dimension and 1 pp in the **portal** dimension. In addition, **Switzerland's** overall maturity increased by 2 pp, driven by 3 pp increases in the **impact** and **quality** dimensions.

Candidate country trends

Among the participating candidate countries, **Ukraine** (97 %) remains the most mature, followed by **Serbia** (87 %). **Albania** stands out with a 23 pp improvement. Its substantial overall increase was driven primarily by a 61 pp gain in the **quality** dimension and an 18 point rise in the **portal** dimension. **Serbia** was the only other candidate country to improve its overall maturity since the previous assessment, with a 3 pp increase since 2024.

Read the analyses by dimension in the following chapters for further details on the factors underlying these trends.

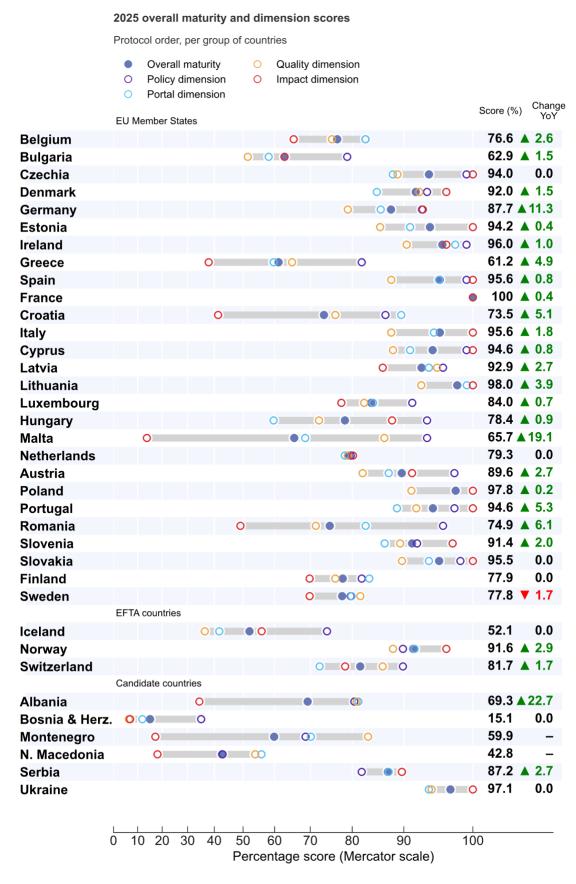


Figure 2: In 2025, the EU average improved by 3 pp to 86 %, and the average for all participating countries increased by a further 1 pp to 81 %.

NB: EFTA, European Free Trade Association; YoY, year-on-year; pp: percentage point.

Clustering

To group the countries into clusters, the overall maturity scores were plotted from lowest to highest. Groups were demarcated where observable gaps in the ordered scores were identified. From the lowest to the highest performing, the four clusters are beginners, followers, fast-trackers and trendsetters. The clusters are visualised in Figure 3.

The distribution of composite maturity scores is skewed towards higher scores. The clusters are as follows.

- Trendsetters (94–100 %). Czechia (CZ), Estonia (EE), Portugal (PT), Cyprus (CY), Slovakia (SK), Spain (ES), Italy (IT), Ireland (IE), Ukraine (UA), Poland (PL), Lithuania (LT) and France (FR).
- Fast-trackers (87–93 %). Luxembourg (LU), Serbia (RS), Germany (DE), Austria (AT), Slovenia (SI), Norway (NO), Denmark (DK) and Latvia (LV).
- Followers (73-84 %). Croatia (HR), Romania (RO), Belgium (BE), Sweden (SE), Finland (FI), Hungary (HU), the Netherlands (NL) and Switzerland (CH).
- Beginners (15-69 %). Bosnia and Herzegovina (BA), North Macedonia (MK), Iceland (IS), Montenegro (ME), Greece (EL), Bulgaria (BG), Malta (MT) and Albania (AL).

Cluster groups based on overall maturity score EU Member States, EFTA countries and candidate countries **Trendsetters** Trendsetters: 12 countries, 94-100 % Fast-trackers: 7 countries, 87-93 % Followers: 9 countries, 73-84 % Fast-trackers Beginners: 8 countries, 15-69 % Median **Followers Beginners** EL MT MK IS BA 10 20 30 40 50 60 70 75 85 90 100

Figure 3: Four-group clustering of participating countries based on overall maturity score.

Percentage score (Mercator scale)

95

Chapter 4: Open data policy

The **policy** dimension of the ODM assessment is designed to encourage the practical implementation of policy measures. Governance structures, operating models, processes and activities are needed to realise the ambitions outlined in policies and strategies. In brief, the policy dimension investigates countries' policies and strategies regarding open data, the national governance models for managing open data and the measures deployed to implement the policies and strategies (Table 2).

Table 2: Indicators of the policy dimension.

Indicator	Key elements
Policy framework	This indicator assesses whether national and subnational open data policies and strategies exist and how comprehensive they are. It looks at the presence of action plans, measures to incentivise publication and reuse, and support for real-time, geospatial, and citizen-generated data. It also considers discoverability on the European Data Portal (data.europa.eu), data inventories, and progress on high-value datasets.
Governance of open data	This indicator explores how governance structures enable coordination and stakeholder inclusion. It considers the existence of governance models, official roles, and public documentation of responsibilities. It also looks at support for local and regional initiatives and regular exchanges between providers, reusers, and open data officers.
Open data implementation	This indicator evaluates how policies and strategies are put into practice. It looks at data publication plans, monitoring and revision processes, and measures to address implementation challenges. It also considers support for data holders, training for civil servants, and activities promoting open data literacy across society.

Overall performance on the policy dimension

According to the EU-27 average in 2025, the policy dimension remains the most mature dimension of the ODM assessment, scoring 8 pp higher than the second-ranked portal dimension. The average maturity of Member States in the policy dimension in 2025 is 93 % (Figure 4. This represents a 2 pp increase from 2024. This increase has primarily been driven by a 3 pp rise in the 'policy framework' indicator, which now also stands at 93 %, the largest increase among the three policy indicators. The 'open data implementation' indicator also saw a 2 pp improvement and is the most mature indicator of the policy dimension, reaching 94 % maturity. The 'governance of open data' indicator scores 93 % on average across the Member States.

