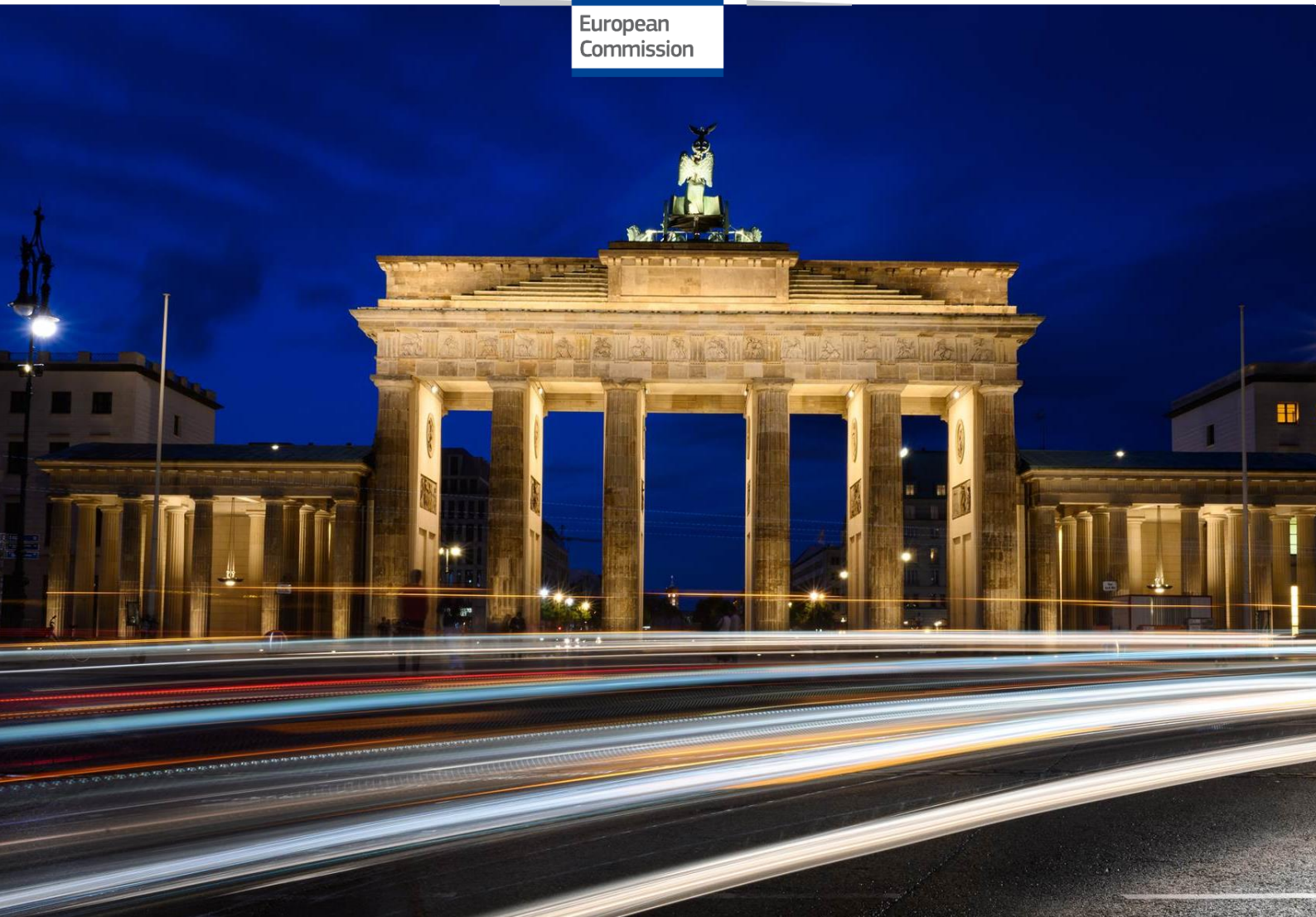# Report on the monitoring of the Berlin Declaration

Directorate General for Informatics

May 2022

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Foreword

By adopting the "Berlin Declaration on Digital Society and Value-Based Digital Government" under the German EU Council Presidency in 2020, we, as EU Member States, emphasised that digital transformation in Europe must be based on democratic values and ethical principles. The Declaration is both a compass based on our shared European values and a response to the question of what kind of digital change we want to see in our societies. Public administrations serve as an important role model in the process of implementing these common guidelines on digital transformation in Europe.

In the context of the Covid crisis, governments have had to accelerate the digital transformation of their administrations and public services. Subsequently, as part of the recovery efforts undertaken by governments and societies, this transformation is continuing with the desire to build a digitalisation of the public sector that is more environment-friendly and respectful of democratic values. Aside from the Covid-19 pandemic, the war in Ukraine has revealed that a functioning, well-informed and skilled digital society is not just "nice to have", but imperative for maintaining and fostering our shared European rights and values, such as freedom of speech, freedom of the press, non-discrimination, democratic institutions and structures, equal access to information, sharing a (digital) commons. Governments, on all administrative levels, have a central role in this respect, however seemingly small and technical many of our projects may seem. We are part of a permanent process as the work of upholding and guaranteeing these rights and values is never done. We have to continually assess and re-evaluate whether we meet our set standards and the well-justified expectations of our citizens and entrepreneurs.

As part of its Presidency of the Council of the European Union, France undertook the task to present a first report on the implementation of the Berlin Declaration. This report intends to summarise the progress made in 2021 and we would like to thank the representatives of all our Member States, who have dedicated their time and energy to achieve this work. This first year has seen the testing of first indicators, with the aim of limiting the workload of Member States by relying on pre-existing data collections. These results will be useful to all administrations throughout Europe, and we have made a point of making the results available as open data so that it can be accessed by as many people as possible. The indicators will have to evolve to take account of the technological changes of tomorrow and their impact on administrations and public services. We therefore invite the forthcoming EU Council Presidencies to pick up and improve this work, again with the support of all Member States and the European Commission - and in close alliance with other EU initiatives (e.g., DESI, eGovernment Benchmark, NIFO).

Of course, we were both very eager to learn where our countries stand with regard to the different elements of the value-based digital governance set out in our joint Member States' Declaration. We were happy to see that we are doing quite well in some policy action areas, and perhaps even happier to learn about the areas where we still have work to do. Society is always progressing, especially in the digital sphere, and our task is to keep track of developments, putting not only our brains but also our hearts into building a well-functioning, value-based digital society.

We would like to take the opportunity of this first report on the implementation of the Berlin Declaration to thank the Council of the European Union for having made this collective success possible. We also thank our colleagues from the European Commission, who have guided and helped us along the way in making the Berlin Declaration become a reality and in making its impact measurable in a way that will help us keep track of our joint efforts of shaping a value-based digital society in Europe. We could not have done it without you! We sincerely hope that we will all keep up this formidable spirit of cooperation and ambition and that this monitoring report will provide the basis for inspiring discussions and many valuable insights in our joint endeavor of shaping the digital transformation in Europe.

Xavier Albouy

Director at Interministerial Digital Directorate of the Ministry of Public Sector Transformation and the Civil Service in France

Dr. Markus Richter

State Secretary at the Federal Ministry of the Interior and Community and Federal Government Commissioner for Information Technology in Germany

Executive Summary

The Berlin Declaration on Digital Society and Value-based Digital Government (hereafter 'the Declaration') has reaffirmed European leaders' commitment to fundamental rights and European values, as already stipulated in the 2017 Tallinn Declaration on eGovernment. Relying on 7 key principles, the Declaration emphasises the importance of digital public services in our everyday lives. It is aimed at taking the user-centricity principles that were formulated in the Tallinn Declaration one step further, by asserting the role of public administrations in driving a value-based digital transformation of European societies.

By signing the Declaration in December 2020, each EU Member State agreed to implement a set of 22 Policy Actions in their national frameworks by 2024. The European Commission and other EU institutions have been called upon to implement and monitor progress in these the Policy Areas, as stipulated in the Declaration. This gave rise to the idea of developing and deploying a framework to monitor the implementation of said Policy Actions, the key objective of which will be to support the Member States in identifying the progress made over time in implementing the Declaration.

This initiative is being led by the National Interoperability Framework Observatory (NIFO) of the European Commission, in parallel to the monitoring of the European Interoperability Framework (EIF). This will help to ensure coherence between the two monitoring mechanisms as both relate to digital public services.

The key benefits of the Berlin Declaration monitoring (BDM) exercise include the highlighting of the measures taken by each Member State to reach the Policy Actions set out in the Declaration, and the identification of good practices and lessons learnt. In addition, this work will support decision-makers at EU and national levels in setting their budgetary priorities and goals in the digital domain, as well as laying the ground for future funding requests and identifying any gaps or areas of improvement where the European Commission and other EU institutions could intervene. In particular, the first data collection of the BDM highlighted that, on average, EU Member States have reached a good level of implementation of the Policy Area related to the strengthening of trust through security in the digital sphere by considering ways to foster agreement on ICT security requirements, among others. Regarding the main area of improvement, the EU Member States will need to advance on the creation of a value-based, human-centred AI systems for use in the public sector and foster the sharing of best practices on the development of successful human-centric AI systems in the public sector.

This report aims to provide readers with an overview of the BDM exercise, including a description of the methodology and KPIs used to conduct the monitoring activities. In addition, it provides a country-level overview of the results of the monitoring exercise, at both Policy Area and Policy Action levels, as well as an overview of each country's good practices in the implementation of these Policy Actions.

Introduction

The [Berlin Declaration on Digital Society and Value-based Digital Government](#) (hereafter 'the Declaration') was signed on 8 December 2021 by responsible ministers from all EU Member States and builds on commitments made in the [Tallinn eGovernment Declaration](#), which endorsed the key principles for digital public services outlined in the eGovernment Action Plan 2016-2020.

The Berlin Declaration recognises the public sector as an essential element for the European Single Market and a driver for new and innovative technological solutions for public services and societal challenges. This has been reconfirmed in the [Digital Decade Communication](#) issued in March 2021, in which Digitalisation of public services is one of the four cardinal points of the Digital Compass. The Declaration stresses that public authorities at all levels must lead by example to reinforce the principles of the European Union. To this end, the Declaration outlines **seven key principles linked to 22 Policy Actions** aiming at fostering the level of digitalisation of the public sector at the national and EU level. The Member States agreed on implementing the Policy Actions within their national frameworks by 2024.

In order to measure and monitor the progress made by the Member States towards the abovementioned Policy Areas, the European Commission has designed and deployed a **monitoring mechanism to assess their level of implementation within the Member States**. Additionally, the **monitoring mechanism of the Berlin Declaration** (BDM) aims to identify and share the measures and initiatives put in place by each country to implement the Policy Actions. Thus, the objective of the BDM is twofold: assess the improvements made by the Member States over time and collect and share good practices in the implementation of the Policy Areas.

This initiative is led by the [National Interoperability Framework Observatory](#) (NIFO) of the European Commission, and is being carried out in parallel to the monitoring of the European Interoperability Framework (EIF). This will help to ensure coherence between the two monitoring mechanisms as both relate to digital public services.

Berlin Declaration Monitoring methodology

The development and deployment of the BDM relied on a two-step approach: the design phase and the implementation phase.