In terms of individual country performance, **Estonia**, **France**, **Italy**, **Lithuania**, **Poland**, and **Ukraine** fulfil all the requirements (100 %) set out in in this dimension (Figure 5). **Czechia**, **Ireland**, **Spain** and **Cyprus** follow closely, with scores of 99%, each excelling in different indicators: **Cyprus** achieved full marks in the 'governance of open data' indicator, while **Czechia** and Ireland did so in the 'open data implementation' indicator. Overall, 18 countries scored at least the same as the EU-27 average of 93 %.

Highlight from Italy – ensuring effective policy implementation

A relevant development observed in this year's report is how countries are strengthening processes to implement and monitor open data policies. **Italy** offers a strong example through its structured approach combining planning, monitoring, and capacity building.

Public administrations are required to adopt data publication plans, as recommended by the national <u>open data guidelines</u>. These plans prioritise high-value datasets (HVDs), dynamic data, and user-requested information. Concrete examples include the <u>monthly publication calendar</u> of the National Institute for Insurance against Accidents at Work and regional strategies such as Apulia's Decision Support System project, which integrates administrative data (e.g., protocol and document management) and domain-specific datasets (e.g., tourism, culture, etc.) into a single regional data lake.

Implementation is supported by robust monitoring. The <u>Agency for Digital Italy (AgID)</u> tracks progress through its digital transformation dashboard, which reports dataset growth on <u>dati.gov.it</u> and progress against targets in its three-year plan for information technology in public administration. The <u>basket of key datasets</u> further enables annual monitoring at the national and regional levels.

Policies are regularly updated: the latest <u>three-year plan (2024–2026)</u> was adopted in December 2024. Guidelines also define licensing requirements and recommend International Organization for Standardization standards for data quality.

To assist data holders and civil servants, AgID provides guidance, conducts webinars and launched the <u>AgID Academy</u> to strengthen digital skills. Training initiatives such as the national strategy for digital skills, the <u>Syllabus platform</u> and programmes by the <u>National School of Administration</u> ensure effective policy implementation across all levels (i.e. national and regional, as previously mentioned).

Highlight from Poland – building a reuse culture through its open data handbook

European countries are increasingly using practical resources to promote open data reuse within the public sector. **Poland** stands out with the second edition of its <u>open data handbook</u>, published by the Ministry of Digital Affairs. This updated handbook responds to the needs of government offices by providing clear steps to build an organisational structure for data openness and reuse. It introduces new data categories, explains how regulations shape open data policies and showcases ready-made solutions such as <u>Poland's Data Portal</u> and <u>the Polish portal for culture and science</u>.

The handbook serves as a checklist for offices, guiding them through their responsibilities for opening data and fostering a reuse culture. It complements Poland's open data programme for 2021–2027 and the associated legal standard, which define the 'pillars of openness' and include tools such as an openness checklist for compliance.

Policy maturity score over time

EU-27, 2018-2025

- Policy dimension
- Governance of open data
- △ Policy framework
- Open data implementation

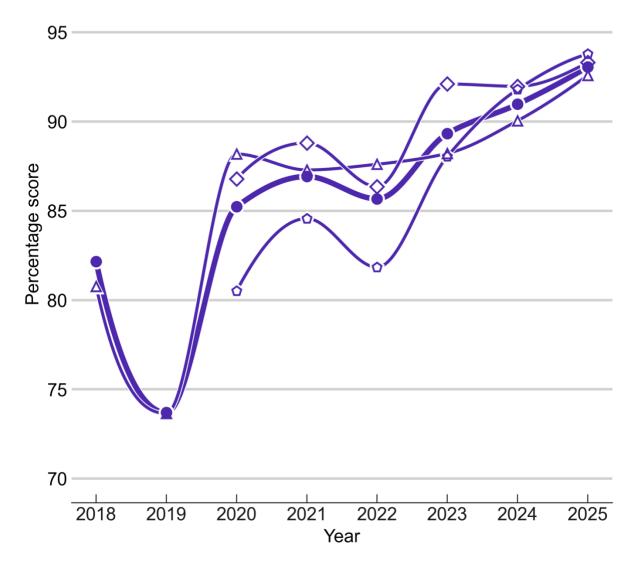


Figure 4: The EU-27 average score on the policy dimension has risen steadily over the past four years (2022–2025).

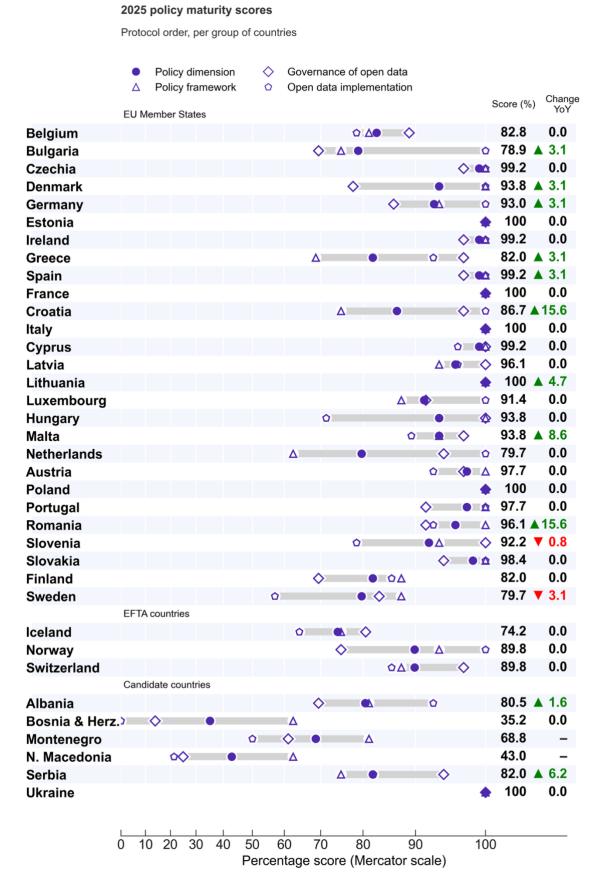


Figure 5: Eleven participating countries improved their scores on the policy dimension in 2025 NB: EFTA, European Free Trade Association; YoY, year-on-year.