Design phase: The design phase aimed to define the theoretical framework on which the monitoring mechanism would be based, as well as its underlying indicators. It consisted of designing the structure of the monitoring mechanism, defining the elements to be measured, identifying the granularity levels and how they relate to one another based on the Declaration, creating a set of primary[1] and secondary[2] indicators, framing the scoring mechanism, and producing the online questionnaire to collect primary data from the Member States.

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[1] Primary indicators are KPIs designed for the purpose of the BDM and the related data is collected through direct inquiry to the Member States.
[2] Secondary indicators are KPIs designed in the scope of other monitoring exercises and reused in the context of the BDM to reduce the burden on the Member States. The related data is collected through different means and incorporated into the BDM.

The monitoring mechanism to the Berlin Declaration was designed in collaboration with volunteer Member States through a workshop and individual meetings. Feedback from the volunteer Member States were collected and incorporated into the final version of the BDM.

The output of the design phase is the BDM itself, with a defined theoretical framework, a robust set of indicators, and a statistically sound methodology for analysing the collected data.

Implementation phase: Following the design of the BDM, several feedback collection sessions have been organised with the Member States to gather early feedback before launching the BDM and to test the relevance of the KPIs deployed.

The implementation phase consisted of launching a data collection exercise through an EU-wide online questionnaire to collect data for the primary indicators. The data collection exercise was carried out in conjunction with one of the EIF monitoring mechanisms in a combined online questionnaire to reduce the burden on the Member States.

Theoretical Framework

The BDM assesses the level of implementation of the 22 Policy Actions (detailed in Appendix III) undersigned by the Member States. They are clustered into 7 Policy Areas (detailed in Appendix III), which are in line with the 7 principles set out by the Declaration.

The architecture of the BDM is based on three granularity levels: the 7 Policy Areas (level 1) aggregating the 22 Policy Actions (level 2) assessed through a set of Key Performance Indicators (KPIs) (level 3). For each level, all elements mentioned above do not overlap and are of equal importance and weight.

The assessment of each Policy Action relies on a set of primary and/or secondary KPIs. The secondary indicators have been collected from existing information sources that are publicly available (e.g., Open Data Portal, Digital Economy and Society Index (DESI)) to avoid the duplication of data requests in line with the Once-Only Principle. For Policy Actions that cannot be fully evaluated using secondary data sources, a set of custom-made primary indicators have been designed and data has been collected through the above-mentioned questionnaire issued to contact points in all the Member States.

Scoring Mechanism

The implementation of the Policy Actions defined under the Berlin Declaration by the Member States was assessed on a percentage scale (i.e., from 1 to 100%), based on the level of completion of each of the KPIs.

The percentage of implementation for each Policy Action has been calculated as the arithmetic mean[3] of the KPIs, designed to assess the corresponding Policy Action, for which it is assumed that all KPIs are of equal importance and weight. Similarly, the percentage of implementation for each Policy Area is be calculated as the arithmetic mean of the percentages of implementation of all of its underlying Policy Actions.

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[3] The arithmetic mean, also called the mean or the average, is the sum of a collection of numbers divided by the count of numbers in the collection.

At each granularity level, the aggregation provides a result only if at least two thirds (66.66%) of underlying values are available. Meaning that if there is above 33.33% of unavailable values (i.e., "no data"), the following aggregation level will provide a "no data" result as well. Such a statistical rule has been established to ensure that the aggregated results at Policy Action and Area level are relevant with sufficient underlying data to carry meaning.

High-level overview of the BDM results at the EU level

All Member States have been implementing the Policy Areas and related Policy Actions set out in the Declaration and all areas have been found to have an average European value of over 50%. Looking at the areas in which the Member States are performing the best, Policy Areas 4 and 5 are scoring the highest.

The EU average for **Policy Area 4 - Strengthen trust through security in the digital sphere** - is 80%. In this specific area, Member States are performing particularly well in building trust through security by honouring cyber-ethical principles such as transparency, accountability and privacy in the provision of digital public services and by promoting honesty, integrity and respect for the law among users (Policy Action 4.3). Most Member States are doing well in ensuring that citizens and businesses can rely on trustworthy and verifiable digital public applications and services that fully comply with high security standards and meet users' needs. Additionally, in order to foster secured access to digital public services, more EU Member States have been leveraging electronic identification (eID) solutions (Policy Action 4.1).

Similarly, **Policy Area 5 - Strengthen Europe's digital sovereignty and interoperability** - is also an area where the Member States score highly (79%), particularly in the establishment of common standards and modular architectures (Policy Action 5.3). Most of the Member States implement common standards, modular architectures and use open-source Software (OSS) to facilitate the deployment and development of strategic digital tools and capabilities.

In contrast, three Policy Areas, namely 2, 6 and 7, are areas where the Member States are lagging behind and should therefore focus increased efforts on.

In particular for **Policy Area 2 - Enhance social participation and digital inclusion, to shape the digital world** – improvements could be made in engaging with citizens and encouraging them to participate in the digital sphere and fully benefit from digital opportunities on a conditional basis and without discrimination. More specifically, Member States should encourage wider participation in policymaking activities by involving society in the design of public services through co-creation, experimentation, and collaboration. This could be done by engaging them in the use of digital tools to support their participation and thus give them the opportunity to shape the digital transformation and share their ideas.

Regarding the design of trustworthy innovative technology corresponding to **Policy Area 6 - Create value-based, human-centred Artificial Intelligence (AI) systems for use in the public sector** - Member States should improve and increase their efforts in fostering the development and use of transparent, accountable and human-centred AI, as well as the promotion of competitiveness and innovation in the EU (Policy Action

6.2). In fact, the promotion of human-centred and responsible development and use of AI and other new technologies is not yet widespread in the public sector at the EU level. Thus, emerging technologies should be leveraged by and made available to all citizens and businesses in EU Member States[4].

Furthermore, in the area of sustainability and resilience of the digital society, **Policy Area 7 - Fostering Resilience and Sustainability** – the results of the BDM have shown that Member States need to improve, in particular by promoting the use of digital tools and ICT as solutions in the transition to climate neutrality, as well as the reduction of emissions related to the increased use of data and technology in a digital society (Policy Action 7.2). Digital transformation should be sustainable and serve citizens, businesses and society, while ensuring the preservation of our natural living environments. A concrete example can be found in the EU Mission for Climate-Neutral and Smart Cities, to which 100 EU citizens will participate, with 12 additional cities coming from countries associated or with the potential of being associated to Horizon Europe.

Please note that the scores of KPIs 7, 8, 10, 13, 14, 15 and 18 are extracted from the 2020 results of the eGovernment benchmark and the Digital Economy and Society Index (DESI) and will be updated as soon as the scores of 2021 are available. Additionally, the scores of the related Policy Areas and Policy Actions may also be affected.

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[4] Several actions are being undertaken in this area by the public sector, as mentioned in the AI Coordinated Plan (see section 14). Some instances refer to the support to public administrations in creating AI algorithm registries increasing citizen trust, and in procuring trustworthy AI by developing a set of minimal capabilities for algorithms to be used in contract conditions.

BDM results and good practices

Here below are presented the results of the first edition of the monitoring mechanism of the Berlin Declaration for the 27 Member States, with their related good practices, when applicable.

Disclaimer: The secondary indicators extracted from the eGovernment Benchmark and the Digital Economy and Society Index (DESI) have yet to be published for the 2021 data collection. Therefore, the data included for related KPIs refers to the collection exercise for 2020 as a proxy for the currently missing indicators. They will be updated as soon as available. Such indicators impact the aggregated score for Policy Actions 2.1, 2.3, 3.1 and 3.2, and thus for Policy Areas 2 and 3.

AUSTRIA
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Austria | Policy Areas level of implementation

Radar chart:

Policy Area 1 — 76% (Country), 72% (EU Average)
Policy Area 2 — 72% (Country), 59% (EU Average)
Policy Area 3 — 72% (Country), 69% (EU Average)
Policy Area 4 — 84% (Country), 81% (EU Average)
Policy Area 5 — 89% (Country), 78% (EU Average)
Policy Area 6 — 92% (Country), 58% (EU Average)
Policy Area 7 — 89% (Country), 69% (EU Average)

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

AUSTRIA
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Austria | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
76%

Action	Value
1.1	Include and translate fundamental rights into policies and technology procurement rules	100%
1.2	Raise awareness on value-based digital transformation	94%
1.3	Establish ethical and technological expert councils	33%

Policy Area 2
Enhance social participation and inclusion
72%

Action	Value
2.1	Encourage the use of digital tools to foster citizen participation in policy decision making	15%
2.2	Ensure inclusiveness and accessibility for all to fully digital public services and information	100%
2.3	Provide easy access to services from mobiles	100%

Policy Area 3
Foster digital empowerment and digital literacy
72%

Action	Value
3.1	Launch and promote initiatives for citizens' digital literacy	35%
3.2	Provide easily accessible, user-friendly and seamless digital services	81%
3.3	Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
84%

Action	Value
4.1	Promote the rollout and use of notified eID in the public and private sectors	67%
4.2	Promote responsible and legally compliant re-use of data	85%
4.3	Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
89%

Action	Value
5.1	Jointly work towards agreements on requirements for technology providers	100%
5.2	Implement common standards and modular architectures in cross border digital solutions	67%
5.3	Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector ⭐
92%

Action	Value
6.1	Foster transparency and accountability when designing digital public services	88%
6.2	Share best practices on the development of human-centric AI systems	89%
6.3	Stimulate knowledge sharing on human centric technologies	100%

Policy Area 7
Foster resilience and sustainability ⭐
89%

Action	Value
7.1	Assess and make transparent energy consumption of digital tools and infrastructures	No data
7.2	Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	67%
7.3	Initiate expert consultations on appropriate use of digital technologies	100%
7.4	Foster the exchange of crisis management data	100%

EU Average ⭐ Good Practice

0%   20%   40%   60%   80%   100%

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Good Practices from Austria

Policy Action 6.2 | Share best practices on the development of successful human-centric AI systems in the public sector

KPI 34 | Share best practices on the development of successful human-centric AI systems in the public sector that can be used by all public administrations at European, national and sub-national levels

89%
EU Average
42%
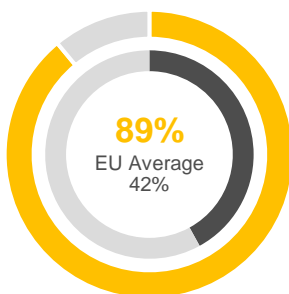
KPI 34

" Austria has well-established processes to share best practices on the development of successful human-centric AI systems in the public sector, at both European and national level.
At EU level, Austria is actively participating in the Member States Group on DEI ('Digitising European Industry') and AI as well as in the AI Watch Group.
At national level, Austria has recently established the 'AI policy forum' to efficiently implement its national strategy on AI.
Additionally, the 'KI Marktplatz' has been established as a platform for AI where providers of AI solutions can meet companies and research institutions to find solutions and practices for their AI projects.
There are two examples of successful human-centric AI systems in the Austrian public sector:
- On the government website, Austria offers the 'Mona' Chatbot to provide support and redirect users to the services/answers they are looking for.
- On the Ministry of Finance website, a Chatbot 'Fred' (named after 'Fair, Richtig, Einfach und Direkt') is available. It is very popular and has already been accessed 775,000 times since its launch in September 2019. Users have sent 1.4 million messages in 409,000 conversations. Fred was able to immediately answer about 90 percent of the questions sent. On YouTube, Fred presents the most important functions of FinanzOnline in an explanatory video - and with extraordinary success: So far, around 500,000 citizens have informed themselves in this way, with the video achieving third place in Austria's YouTube trends. "

Policy Action 7.1 | Consider how to assess and make transparent the energy sources and consumption of digital tools and infrastructures as well as ways to improve their efficiency

KPI 39 | Actions at national or sub-national level for improving energy efficiency, optimise local consumption of digital tools and infrastructures

100%
EU Average
66%
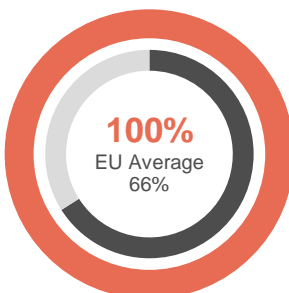
KPI 39

" Regarding actions for improving energy efficiency, optimising local consumption of digital tools and infrastructures, Austria notably adopted its National Action plan on sustainable public procurement (naBe) in June 2021, in which there is a criterion to procure IT equipment that is energy efficient, quiet and easy to repair or recycle. The criterion focuses on resource efficiency (including energy), fostering recycling of plastic parts and prolonging the lifetime of ICT products. Suppliers must ensure that ICT products are taken back after the first life cycle and will be refurbished for a second one.
Additionally, the Industry 4.0 Austria platform, an association of leading companies, scientific institutions and employee and employer representatives founded in 2015, has established working groups to discuss relevant topics such as the energy efficiency of the ICT sector. "

BELGIUM
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Belgium | Policy Areas level of implementation

Policy Area 1 — 50% / 72%
Policy Area 2 — 55% / 59%
Policy Area 3 — 74% / 69%
Policy Area 4 — 92% / 81%
Policy Area 5 — 86% / 78%
Policy Area 6 — 64% / 58%
Policy Area 7 — 68% / 69%

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
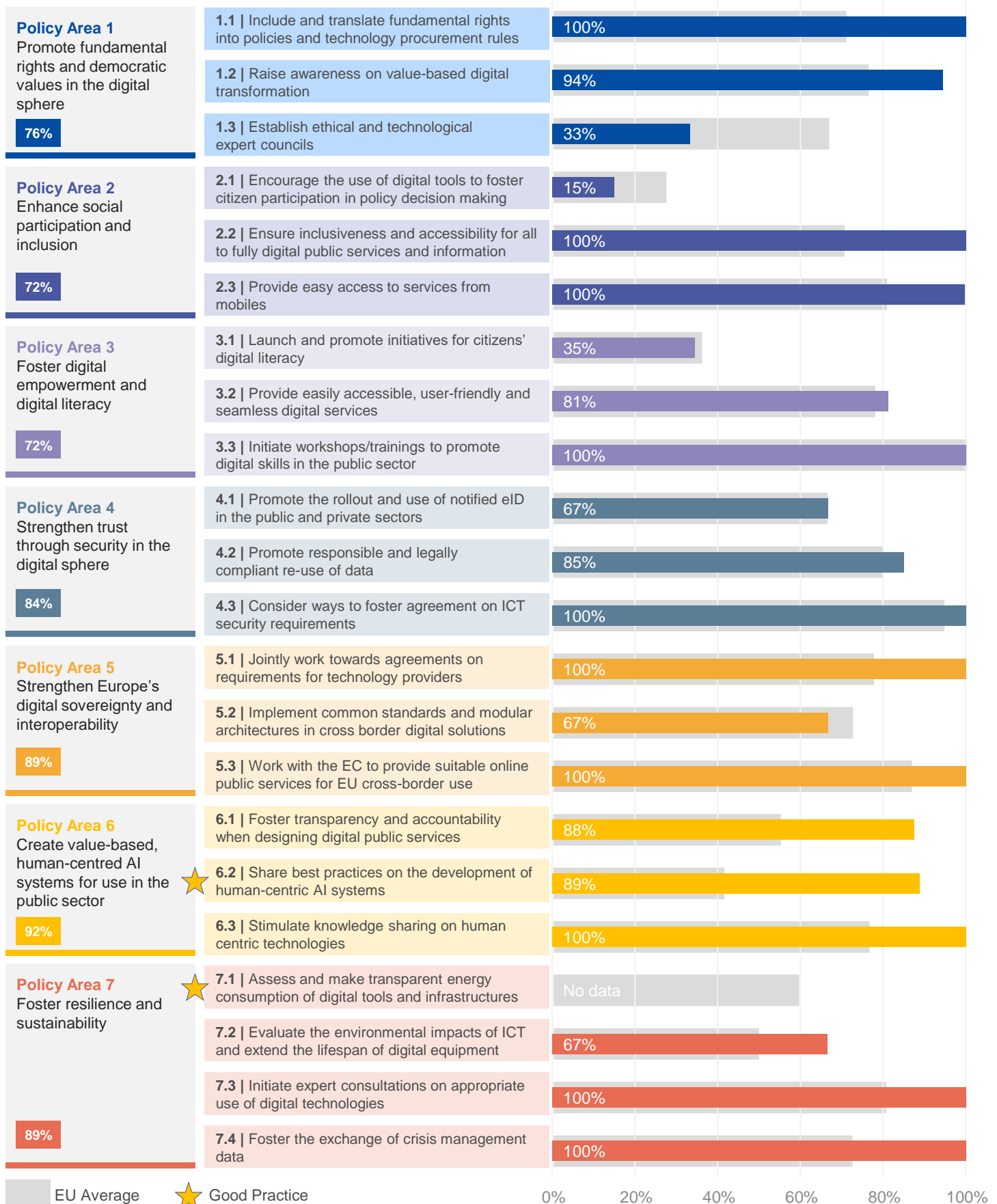The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

BELGIUM
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Belgium | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
50%

1.1 | Include and translate fundamental rights into policies and technology procurement rules	50%
1.2 | Raise awareness on value-based digital transformation	51%
1.3 | Establish ethical and technological expert councils	50%

Policy Area 2
Enhance social participation and inclusion
55%

2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	4%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	80%
2.3 | Provide easy access to services from mobiles	82%

Policy Area 3
Foster digital empowerment and digital literacy
74%

3.1 | Launch and promote initiatives for citizens' digital literacy	38%
3.2 | Provide easily accessible, user-friendly and seamless digital services	83%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
92%

4.1 | Promote the rollout and use of notified eID in the public and private sectors	100%
4.2 | Promote responsible and legally compliant re-use of data	77%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
86%

⭐ **5.1 |** Jointly work towards agreements on requirements for technology providers	100%
5.2 | Implement common standards and modular architectures in cross border digital solutions	92%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	67%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
64%

6.1 | Foster transparency and accountability when designing digital public services	No data
6.2 | Share best practices on the development of human-centric AI systems	44%
⭐ **6.3 |** Stimulate knowledge sharing on human centric technologies	83%

Policy Area 7
Foster resilience and sustainability
68%

7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	71%
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	33%
7.3 | Initiate expert consultations on appropriate use of digital technologies	No data
7.4 | Foster the exchange of crisis management data	100%

⬜ EU Average ⭐ Good Practice

0% 20% 40% 60% 80% 100%

Good Practices from Belgium

Policy Action 5.1 | Jointly work towards agreements on requirements for technology providers and solutions in the public sector that are essential for digital sovereignty

KPI 29 | Participation of Member States in EU Actions essential for digital sovereignty

100%
EU Average
76%

KPI 29

" With regard to digital sovereignty, the Interuniversity Microelectronics Centre (IMEC), an independent research centre for micro- and nano-electronics, is part of the Alliance on Processors and Semiconductor technologies, which gathers actors from the electronics value chain across the EU, including academia, research and technology organisations, but also users to join forces in order to maintain and boost the competitiveness of this sector in the EU.

At the national level, an open community of cloud stakeholders working on Gaia-X has been created. It focuses on building interest in and facilitating the scaling up of Gaia-X use cases. This community is part of the Gaia-X Alliance, whose mission is to strengthen digital European sovereignty by empowering the development of innovation data ecosystems. "

Policy Action 6.3 | Stimulate knowledge sharing between practitioners of administrative innovation strategies and on examples of human centric technologies in public administrations

KPI 35 | Knowledge sharing on public sector innovation strategies

100%
EU Average
83%
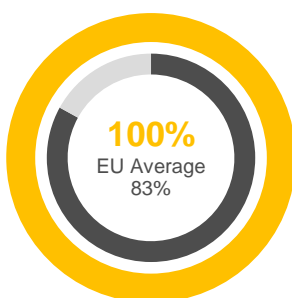
KPI 35

" Concerning knowledge sharing on public sector innovation strategies, NIDO, a public service innovation lab, has been created at the federal level. It offers civil servants a safe environment and an interactive approach to experiment with new and sustainable solutions to the challenges of public administration. It creates a national and international innovation ecosystem where knowledge and experience can be shared to accelerate innovation in the public sector.

In the Flemish administration, the Sandbox Flanders prototyping platform provides an environment where civil servants can experiment safely with new products and technologies. Its goal is to embed a sustainable innovation culture within the Flemish government by collaborating with start-ups.

Recently, the Innovation Network Government (Innovatie Netwerk Overheid, INO) has been created, which aims to improve the sharing of experiences and knowledge between practitioners of administrative innovation strategies.

Additionally, the Digital Open-network unites people from government services working on user-centric and people-oriented (digital) public services in order to share lessons learned as well as best practices and new tools. In 2021, 270 people took part in the activities organised by Digital Open, such as *lunchtalks* (thematic webinars), mini-masterclasses and collecting users insights on government websites. The challenges addressed by Digital Open are: (1) improving the accessibility of digital contact points; (2) optimizing the connection between physical and digital contact points; (3) drafting digital strategies; and (4) improving the user experience of digital tools and services. "

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BULGARIA
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Bulgaria | Policy Areas level of implementation

Country ☐ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

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BULGARIA
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Bulgaria | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
54%

1.1 | Include and translate fundamental rights into policies and technology procurement rules	83%
1.2 | Raise awareness on value-based digital transformation	78%
1.3 | Establish ethical and technological expert councils	0%

Policy Area 2
Enhance social participation and inclusion
48%

2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	25%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	60%
⭐ **2.3 |** Provide easy access to services from mobiles	59%

Policy Area 3
Foster digital empowerment and digital literacy
62%

3.1 | Launch and promote initiatives for citizens' digital literacy	25%
3.2 | Provide easily accessible, user-friendly and seamless digital services	62%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
64%

4.1 | Promote the rollout and use of notified eID in the public and private sectors	0%
4.2 | Promote responsible and legally compliant re-use of data	92%
⭐ **4.3 |** Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
83%

5.1 | Jointly work towards agreements on requirements for technology providers	No data
5.2 | Implement common standards and modular architectures in cross border digital solutions	67%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
57%

6.1 | Foster transparency and accountability when designing digital public services	71%
6.2 | Share best practices on the development of human-centric AI systems	33%
6.3 | Stimulate knowledge sharing on human centric technologies	66%

Policy Area 7
Foster resilience and sustainability
48%

7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	58%
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	33%
7.3 | Initiate expert consultations on appropriate use of digital technologies	0%
7.4 | Foster the exchange of crisis management data	100%

EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

More information on the model and country results is available in Appendix II

Good Practices from Bulgaria

Policy Action 2.3 | Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders

KPI 12 | Existence of a national strategy to enable citizens to use their mobile devices to carry out digital public services

100%
EU Average
84%
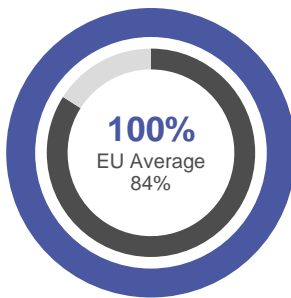
KPI 12

"The Bulgarian National Strategy for e-Government Development 2019-2025 includes a specific priority ('Establishment of appropriate conditions for the development and accessibility of digital networks and services') as well as dedicated measures to develop solutions and create an ecosystem that enables citizens to use their mobile devices to carry out digital public services.
Additionally, different authorities and public institutions have developed and launched various mobile solutions/applications for digital services, such as:
• the mobile version of the single portal for digital public services;
• the mobile application of the National Revenue Agency;
• the mobile application of the Ministry of interior; and
• the mobile application of the National Health Insurance Fund.