Croatia (+ 16 pp), Romania (+ 16 pp) and Malta (+ 9 pp) recorded the strongest year-on-year improvements in the policy dimension. Croatia's progress was driven by major gains in the 'governance of open data' indicator (+ 33 pp), following the official establishment of a national coordination body to oversee and support open data policy implementation. Romania achieved the greatest increase in the 'policy framework' indicator (+ 31 pp), largely due to the adoption of the national open data strategy for 2024–2028 and its action plan, which introduced clear objectives and governance structures. Malta's improvement in the policy dimension was supported by a 29 pp rise in the 'open data implementation' indicator. This growth reflects Malta's updated legislation, and the introduction of publication plans at the level of individual public bodies, ensuring consistent application of open data policies and strengthening governance processes.

Highlight from Croatia - inclusive governance for open data

Croatia has introduced a robust governance model to drive its open data agenda. In 2025, the Member State established the Coordination for the Implementation of the Open Data Policy, a multistakeholder body that monitors compliance, improves data accessibility and supports public authorities. Members include representatives from the Ministry of Justice, Public Administration and Digital Transformation, the Office of the Information Commissioner and the State Geodetic Administration. The coordination body can form thematic working groups involving local authorities, academia, businesses and civil society, ensuring broad participation.

This model builds on the Act on the Right to Access to Information, which mandates public bodies to appoint information officers responsible for publishing data and handling reuse requests. At the national level, the <u>open data portal</u> serves as a central hub. It is complemented by local portals such as the <u>City of Zagreb's platform</u>, which publishes machine-readable datasets for reuse.

Knowledge exchange is embedded in Croatia's approach: coordination meetings, regular updates and shared resources on standards foster collaboration between the national team and portal maintainers. Partnerships with academia, such as the University of Zagreb's Faculty of Electrical Engineering and Computing, further strengthen the ecosystem by engaging students in dataset quality analysis.

This inclusive governance structure ensures alignment between national and local initiatives and promotes stakeholder engagement across sectors.

Overall, only two countries – **Slovenia** and **Sweden** - experienced minor decreases in their performance on the policy dimension year-on-year. In both cases, the decrease (Slovenia: -1 pp; Sweden: -3 pp) was driven by a reported reduction of the annually held events to promote open data and data literacy to a broader public.

Chapter 5: Open data portals

The portal dimension of the ODM assessment is designed to encourage national portals to offer features and functionalities that meet user needs and deliver a positive user experience. A well-designed, user-friendly portal can boost the adoption of open data and help transform casual users into active reusers. In brief, the portal dimension investigates the functionality of national open data portals, how user needs and behaviours are incorporated into portal improvements, the availability of open data across various sectors and strategies to ensure portal's' long-term sustainability (Table 3).

Table 3: Indicators of the portal dimension

Indicator	Key elements
Portal features	This indicator explores how national portals empower users through interactive features and technical capabilities. It assesses whether portals support programmatic access via application programming interfaces (APIs) and or SPARQL, offer relevant documentation, and enable dataset previews. It also considers user engagement tools such as feedback mechanisms, dataset requests, reuse case submissions, and notifications. The presence of community features, transparency around data requests, and promotion of high-value datasets (HVDs) are also taken into account.
Portal usage	This indicator assesses how well national portals monitor user activity and apply insights to improve usability. It looks at traffic analysis, API usage, and efforts to understand user needs. It also considers whether search behaviour is tracked and if steps are taken to enhance discoverability and metadata clarity.
Data provision	This indicator assesses how well national portals support inclusive data publication. It looks at contributions from public sector providers and whether support is offered to those not yet publishing. It also considers the integration of regional and local data, the use of automatic harvesting, and the availability of real-time and citizen-generated datasets. Lastly, it checks if the portal shows when data exists but cannot be shared.
Portal sustainability	To ensure long-term viability, this indicator looks at whether clear sustainability strategies are in place for national portals. It considers the availability of public documentation and open-source code and looks at social media presence. It also assesses whether portals monitor the characteristics of published data and use these insights to improve performance. The focus is on transparency, adaptability and the ability to maintain and develop the portal over time.

Overall performance on the portal dimension

In 2025, the portal dimension (85 %) continues to be the second-best-performing dimension among the EU-27, with a 4 pp increase in maturity since 2024 (Figure 6). The increase in this dimension's score can be attributed to increases in all four of the underlying indicators, with the 'portal features' indicator showing the largest year-on-year increase in maturity (+ 5 pp).

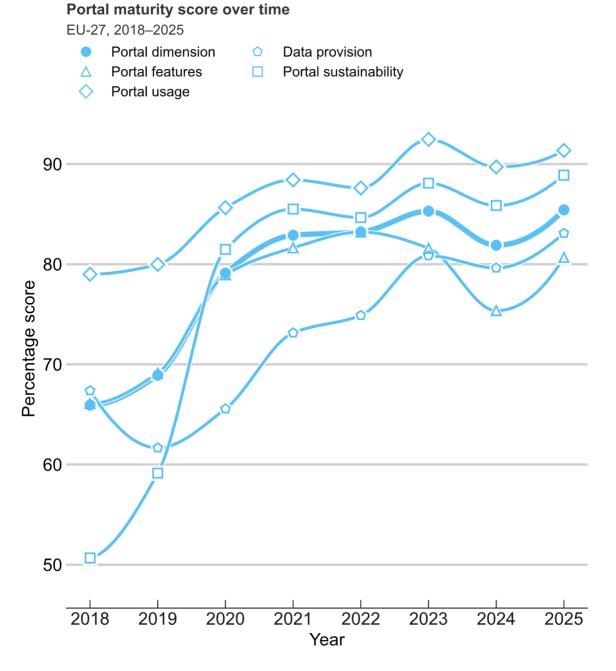


Figure 6: The EU-27 average score on the portal dimension increased year-on-year, counteracting the decrease observed in the previous annual cycle.