Policy Action 4.3 | Consider ways to foster agreement on ICT security requirements

KPI 28 | Existence of initiatives to foster agreement on ICT security requirements for the public procurement of data processing services

100%
EU Average
95%
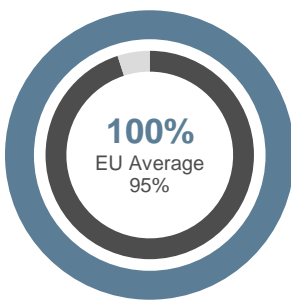
KPI 28

"In terms of initiatives to foster agreement on ICT security requirements for the public procurement of data processing services, the Bulgarian Public Procurement Agency (PPA) maintains and manages a Centralised Automated Electronic System for Public Procurement (CAES GPP) which is built on a modular principle that provides easy access to services in a structured form. The platform is a useful tool for organising fair and transparent procurement procedures. Its use leads to a significant reduction of administrative burden in the procurement process while considering high state-of-the-art information security requirements. The following best practices have been implemented in CAIS EAD:
• Access to the various functionalities in the e-procurement system is based on predefined roles and rights;
• Preparation of the tender is carried out entirely at the workstation of the economic operator and the exchange of information is encrypted. The system includes measures to prevent the possibility of unauthorised external access;
• Tenders submitted via the national electronic platform can only be duly encrypted and decrypted by the relevant economic operator. Secure electronic user identification and secure electronic transactions are used. Data transmission activities use a secure internet connection (HTTPS);
• The hardware architecture of the system includes a main and backup centre; measures have been taken to reserve data and prevent loss of information;
• The software and tools developed can be reused; and
• The award process promotes the use of criteria related to product life cycle assessment as well as the transition to a circular economy.

CROATIA
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Croatia | Policy Areas level of implementation

Policy Area 1 — 67% / 72%
Policy Area 2 — 70% / 59%
Policy Area 3 — 48% / 69%
Policy Area 4 — 65% / 81%
Policy Area 5 — 92% / 78%
Policy Area 6 — 36% / 58%
Policy Area 7 — 73% / 69%

☐ Country ☐ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
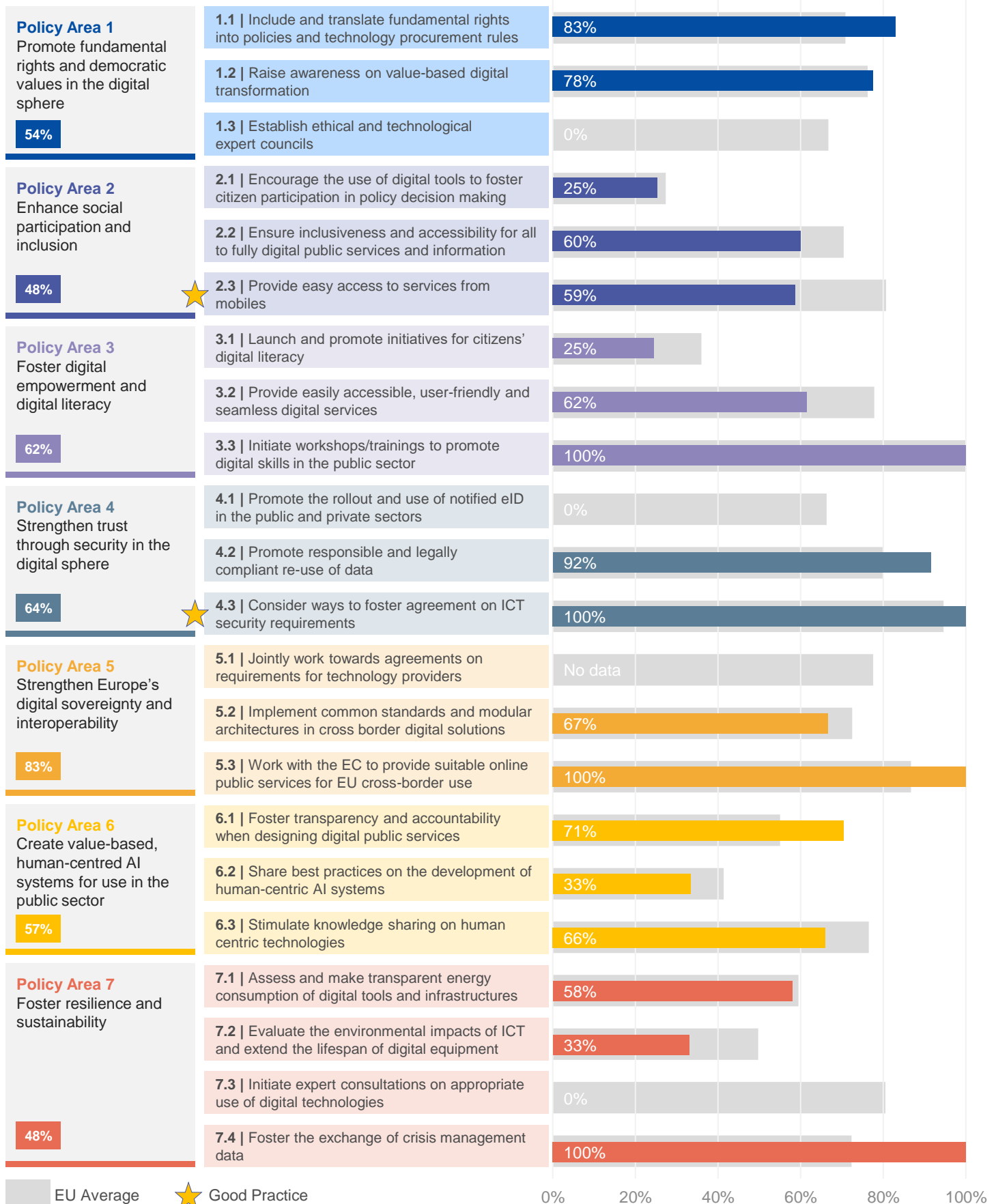The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

CROATIA

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Croatia | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
67%

- **1.1 |** Include and translate fundamental rights into policies and technology procurement rules — 33%
- **1.2 |** Raise awareness on value-based digital transformation — 100%
- **1.3 |** Establish ethical and technological expert councils — No data

Policy Area 2
Enhance social participation and inclusion
70%

- **2.1 |** Encourage the use of digital tools to foster citizen participation in policy decision making — 23%
- **2.2 |** Ensure inclusiveness and accessibility for all to fully digital public services and information — 100%
- **2.3 |** Provide easy access to services from mobiles — 87%

Policy Area 3
Foster digital empowerment and digital literacy
48%

- **3.1 |** Launch and promote initiatives for citizens' digital literacy — 32%
- **3.2 |** Provide easily accessible, user-friendly and seamless digital services — 65%
- **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector — No data

Policy Area 4
Strengthen trust through security in the digital sphere
65%

- **4.1 |** Promote the rollout and use of notified eID in the public and private sectors — 67%
- **4.2 |** Promote responsible and legally compliant re-use of data — 64%
- **4.3 |** Consider ways to foster agreement on ICT security requirements — No data

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
92%

- ⭐ **5.1 |** Jointly work towards agreements on requirements for technology providers — 100%
- **5.2 |** Implement common standards and modular architectures in cross border digital solutions — 75%
- **5.3 |** Work with the EC to provide suitable online public services for EU cross-border use — 100%

Policy Area 6
Create value-based, human-centered AI systems for use in the public sector
36%

- **6.1 |** Foster transparency and accountability when designing digital public services — No data
- ⭐ **6.2 |** Share best practices on the development of human-centric AI systems — 56%
- **6.3 |** Stimulate knowledge sharing on human centric technologies — 17%

Policy Area 7
Foster resilience and sustainability
73%

- **7.1 |** Assess and make transparent energy consumption of digital tools and infrastructures — 42%
- **7.2 |** Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — 50%
- **7.3 |** Initiate expert consultations on appropriate use of digital technologies — 100%
- **7.4 |** Foster the exchange of crisis management data — 100%

EU Average ⭐ Good Practice

0% 20% 40% 60% 80% 100%

Good Practices from Croatia

Policy Action 5.1 | Jointly work towards agreements on requirements for technology providers and solutions in the public sector that are essential for digital sovereignty

KPI 29 | Participation of Member States in EU Actions essential for digital sovereignty

100%
EU Average
76%
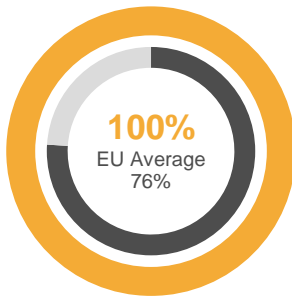
KPI 29

" Croatia participates in several EU actions dedicated to fostering digital sovereignty. In particular, Croatia was among the first signatories of the Declaration on a European Initiative for Processors and Semiconductor Technologies, which calls for an investment of around 145 billion euros in boosting the development of the European microelectronics and semiconductor sector over the next two to three years. The goal of this initiative is to establish European capacities for chip design and reduce dependence on imports. Therefore, the Association for Microelectronics and Semiconductors (ZaMiP) has been established within the Croatian Chamber of Commerce, which will work towards actively involving the Croatian economy in this European initiative. "

Policy Action 6.2 | Share best practices on the development of successful human-centric AI systems in the public sector

KPI 34 | Share best practices on the development of successful human-centric AI systems in the public sector that can be used by all public administrations at European, national and sub-national levels

56%
EU Average
42%
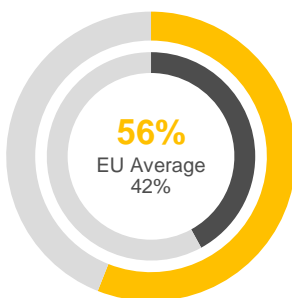
KPI 34

" One Croatian best practice on the development of successful human-centric AI systems in the public sector is Certilia, a software and service provided directly by the Croatian government focusing on digital identity and digital document signing with qualified electronic signatures. Certilia is providing a service of digital identity creation where citizens can have their digital identity backed up with their ID card in just a few clicks. "

22

CYPRUS
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Cyprus | Policy Areas level of implementation

■Country □EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
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CYPRUS

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Cyprus | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere

No data

Policy Action	Value
1.1 | Include and translate fundamental rights into policies and technology procurement rules	No data
1.2 | Raise awareness on value-based digital transformation	85%
1.3 | Establish ethical and technological expert councils	No data

Policy Area 2
Enhance social participation and inclusion

59%

Policy Action	Value
2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	6%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	80%
2.3 | Provide easy access to services from mobiles	91%

Policy Area 3
Foster digital empowerment and digital literacy

63%

Policy Action	Value
3.1 | Launch and promote initiatives for citizens' digital literacy	28%
3.2 | Provide easily accessible, user-friendly and seamless digital services	62%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere

68%

Policy Action	Value
4.1 | Promote the rollout and use of notified eID in the public and private sectors	67%
4.2 | Promote responsible and legally compliant re-use of data	71%
4.3 | Consider ways to foster agreement on ICT security requirements	66%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability

58%

Policy Action	Value
5.1 | Jointly work towards agreements on requirements for technology providers	50%
5.2 | Implement common standards and modular architectures in cross border digital solutions	58%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	67%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector

34%

Policy Action	Value
6.1 | Foster transparency and accountability when designing digital public services	46%
6.2 | Share best practices on the development of human-centric AI systems	22%
6.3 | Stimulate knowledge sharing on human centric technologies	No data

Policy Area 7
Foster resilience and sustainability

No data

Policy Action	Value
7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	No data
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	50%
7.3 | Initiate expert consultations on appropriate use of digital technologies	100%
7.4 | Foster the exchange of crisis management data	No data

EU Average

0% 20% 40% 60% 80% 100%

24

CZECH REPUBLIC
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Czech Republic | Policy Areas level of implementation

Policy Area 1 — 78% / 72%
Policy Area 2 — 57% / 59%
Policy Area 3 — 71% / 69%
Policy Area 4 — 81% / 81%
Policy Area 5 — 75% / 78%
Policy Area 6 — 54% / 58%
Policy Area 7 — 77% / 69%

■Country ■EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
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CZECH REPUBLIC
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Czech Republic | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
78%

1.1 | Include and translate fundamental rights into policies and technology procurement rules	67%
⭐ **1.2 |** Raise awareness on value-based digital transformation	100%
1.3 | Establish ethical and technological expert councils	67%

Policy Area 2
Enhance social participation and inclusion
57%

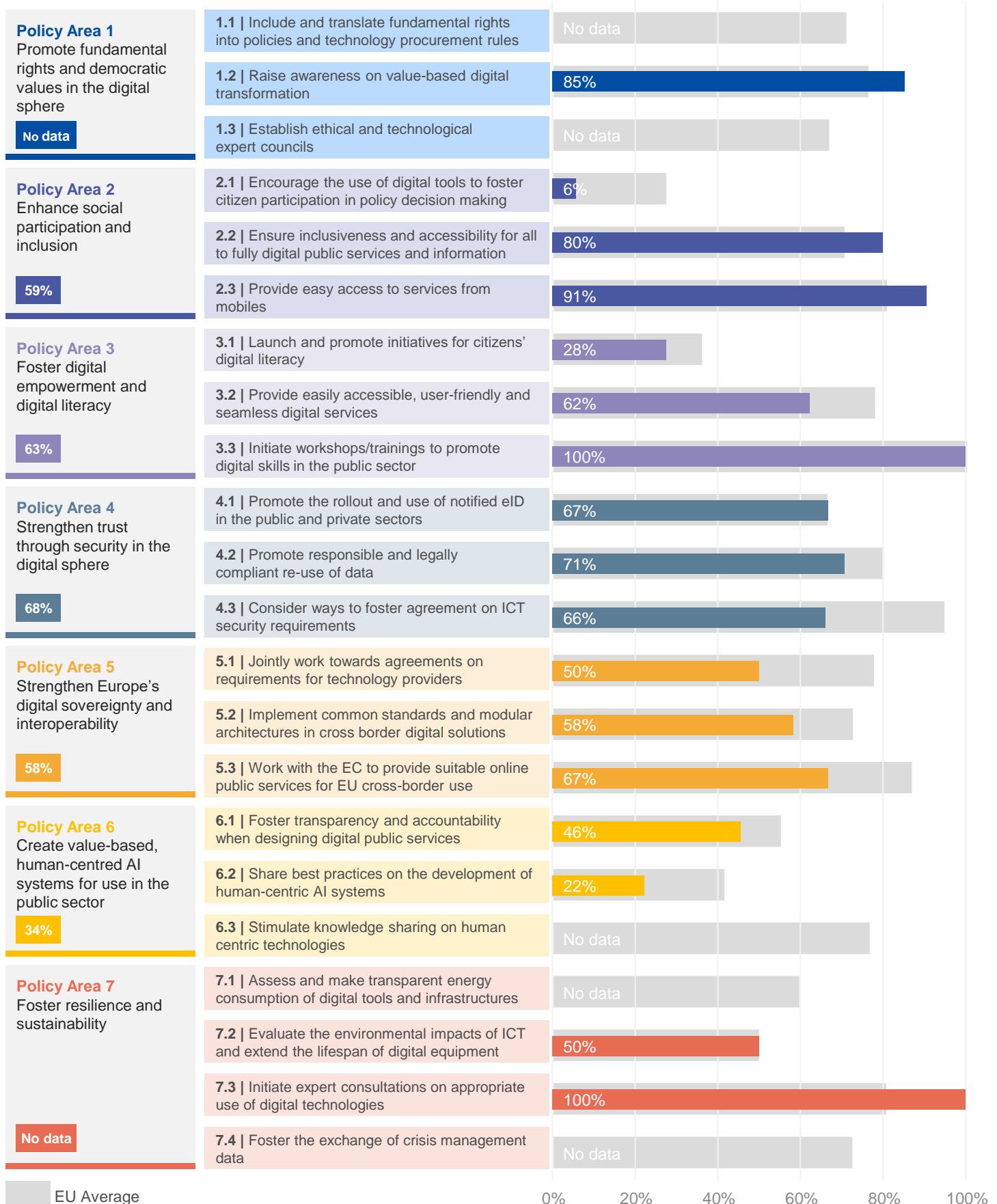|	
2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	6%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	80%
⭐ **2.3 |** Provide easy access to services from mobiles	84%

Policy Area 3
Foster digital empowerment and digital literacy
71%

3.1 | Launch and promote initiatives for citizens' digital literacy	34%
3.2 | Provide easily accessible, user-friendly and seamless digital services	79%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
81%

4.1 | Promote the rollout and use of notified eID in the public and private sectors	89%
4.2 | Promote responsible and legally compliant re-use of data	89%
4.3 | Consider ways to foster agreement on ICT security requirements	66%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
75%

5.1 | Jointly work towards agreements on requirements for technology providers	50%
5.2 | Implement common standards and modular architectures in cross border digital solutions	75%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
54%

6.1 | Foster transparency and accountability when designing digital public services	58%
6.2 | Share best practices on the development of human-centric AI systems	22%
6.3 | Stimulate knowledge sharing on human centric technologies	83%

Policy Area 7
Foster resilience and sustainability
77%

7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	54%
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	55%
7.3 | Initiate expert consultations on appropriate use of digital technologies	100%
7.4 | Foster the exchange of crisis management data	100%

EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

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More information on the model and country results is available in Appendix II

Good Practices from Czech Republic

Policy Action 1.2 | Engage in strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, i.e., by building platforms to exchange and further develop national and European strategies with regard to digital transformation and by organising cross-border and international exchange

KPI 3 | Number of workshops/events organised on cross-border initiatives at national level or European level

100%
EU Average
51%
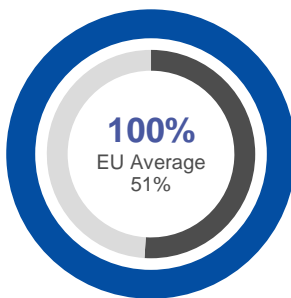
KPI 3

> Many events on cross-border initiatives have taken place at different levels of government and have been organized by various stakeholders. Such events include regular and ad-hoc meetings of relevant working committees of the Government Council for Information Society, as well as national and international conferences and events organized in cooperation with the private sector, academia and non-profit companies. These events focus on current issues and topics related to the digital transformation of society and the government. Examples of national initiatives include:
> - Cross-border eHealth services in the EU: these workshops focus on ePrescription/eDispensing and are organized by the Vysocina region in the context of CEF Telecom projects;
> - AI conferences: 1st International Congress for the Governance of AI (ICGAI);
>
> Examples of cross-border initiatives include:
> - Cross-border eHealth services in the sU (in the context of CEF TELECOM, with Luxembourg, Croatia, Portugal, France)
> - SOLAIR Conference: its main focus is on fundamental rights and values in the digital age regarding the use and development of AI. Participants included representatives of the OECD, UNESCO, UNIDROIT, UNCITRAL and other organisations.

Policy Action 2.3 | Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders

KPI 11 | Cooperation between EU Member States to ensure cross-border access to services via the mobile channel