Regarding individual country performance, **France** now stands with **Poland** as the two participating countries to report conducting all of the activities assessed in the questionnaire, earning a 100 % maturity score on this dimension (Figure 7). **Lithuania** places third on this dimension, with a maturity score of 99%, reflecting a 6 pp increase compared with 2024. In total, 20 countries match or exceed the EU average of 85 %, including 13 with scores of 90 % or above. Among these are **Ukraine**, a candidate country scoring 94 %, and **Norway**, an EFTA country with a score of 92 %.

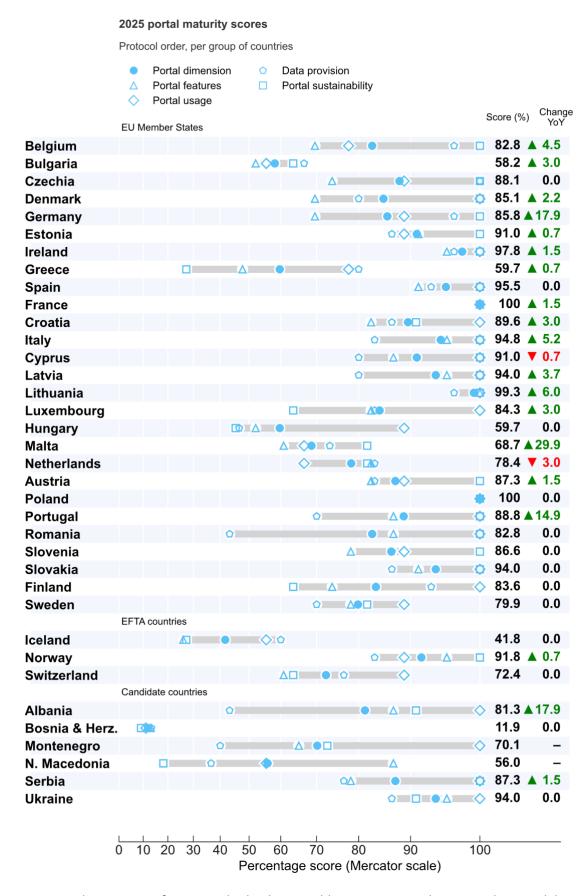


Figure 7: The majority of countries had either a stable or an increased score on the portal dimension in 2025.

NB: YoY, year-on-year.

Highlight from Lithuania - continuous improvement through multichannel feedback

One of the key practices highlighted in this year's report is basing portal improvements on user feedback. **Lithuania**, for example, places a strong emphasis on continuous improvement of its national portal, actively incorporating feedback received via social media and direct contact. Recent developments include enhancements to the user interface, API functionality and task management tools for institutional coordinators. The portal team also uses <u>GitHub</u> to log issues and track potential improvements, applying a ticketing approach to manage updates transparently.

Highlight from Ukraine – supporting data providers in the publication process

One of the key practices highlighted in this year's report is providing support to data providers to facilitate the publication of high-quality datasets on national portals. **Ukraine** takes a structured approach to assisting public authorities in their data publication efforts, offering both technical and strategic guidance.

The Ministry of Digital Transformation plays a central role in coordinating open data activities and supporting data providers. As part of its efforts, the ministry has developed a comprehensive set of resources and tools to streamline the publication process and improve data quality.

- Technical documentation and guidance. Ukraine provides detailed instructions and templates to help data providers prepare and publish datasets in line with national standards. These materials cover metadata structuring, licensing and compliance with the Data Catalog Vocabulary Application Profile (DCAT-AP) standard, ensuring consistency across the portal.
- Monitoring and feedback mechanisms. The national portal includes features that allow
 for the tracking of dataset publication and reuse. Data providers receive feedback on the
 quality and completeness of their metadata, helping them to identify areas for
 improvement and align with best practices.
- Capacity building and coordination. Regular training sessions and workshops are
 organised to build the skills of data publishers. These events foster collaboration between
 institutions and promote a shared understanding of open data principles and technical
 requirements.

Ukraine's approach demonstrates how targeted support and clear guidance can empower data providers, enhance the quality of published data and strengthen the overall open data ecosystem.

Malta (+ 30 pp), Albania (+ 18 pp), Germany (+ 18 pp) and Portugal (+ 15 pp) achieved double-digit improvements in their maturity scores compared with 2024. Malta's improved maturity can be attributed to progress across all four indicators of the portal dimension. The country achieved a notable increase in the 'portal sustainability' indicator (+ 45 pp), driven by the introduction of a sustainability strategy for its national portal, and on the 'portal features' indicator (+ 35 pp), where it enhanced its feedback mechanisms and user involvement to ensure relevant updates to the portal.

Germany's increased maturity is primarily driven by a significant rise in the 'portal sustainability' indicator (+ 55 pp). This resulted from the national portal's active presence on social media platforms such as <u>Mastodon</u> and <u>LinkedIn</u> and from the implementation of the GovData Monitor, which tracks data characteristics and informs daily improvements. Germany also saw progress on the 'portal features' indicator (+ 26 pp) following the introduction of a contact mechanism, a way to request datasets and the integration of open-data-related news into the portal.

For the second year in a row, **Albania** is among the major improvers in the portal dimension. It achieved significant progress on the 'portal features' (+ 35 pp) and 'portal usage' (+ 22 pp) indicators. Key improvements included the implementation of a rating system for datasets, the creation of a dedicated reuse section and analysis of user behaviour, not only through traffic monitoring but also through a user workshop and a user survey. **Portugal's** maturity gains stem mainly from an increase in the 'portal usage' indicator (+ 33 pp). This was driven by enhanced monitoring efforts, including expanded API analytics, tracking of user-entered search keywords and analysis of the most and least visited pages.

Highlight from Albania - comprehensive portal upgrade to enhance user experience

One of the practices highlighted in this year's report is the maturity gains that can be achieved through a comprehensive upgrade of the national open data portal. Albania exemplifies this approach through a large-scale revamp of its portal, aimed at improving usability, transparency and user engagement. The updated portal now features a dataset rating system (1–5 stars), a dedicated news section on open data topics and multiple notification options, including RSS and Atom feeds and email. Users can follow the progress of their data requests; the requests are actively monitored and the responses summarised in publicly available reports. A newly introduced reuse section showcases practical applications of datasets, with direct links to the source data and the option for users to submit their own reuse cases. To better understand and respond to user needs, the portal team tracks search keywords, analyses traffic and conducts user surveys and workshops. Together, these enhancements reflect a strategic and user-centric effort to elevate the portal's functionality and foster a more mature and responsive open data ecosystem.

Two participating countries – **Cyprus** (-1 pp) and the **Netherlands** (-3 pp) – experienced slight reductions in maturity on the portal dimension. In **Cyprus**, the national portal previously harvested data from all local and regional sources automatically, but now a majority of datasets, but not all, are harvested in this way. The **Netherlands** temporarily paused monitoring and promotional activities as part of an ongoing update to the platform's vision and ambition.

Chapter 6: Open data quality

The quality dimension of the ODM assessment encourages national portals to publish datasets with high-quality data and metadata. The ODM methodology emphasises metadata quality, not only because national portals rely on it to make datasets discoverable and support metadata harvesting, but also because it ensures interoperability, reusability, compliance with standards, and effective data management. The methodology also evaluates whether portal managers offer guidance and processes that enable and incentivise data publishers to provide high-quality data. In brief, the quality dimension assesses the measures adopted by portal managers to ensure the systematic and timely harvesting of metadata and the monitoring mechanisms in place to ensure the publication of metadata that is compliant with the DCAT-AP metadata standard and several deployment quality requirements. Table 4 summarises the key elements of the quality dimension.

Table 4: Indicators of the quality dimension

Indicator	Key elements
Metadata currency and completeness	This indicator assesses whether metadata is kept current and complete. It looks at systematic approaches for timely updates, automation of harvesting, and minimal delay between source changes and portal updates. It also considers coverage of historical and contemporary data and measures to ensure interoperability of high-value datasets across countries.
Monitoring and measures	This indicator explores how metadata quality and licensing compliance are monitored. It considers whether mechanism track quality and if results are published. It also looks at standards for metadata and licences, guidelines for providers, and support activities to help them publish high-quality metadata and choose appropriate licences.
DCAT-AP compliance	This indicator evaluates adherence to the DCAT-AP standard. It looks at compliance with mandatory, recommended, and optional classes, and whether guidelines and tools assist providers. It also considers the existence of national DCAT-AP extensions, monitoring of compliance, and efforts to address common gaps.
Deployment quality and linked data	This indicator assesses the quality of data and metadata deployment. It considers whether models such as 5-Star or FAIR are used, the share of datasets meeting open and machine-readable standards, and the use of structured licences. It also looks at linking practices, including the use of Uniform Resource Identifiers and connections to other data sources.

Overall performance on the quality dimension

The quality dimension is the third most mature dimension of the ODM assessment according to the EU-27 average in 2025 (Figure 8). The average maturity of EU Member States in the quality dimension is 83 %. This is a 4 pp increase from 2024, primarily driven by a 7 pp increase in the 'metadata currency and completeness' indicator and a 4 pp increase in the 'deployment quality and linked data' indicator. The 'DCAT-AP compliance' (+ 3 pp) and the 'monitoring and measures' (+ 2 pp) indicators also increased. Overall, 19 countries score above the EU average, with 10 achieving 90 % or higher.

Quality maturity score over time

EU-27, 2018-2025

- Quality dimension
- △ Metadata currency and completeness
- Monitoring and measures

DCAT-AP compliance

Deployment quality and linked data

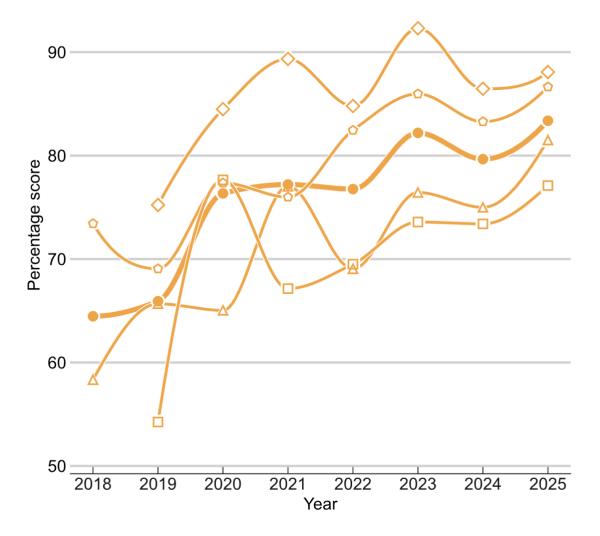


Figure 8: The EU-27 average score on the quality dimension experienced the largest year-on-year among the four dimensions.

In terms of individual country performance, **France** (100 %) maintains its position as the most mature country in the quality dimension (Figure 9). **Latvia** (95 %) and **Ukraine** (94 %) follow closely, both demonstrating full maturity (100 %) in the 'monitoring and measures' indicator. In addition, **Denmark**, **Lithuania** and **Ukraine** achieve full maturity (100 %) on the 'DCAT-AP compliance' indicator, demonstrating that they monitor adherence to the DCAT-AP standard and provide clear guidelines and training to help data providers comply.