100%
EU Average
66%
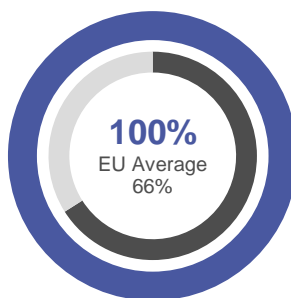
KPI 11

> In Czech Republic, the main cross-border interoperability element of the mobile channel initiative is a pre-notification of the 'Mobile eGovernment Key' and 'mojeID' under eIDAS.
> The Mobile eGovernment Key application is available for Android and iOS. Citizens can use it to access national digital government services.
> In the near future, this secure eID (mojeID) will be recognised by other EU countries under the eIDAS scheme.
> Generally, government discussions focus on issues related to the wider use of mobile channels by digital government services. Non-government platforms for national digital transformation have offered their support to the public administration to speed up innovation and increase the use of mobile channels. The Chief Digital Officer is involved in these discussions, as are sectoral CIOs.
> The Ministry of Interior also published a Design system, which outlines the guidelines for digital government service development. In particular, 'Mobile First' is one of key principles that must be implemented by digital government service designers.
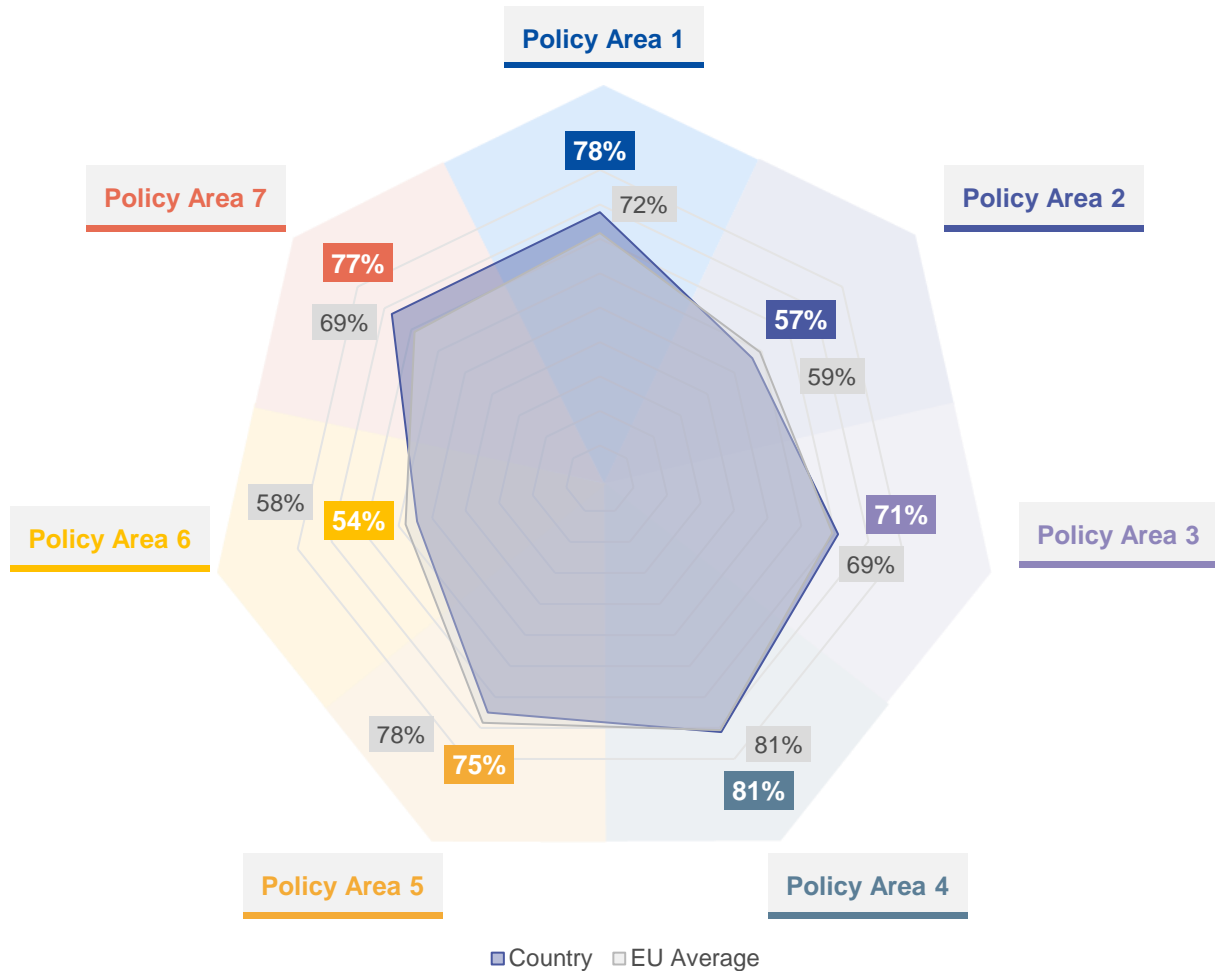
DENMARK
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Denmark | Policy Areas level of implementation

Policy Area 1
95%
72%

Policy Area 2
92%
59%

Policy Area 3
80%
69%

Policy Area 4
93%
81%

Policy Area 5
88%
78%

Policy Area 6
69%
58%

Policy Area 7
85%
69%

◼ Country ◻ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
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DENMARK
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Denmark | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
95%

1.1 | Include and translate fundamental rights into policies and technology procurement rules	100%
1.2 | Raise awareness on value-based digital transformation	85%
⭐ **1.3 |** Establish ethical and technological expert councils	100%

Policy Area 2
Enhance social participation and inclusion
92%

2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	75%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	100%
2.3 | Provide easy access to services from mobiles	100%

Policy Area 3
Foster digital empowerment and digital literacy
80%

3.1 | Launch and promote initiatives for citizens' digital literacy	45%
3.2 | Provide easily accessible, user-friendly and seamless digital services	95%
⭐ **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
93%

4.1 | Promote the rollout and use of notified eID in the public and private sectors	100%
4.2 | Promote responsible and legally compliant re-use of data	80%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
88%

5.1 | Jointly work towards agreements on requirements for technology providers	No data
5.2 | Implement common standards and modular architectures in cross border digital solutions	75%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
69%

6.1 | Foster transparency and accountability when designing digital public services	63%
6.2 | Share best practices on the development of human-centric AI systems	44%
6.3 | Stimulate knowledge sharing on human centric technologies	100%

Policy Area 7
Foster resilience and sustainability
85%

7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	No data
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	55%
7.3 | Initiate expert consultations on appropriate use of digital technologies	100%
7.4 | Foster the exchange of crisis management data	100%

EU Average ⭐ Good Practice

0%   20%   40%   60%   80%   100%

More information on the model and country results is available in Appendix II

Good Practices from Denmark

Policy Action 1.3 | Encourage the establishment of ethical and technological expert councils to provide advice to and foster debate among citizens

KPI 6 | Existence of initiatives promoting the set-up of ethical and technological expert councils to provide advice to, and foster debate among citizens

100%
EU Average
70%

KPI 6

"The Danish Data Ethics Council was created in 2019 and contributes to an open debate on topics such as the use of new digital solutions, data, artificial intelligence and the dilemmas that new technologies may raise.

Furthermore, the Tech for Democracy initiative brings together states, multilateral organisations, tech sector representatives, and civil society to power up a multi-stakeholder push for protecting and promoting democracy and human rights in an era of rapid technological development.

A virtual conference took place on 18 November 2021 and launched a multi-stakeholder dialogue and laid the ground for a year of action.

In June 2022, a high-level physical conference in Copenhagen will take stock of the progress made and will serve as a platform for increasing commitments to strengthen digital democracy in advance of the US Summit for Democracy.

Additionally, Denmark works to ensure that everyone is able to participate in digital society. Therefore, the Agency for Digital Government has a Division for Digital Inclusion, which is represented in the Network for Digital Inclusion. The network has been in place for six years, and is made up of citizen organisations, relevant private organisations and (local and central) authorities."

Policy Action 3.3 | Initiate workshops, training etc. in order to promote digital skills and awareness in the public sector

KPI 19 | Promotion of digital skills and awareness in the public sector

100%
EU Average
100%
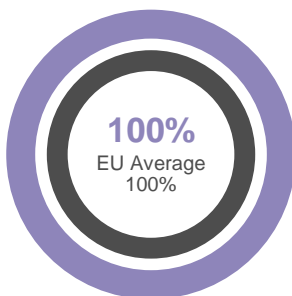
KPI 19

"A digital academy has been established where civil servants in the public sector are offered workshops, seminars, training and courses on a regular basis to enhance, understand and use technology in their work. In 2017, one of the central objectives of the government ICT strategy was to make sure that government staff members have the right skills and competencies to understand and see the opportunities that ICT presents within their particular field. Therefore, the Central Government Academy for Digitisation was created. It proposes a catalogue of 10 courses that are tailored to the special needs and context of the central government. The courses provide general introductions to digitisation as well as more specialised lessons. The courses typically last 2-3 days with an average of 10-16 participants, and a maximum of 25. The academy offers both open courses and team-based courses tailored to the recipient with minor changes to the content."
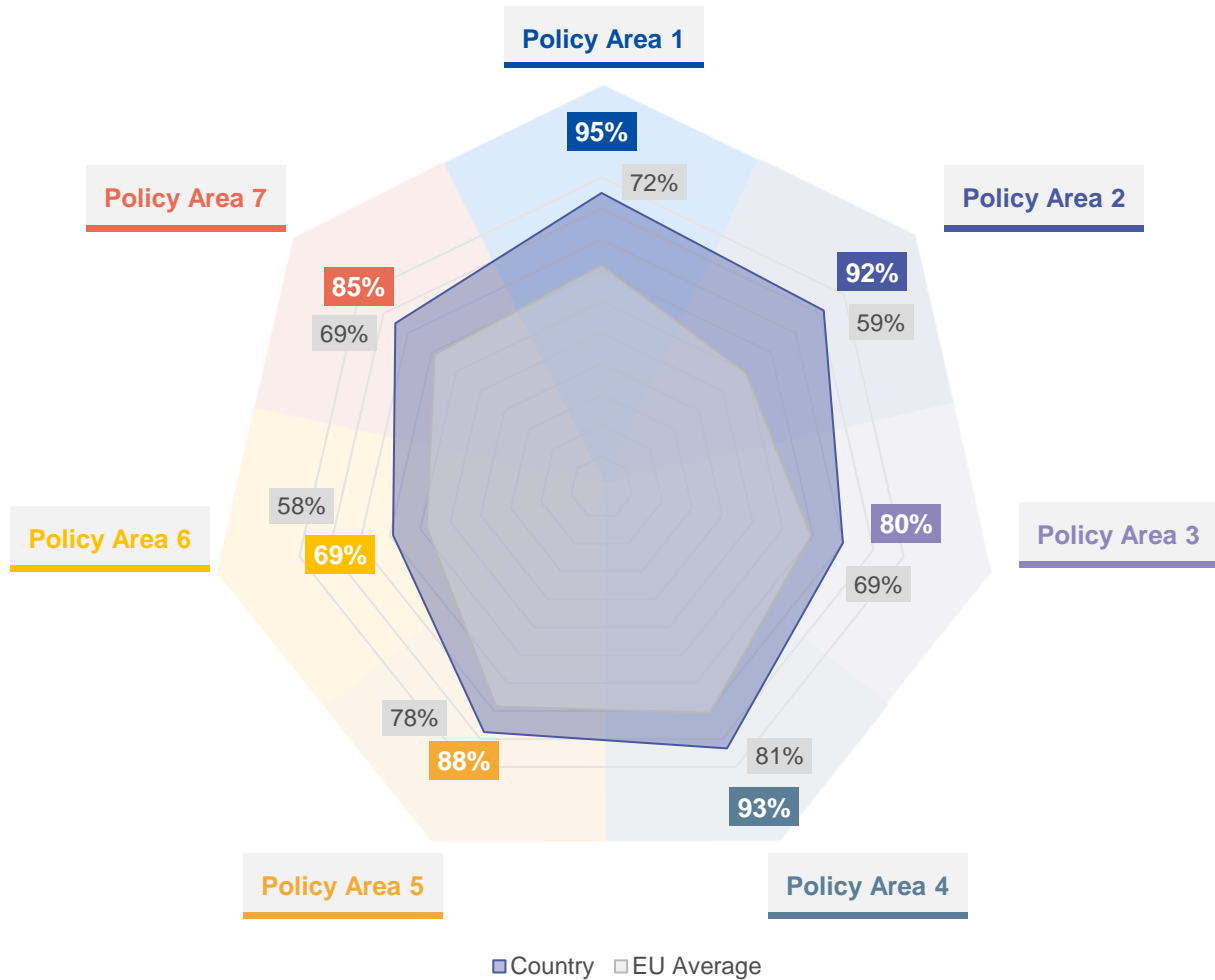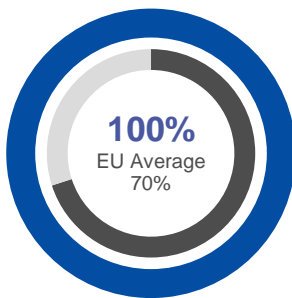
ESTONIA
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Estonia | Policy Areas level of implementation