Figure 9: The scores of the majority of countries increased in the quality dimension in 2025. NB: EFTA = European Free Trade Association, YoY = year on year.

Highlight from France – technical integration for DCAT-AP

One of the key challenges highlighted in this year's report for DCAT-AP compliance is technical integration from diverse systems.

France has taken extensive measures to guarantee that its national catalogue exposes correct DCAT-AP descriptions of datasets, particularly in the context of HVD reporting. The first approach involved leveraging the Semantic Interoperability Community (SEMIC) ISO 19139 to DCAT-AP Extensible Stylesheet Language Transformations (XSLT) as the main interoperability solution for harvesting metadata from decentralised or thematic geographical platforms. This required in-depth studies of common issues, such as licences, data services, contact points and other responsible parties, which were addressed either at the metadata level or during harvesting.

To ensure proper interpretation by the European Data Portal (data.europa.eu), France validated its DCAT-AP exposition using SPARQL (SPARQL Protocol and RDF Query Language), reporting endpoints to list required metadata fields. This process revealed inconsistencies in the national catalogue's exposition, which have since been corrected, strengthening compliance and interoperability.

This proactive approach demonstrates how systematic validation and iterative improvements can significantly enhance the accuracy and reliability of DCAT-AP metadata across national catalogues.

Albania (+ 61 pp), Malta (+ 31 pp) and Greece (+ 16 pp) demonstrated the greatest year-on-year improvement in the quality dimension. Albania's major improvement can be attributed to substantial progress on the 'DCAT-AP compliance' indicator (+ 100 pp), 'deployment quality and linked data' (+ 70 pp) and 'monitoring and measures' indicator (+ 66 pp). These substantial increases can be attributed to a comprehensive redevelopment of their open data portal over the past year.

Highlight from Albania - DCAT-AP by design

Albania achieved a marked improvement in DCAT-AP compliance by fully redeveloping its <u>national</u> <u>open data portal</u>. The new platform was designed using best practices from leading portals, notably the European Data Portal (data.europa.eu), and includes the following.

- Structured metadata collection: a redesigned management panel enables data providers to submit datasets via a user-friendly form that captures all required DCAT-AP fields. Metadata such as title, access rights, licence, format and publisher details are either mandatory or auto-inferred (e.g. media type, file size).
- Automated metadata generation and validation: upon submission, the system
 automatically generates DCAT-AP-compliant metadata. Validation is performed using a
 nationally developed metadata quality assurance (MQA) methodology, modelled on the
 MQA from the European Data Portal, to ensure consistency and conformance.
- **Legacy data migration:** all datasets from the previous portal were migrated and their metadata regenerated to align with DCAT-AP standards.

These initiatives led to Albania's open data portal achieving over 90 % compliance with DCAT-AP standards across mandatory, recommended and optional classes.

Malta's increase in its score on the quality dimension can be attributed to its 48 pp increase in the 'DCAT-AP compliance' indicator, which they credit to a new version of their national portal that focuses more on DCAT-AP standards. Additionally, Malta saw a 32 pp increase in the 'metadata currency and completeness' indicator, which can be attributed to the implementation of <u>DCAT-AP HVD</u> tags, new

efforts to ensure that published data covers a complete time series and an increase in the percentage of metadata obtained automatically from the source, among other improvements.

Highlight from Malta – guidance for high-quality metadata

One of the key practices highlighted in this year's report is the publication of manuals and handbooks that help data owners produce high-quality metadata.

Malta ensures that data publishers receive clear, practical guidance through multiple methods.

- **Helper text in the publishing form:** when creating or amending a dataset, data owners see a brief description under each metadata field, explaining what information is expected.
- **Publisher user guide:** a comprehensive guide is available to assist data owners in publishing datasets correctly and independently.

These measures enable data owners to provide accurate metadata and maintain consistency across the national portal.

Greece's increase in its score in the quality dimension can be attributed to its 30 pp increase in the 'deployment quality and linked data' indicator and an 18 pp increase in the 'DCAT-AP compliance' indicator. The notable rise in the 'deployment quality and linked data' indicator can be attributed to a new portal being implemented, which has improved the openness, structure, and interoperability of its public datasets along with its DCAT-AP compliance.

Chapter 7: Open data impact

The Open Data Directive (Directive (EU) 2019/1024) and the implementing regulation on high-value datasets (HVDs) (Regulation (EU) 2023/138) promote the reuse of public sector information to deliver economic, environmental and societal benefits. Reuse involves processing open datasets by combining them with other sources and applying analytical tools to generate insights or solutions, creating measurable impact across various fields. The impact dimension of the ODM assessment encourages countries to monitor open data reuse and address user needs. It evaluates how countries define and measure reuse, assess user needs and provide reuse examples across governmental, social, environmental and economic domains (Table 5).

Table 5: Indicators of the impact dimension

Indicator	Key elements
Strategic awareness	This indicator assesses whether a national definition of open data reuse exists and how reuse is monitored and encouraged. It looks at processes for tracking reuse at national, regional, and local levels, including for high-value datasets. It also considers whether a methodology is in place to measure the impact of open data reuse.
Measuring reuse	This indicator explores how reuse is understood and documented. It looks at tools and activities for identifying which datasets are reused and how, as well as efforts to understand reusers' needs. It also considers whether reuse cases are gathered and classified systematically.
Created impact governmental social environmental economic	 This indicator evaluates whether the impact of open data reuse has been studied and documented across key domains. It looks at evidence and examples of impact in the following domains: Governmental: efficiency, transparency, policymaking, and decision making Social: inclusion, health, housing, education, and data literacy Environmental: biodiversity, sustainable cities, climate change mitigation, and renewable adoption Economic: GDP, employment, productivity, innovation, entrepreneurship, and business creation

Overall performance on the impact dimension

In 2025, the impact dimension is the least mature dimension of the ODM assessment, with the EU-27 scoring 82 % on average (Figure 10). Maturity in this dimension has grown by 2 pp since the 2024 assessment. This increase at the dimension level has been driven by improvements in all three underlying indicators. Specifically, the 'strategic awareness' and 'created impact' indicators both increased by 2 pp; the 'measuring reuse' indicator increased by 1 pp. While 'strategic awareness' (89 %) and 'measuring reuse' (88 %), which primarily relate to the activities of the national open data teams, show strong maturity at close to 90 %, 'created impact' remains behind at 77 %, demonstrating the challenge of converting data supply into active uptake by data users. Still, taken from a historical perspective, maturity on the 'created impact' indicator has increased by more than 10 pp since this indicator was introduced to the methodology in 2022.

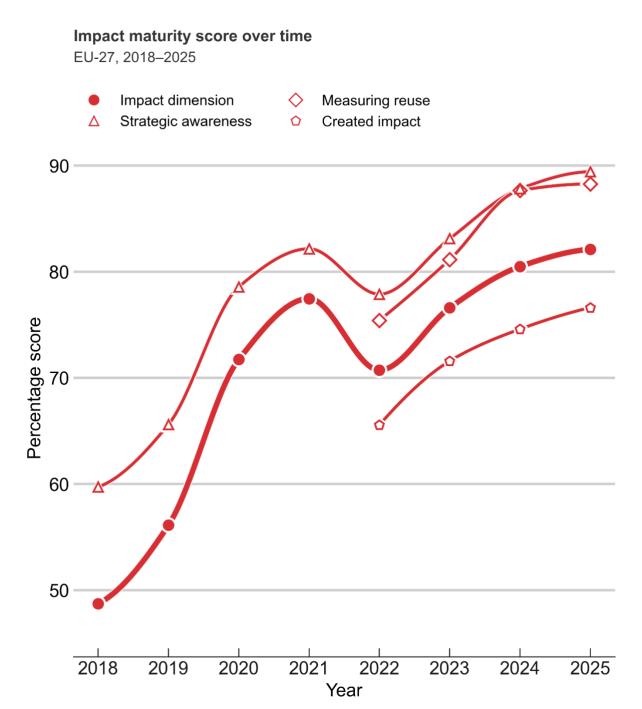


Figure 10: The EU-27 average score on the impact dimension has risen steadily during 2022–2025.

In terms of individual country performance, 11 countries reported performing all the activities investigated in the questionnaire, scoring 100 % on this dimension (Figure 11). **Denmark** and **Ireland** (as in 2024) and now in 2025 also **Norway** and **Slovenia** achieve a nearly full maturity score of 97 %. However, the distribution of scores reveals a two-speed reality. While half of the assessed countries score more than 90 % on this dimension, nearly a quarter of countries remain below 50 % maturity. This suggests that the leading countries are consolidating their advanced practices, but many other countries are still establishing their foundations on the concepts of reuse and impact.

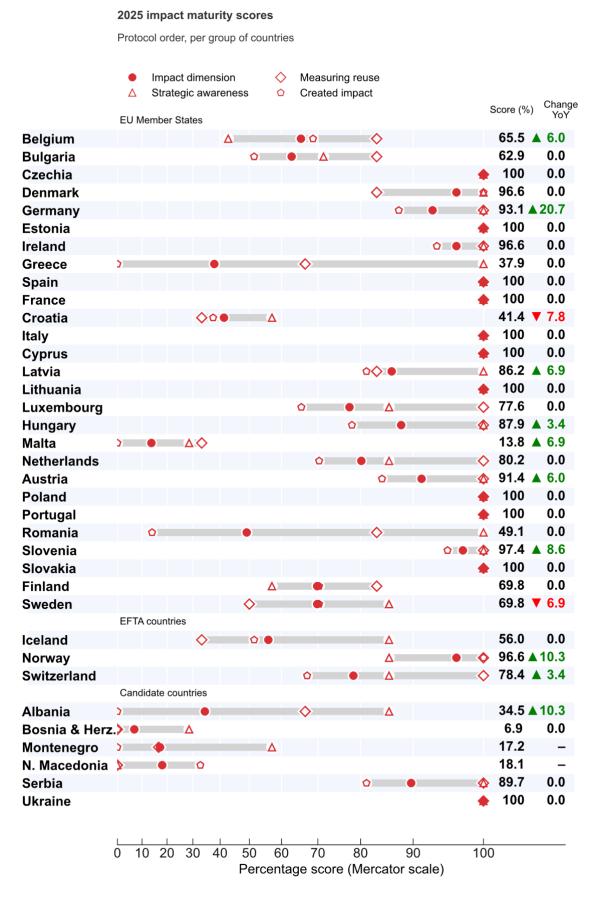


Figure 11: Ten participating countries improved their score on the impact dimension in 2025. NB: EFTA, European Free Trade Association; YoY, year-on-year.

Highlight from Lithuania – Formal methodologies for measuring impact

One of the key practices highlighted in this year's report is the adoption of formal frameworks and structured methodologies that provide a systematic way to assess the impact of open data. **Lithuania** stands out with a comprehensive approach.

- Official monitoring methodology. The 'Methodology for the monitoring of open datasets' sets out specific indicators and procedures for tracking the publication and reuse of datasets. It defines how institutions should report on open data activities, ensuring consistency, accountability and compliance across the public sector. The methodology is formally endorsed by the Director of the Information Society Development Committee, giving it regulatory weight.
- **Predictive economic impact analysis.** The Ministry of Economy and Innovation conducted <u>calculations</u> to estimate the economic impact of open data. This analysis provides quantifiable evidence of open data's contribution to innovation, productivity and job creation, reinforcing its strategic importance.

These methodologies also help policymakers communicate the economic benefits of open data for the national economy in an accessible manner for all stakeholders. For example, this <u>article</u> illustrates the findings from the Ministry of Economy and Innovation's predictive economic impact analysis, showing that open data in Lithuania creates a market value of approximately EUR 566 million – around 1.2 % of gross domestic product – and supports about 8 000 value-added jobs.