Policy Area 1 — 65% / 72%
Policy Area 7 — 76% / 69%
Policy Area 2 — 56% / 59%
Policy Area 3 — 74% / 69%
Policy Area 6 — 94% / 58%
Policy Area 4 — 93% / 81%
Policy Area 5 — 75% / 78%

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

More information on the model and country results is available in Appendix II

ESTONIA

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Estonia | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
65%

- **1.1 |** Include and translate fundamental rights into policies and technology procurement rules — 100%
- **1.2 |** Raise awareness on value-based digital transformation — 44%
- **1.3 |** Establish ethical and technological expert councils — 50%

Policy Area 2
Enhance social participation and inclusion
56%

- **2.1 |** Encourage the use of digital tools to foster citizen participation in policy decision making — 44%
- **2.2 |** Ensure inclusiveness and accessibility for all to fully digital public services and information — 60%
- **2.3 |** Provide easy access to services from mobiles — 65%

Policy Area 3
Foster digital empowerment and digital literacy
74%

- **3.1 |** Launch and promote initiatives for citizens' digital literacy — 37%
- **3.2 |** Provide easily accessible, user-friendly and seamless digital services — 86%
- **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector — 100%

Policy Area 4
Strengthen trust through security in the digital sphere
93%

- **4.1 |** Promote the rollout and use of notified eID in the public and private sectors — 100%
- **4.2 |** Promote responsible and legally compliant re-use of data — 80%
- **4.3 |** Consider ways to foster agreement on ICT security requirements — 100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
75%

- **5.1 |** Jointly work towards agreements on requirements for technology providers — 50%
- **5.2 |** Implement common standards and modular architectures in cross border digital solutions — 75%
- **5.3 |** Work with the EC to provide suitable online public services for EU cross-border use — 100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
94%

- **6.1 |** Foster transparency and accountability when designing digital public services — 83%
- **6.2 |** Share best practices on the development of human-centric AI systems — 100%
- **6.3 |** Stimulate knowledge sharing on human centric technologies — 100%

Policy Area 7
Foster resilience and sustainability
76%

- **7.1 |** Assess and make transparent energy consumption of digital tools and infrastructures — 71%
- **7.2 |** Evaluate the environmental impacts of ICT and extend the lifespan of digital equipmen — 66%
- **7.3 |** Initiate expert consultations on appropriate use of digital technologies — 100%
- **7.4 |** Foster the exchange of crisis management data — 66%
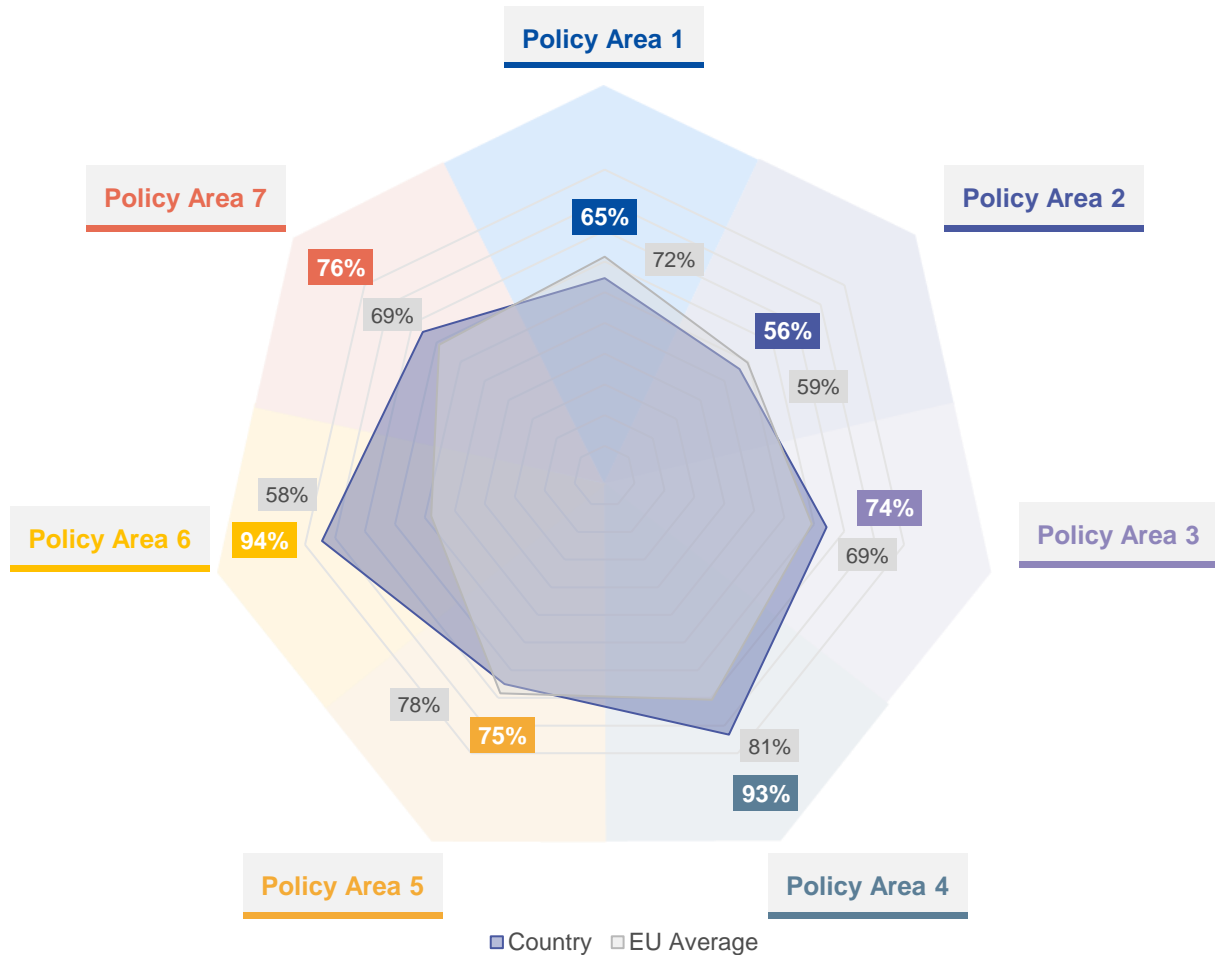
EU Average

0% 20% 40% 60% 80% 100%

FINLAND
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Finland | Policy Areas level of implementation

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.
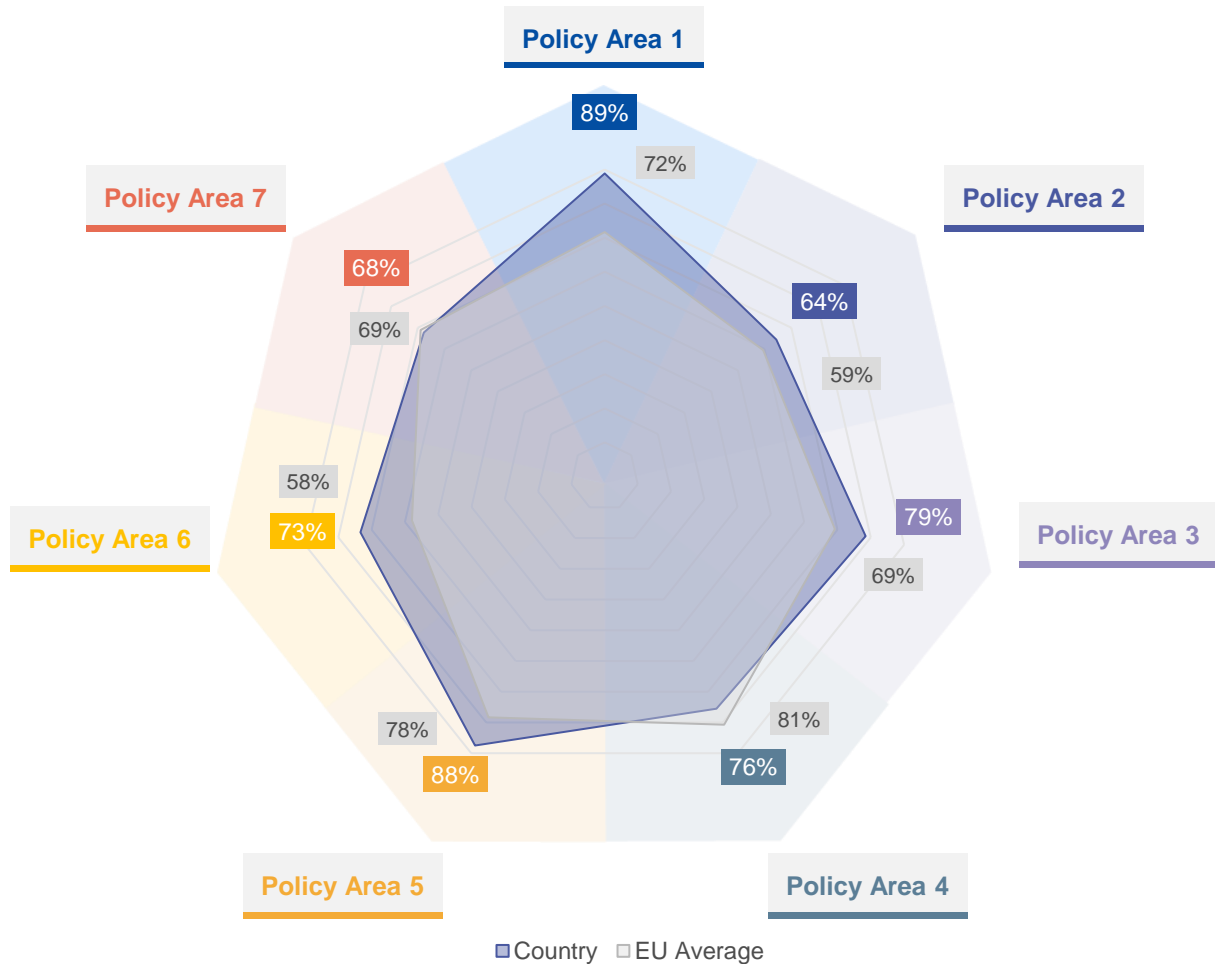
FINLAND

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Finland | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
89%

- 1.1 | Include and translate fundamental rights into policies and technology procurement rules — 67%
- 1.2 | Raise awareness on value-based digital transformation — 100%
- 1.3 | Establish ethical and technological expert councils — 100%

Policy Area 2
Enhance social participation and inclusion
64%

- 2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making — 33%
- 2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information — 60%
- ⭐ 2.3 | Provide easy access to services from mobiles — 100%

Policy Area 3
Foster digital empowerment and digital literacy
79%

- 3.1 | Launch and promote initiatives for citizens' digital literacy — 42%
- 3.2 | Provide easily accessible, user-friendly and seamless digital services — 94%
- 3.3 | Initiate workshops/trainings to promote digital skills in the public sector — 100%