Germany (+ 21 pp), **Norway** (+ 10 pp), **Albania** (+ 10 pp), are countries that showed the most significant year-on-year improvements in the impact dimension. **Germany's** improved maturity relates primarily to a notable increase in the 'strategic awareness' indicator (+ 29 pp). This can be credited to their recent development of implementing processes for monitoring and measuring the level of reuse of high-value datasets, along with new collaborations between their government institutions and other actors (e.g., civil society and academia). Germany also considerably improved its 'created impact' indicator, and more specifically 'social impact', by reporting evidence and reuse cases across key domains such as inequality, housing, and health.

Highlight from Germany - mFund initiative

One of the key practices highlighted in this year's report is the focus on systematic funding that sustains long-term capacity and fosters collaboration between government and civil society.

As an example, **Germany's** mFund initiative provides structured financial support for mobility-related data projects, encouraging partnerships beyond government. In total, 15 mFUND projects involve civil society organisations that use and/or create open data, demonstrating how systematic funding can amplify open data impact.

A notable project that was created through this funding programme is the <u>miki project (mobil im Kiez)</u>, which develops navigation and orientation solutions for people with limited mobility through active civil society engagement. The project team created a nationwide prototype with visualisations for cities such as Cologne, Kassel, Munich, Potsdam and Saarbrücken, showing building barriers and path surfaces. People with disabilities were involved from the start of the project. These visualisations will be integrated into Wheelmap.org, helping individuals with mobility impairments save money, plan better and advocate for accessible environments. The project also enabled the OpenStreetMap community to identify missing data quickly.

Norway's improved maturity is driven by the 'created impact' indicator (+ 19 pp), and mostly in the domain of 'economic impact' (+ 56 pp). Namely, it now reports documented reuse cases driving improvements in employment, innovation and productivity. **Albania's** improvement can mostly be credited to a 33 pp increase on the 'measuring reuse' indicator. Albania reported introducing new activities in 2025 to track dataset reuse, including surveys and workshops with reusers. In addition, it has launched a social media campaign as a way to better understand reusers' needs and to further stimulate the reuse of open data.

Highlight from Norway – Entur Initiative

In the domain of economic impact, **Norway** stands out with the **Entur initiative**. This is a state-owned company that created a national platform for travel planning and mobility services. By aggregating and standardising real-time data from public transport operators, Entur provides unified access to mobility information. The platform uses open standards such as NeTEx and SIRI and is built on OpenTripPlanner 2.0, enabling advanced routing and integration with micro-mobility services such as scooters. Through APIs and <u>open datasets published on data.norge.no</u>, developers can access timetables, stop locations and real-time updates to build apps and services that support seamless mobility. Entur also collaborates on open-source development and integrates providers like Voi and TIER, fostering an ecosystem of innovative mobility solutions.

This case highlights how open data can serve as a foundational enabler for innovation ecosystems and accelerate technology adoption. By providing standardised, real-time transport data through open APIs and datasets, Entur removes interoperability barriers and creates a shared infrastructure that developers and service providers can build upon.

Countries that experienced decreases on their impact dimension scores are **Croatia** and **Sweden**. Croatia's 8 pp drop in overall score stems from a 14 pp decrease in the 'created impact' indicator. This is largely due to the country indicating that it does not currently have up-to-date information on the social impact of open data. Sweden's overall score declined by 7 pp, largely due to a significant 33-point drop in the measuring reuse indicator. This decline can be attributed to the discontinuation of activities aimed at tracking how open datasets are reused, along with efforts to understand the needs of data reusers.

Chapter 8: Conclusions

Countries in Europe have, on average, improved on their ODM since last year. This resumes a trend of incremental annual improvements following a year of stable maturity in 2024 when the assessment methodology underwent a period update.

In the EU, the **policy** dimension remains the most advanced. The underlying 'policy framework' indicator increased in maturity the most, reflecting the fact that EU Member States continue to update and refine their data strategies with measures in the open data field such as to enhance the availability of dynamic and citizen-generated data and to support reuse by the private sector. All Member States report ongoing efforts to implement the HVDs Regulation.

The portal dimension remains the second most mature, exhibiting the largest year-on-year increase among the four dimensions (tied with the year-on-year increase in the quality dimension). In particular, the 'portal features' indicator experienced the greatest improvement, an about-face from 2024. More countries are providing users with APIs and SPARQL end points, offering preview functions for tabular and geospatial data, enhancing user feedback mechanisms, and promoting HVDs on their portals.

Maturity on the quality dimension improved the most year-on-year in the EU (tied with the year-on-year increase in the portal dimension). This improvement was primarily driven by improvements in the 'metadata currency and completeness' indicator. More countries are configuring their systems to rapidly synchronise the metadata they harvest when changes are made at the source, making efforts to ensure that time series data are complete and are implementing HVD tags.

The **impact** dimension again experienced a year-on-year improvement, although to a lesser extent than previous years. Most countries report collaborating between government and civil society or academia to create open data impact in their country and have a definition of open data impact in place. As in previous years, reuse examples remain more common than systematic data on open data impact, and only a few new cases were reported in this year's assessment.

In the year ahead, Member States are expected to continue making their identified HVDs available on their national portals and annotating them with metadata according to the DCAT-AP HVD specification, including references to the European Legislation Identifier (ELI) of the Commission Implementing Regulation and HVD categories.

Feeding into its <u>Digital Omnibus initiative</u>, the Commission has proposed on 19 November 2025 to simplify and consolidate existing EU data rules through the data act, combining the open data directive, data governance act, free flow of non-personal data regulation and data act into one piece of legislation for enhanced legal clarity. Negotiations on these proposals will take place in 2026. The review of the Infrastructure for Spatial Information in the European Community Directive may also reshape the policy landscape, especially regarding datasets that fall under both the Infrastructure for Spatial Information in the European Community Directive and the implementing regulation on HVDs.

Amid these changes, open data portals will remain central to public sector data sharing while developing into broader data-sharing platforms. Open data teams will continue adapting to this landscape and coordinating new government data initiatives.