Policy Area 4
Strengthen trust through security in the digital sphere
76%

- 4.1 | Promote the rollout and use of notified eID in the public and private sectors — 33%
- 4.2 | Promote responsible and legally compliant re-use of data — 93%
- 4.3 | Consider ways to foster agreement on ICT security requirements — 100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
88%

- ⭐ 5.1 | Jointly work towards agreements on requirements for technology providers — 100%
- 5.2 | Implement common standards and modular architectures in cross border digital solutions — 75%
- 5.3 | Work with the EC to provide suitable online public services for EU cross-border use — No data

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
73%

- 6.1 | Foster transparency and accountability when designing digital public services — 71%
- 6.2 | Share best practices on the development of human-centric AI systems — 67%
- 6.3 | Stimulate knowledge sharing on human centric technologies — 83%

Policy Area 7
Foster resilience and sustainability
68%

- 7.1 | Assess and make transparent energy consumption of digital tools and infrastructures — 83%
- 7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — 22%
- 7.3 | Initiate expert consultations on appropriate use of digital technologies — 100%
- 7.4 | Foster the exchange of crisis management data — 66%

Legend: ▭ EU Average   ⭐ Good Practice

Scale: 0% 20% 40% 60% 80% 100%

34

Good Practices from Finland

Policy Action 2.3 | Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders

KPI 11 | Cooperation between EU Member States to ensure cross-border access to services via the mobile channel

100%
EU Average
66%
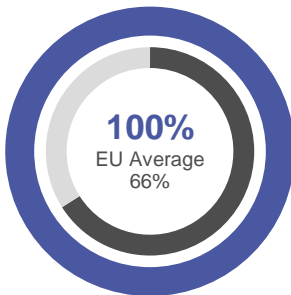
KPI 11

"As regard to cooperation between EU Member States to ensure cross-border access to services via the mobile channel, the Nordic and Baltic countries (i.e., Denmark, Finland, Norway, Sweden, Estonia, Latvia and Lithuania) are working on the Nordic-Baltic eID project (NOBID) under the auspice of the Nordic Council of Ministers. The project supports the cooperation between the Nordic and Baltic countries and the implementation of the Commission's initiative from June 2021 on a digital wallet, for example by promoting the EU-wide common toolbox, which will encompass the standards, technical architecture, and best practices for the digital wallet framework. The NOBID project is part of the Cross-Border Digital Services -Programme, which promotes cross-border digital services and mobility of data between the Nordic and Baltic countries.

Furthermore, Finland is in cooperation on digital identity with other EU Member States, especially with the Netherlands (through the Coalition of the Willing). The main purpose of this cooperation is to share experiences on national digital identity schemes and to pilot some cross-border use case(s)."

Policy Action 5.1 | Jointly work towards agreements on requirements for technology providers and solutions in the public sector that are essential for digital sovereignty

KPI 29 | Participation of Member States in EU Actions essential for digital sovereignty

100%
EU Average
76%
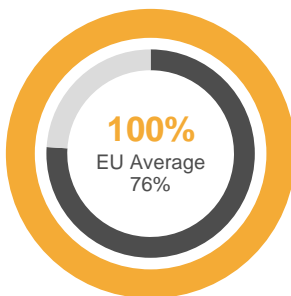
KPI 29

"Regarding Finland's participation in EU Actions for digital sovereignty, as a part of the Recovery and Resilience Facility programme, the country decided to launch two funding calls intended to build or develop testing, experimentation, research and innovation environments that promote the development of 6G, AI or quantum computing, as well as infrastructures that support sustainable growth and digitalisation.

Beside this, the Finnish national Gaia-X network is coordinated by the Finnish Innovation Fund SITRA. Dozens of companies have joined SITRA and there are Finnish representatives participating in the international Gaia-X project organisation."

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FRANCE
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for France | Policy Areas level of implementation

Policy Area 1 — 93% / 72%
Policy Area 2 — 57% / 59%
Policy Area 3 — 70% / 69%
Policy Area 4 — 93% / 81%
Policy Area 5 — 81% / 79%
Policy Area 6 — 57% / 58%
Policy Area 7 — 81% / 69%

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
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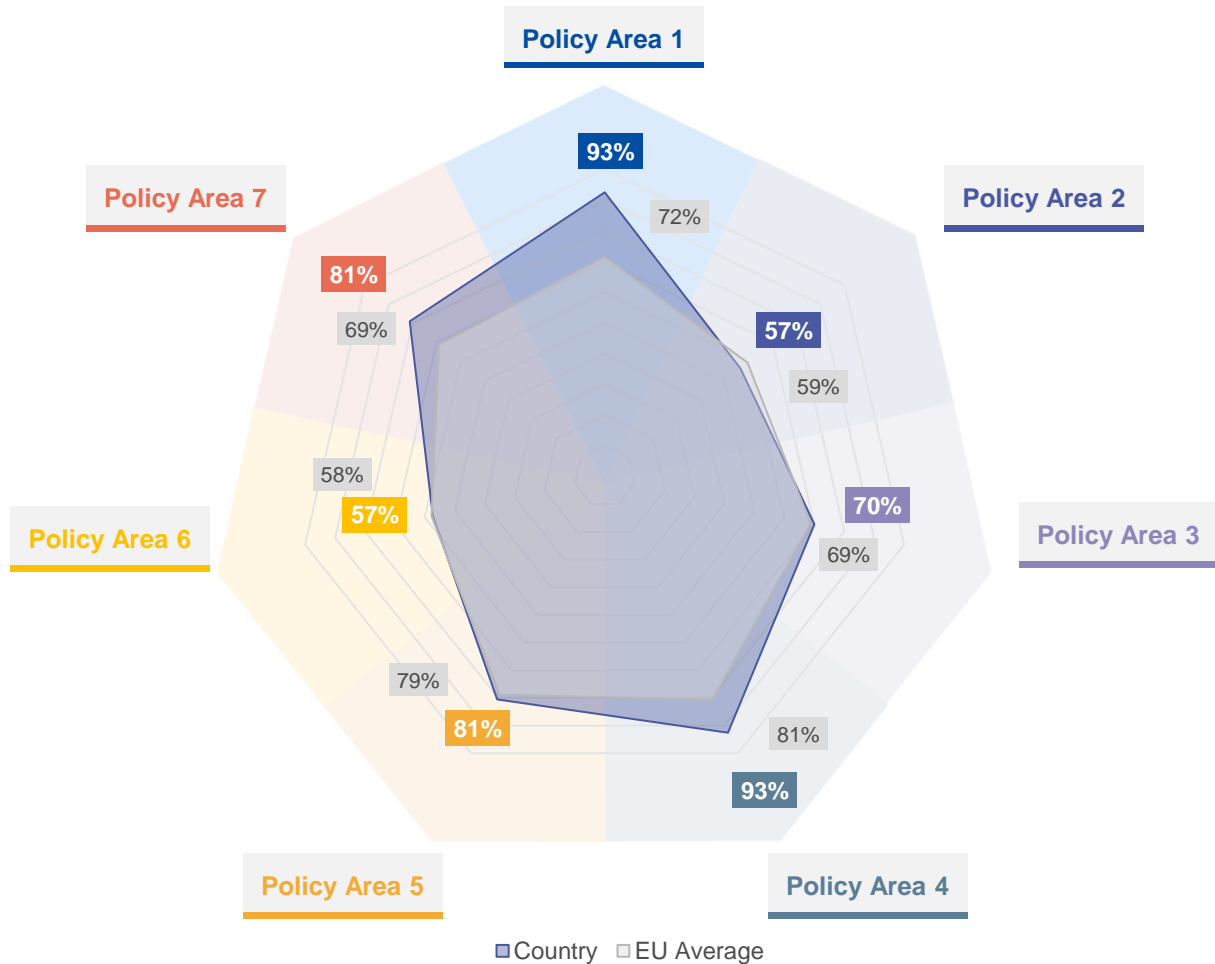
FRANCE
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for France | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
93%

1.1 | Include and translate fundamental rights into policies and technology procurement rules	100%
1.2 | Raise awareness on value-based digital transformation	78%
⭐ **1.3 |** Establish ethical and technological expert councils	100%

Policy Area 2
Enhance social participation and inclusion
57%

2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	30%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	40%
2.3 | Provide easy access to services from mobiles	100%

Policy Area 3
Foster digital empowerment and digital literacy
70%

3.1 | Launch and promote initiatives for citizens' digital literacy	36%
3.2 | Provide easily accessible, user-friendly and seamless digital services	75%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
93%

4.1 | Promote the rollout and use of notified eID in the public and private sectors	78%
4.2 | Promote responsible and legally compliant re-use of data	100%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
81%

5.1 | Jointly work towards agreements on requirements for technology providers	100%
5.2 | Implement common standards and modular architectures in cross border digital solutions	75%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	67%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
57%

⭐ **6.1 |** Foster transparency and accountability when designing digital public services	50%
6.2 | Share best practices on the development of human-centric AI systems	22%
6.3 | Stimulate knowledge sharing on human centric technologies	100%

Policy Area 7
Foster resilience and sustainability
81%

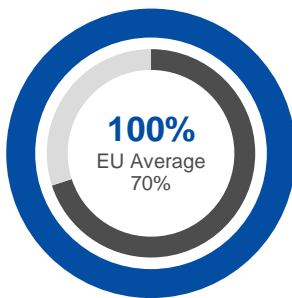|	
7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	No data
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	77%
7.3 | Initiate expert consultations on appropriate use of digital technologies	100%
7.4 | Foster the exchange of crisis management data	66%

⬜ EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

Good Practices from France

Policy Action 1.3 | Encourage the establishment of ethical and technological expert councils to provide advice to and foster debate among citizens

KPI 6 | Existence of initiatives promoting the set up of ethical and technological expert councils to provide advice to, and foster debate among citizens

100%
EU Average
70%

KPI 6

“France established both an Ethical Council and a Technological Council. Since 2011, the National Digital Council (*Conseil national du numérique*), an independent council gathering philosophers, sociologists, psychologists, anthropologists, members of Parliament, economists, business leaders, lawyers, scientists and technological experts, is responsible for questioning the relationship between humans and digital technology, for structuring the debate around this issue and for giving advice. Its mission is twofold: to produce open thinking on digital technology, in all its dimensions, and to organise consultations at the European, national and local levels with public authorities, elected officials, economic actors, associations, academia and civil society. Additionally, the Data Protection Authority (CNIL), the Audiovisual Council (CSA), the High Authority for the distribution of art works and the protection of rights on the Internet (HADOPI) and the Human Rights Protection Authority (*Défenseur des droits*) have published an Educational Kit for the Digital Citizen in January 2021. This Kit addresses the issues of rights on the Internet, protection of online privacy, respect of creation and reasoned use of screens.”

Policy Action 6.1 | Foster transparency and accountability i.e., by revealing when automated decision-making processes are used in digital public services, and ensure quality standards of data sets fed into AI systems when designing digital public services (e.g., by quality seals for data sets)

KPI 32 | Transparency with regards to automated decision-making process used in digital public services

100%
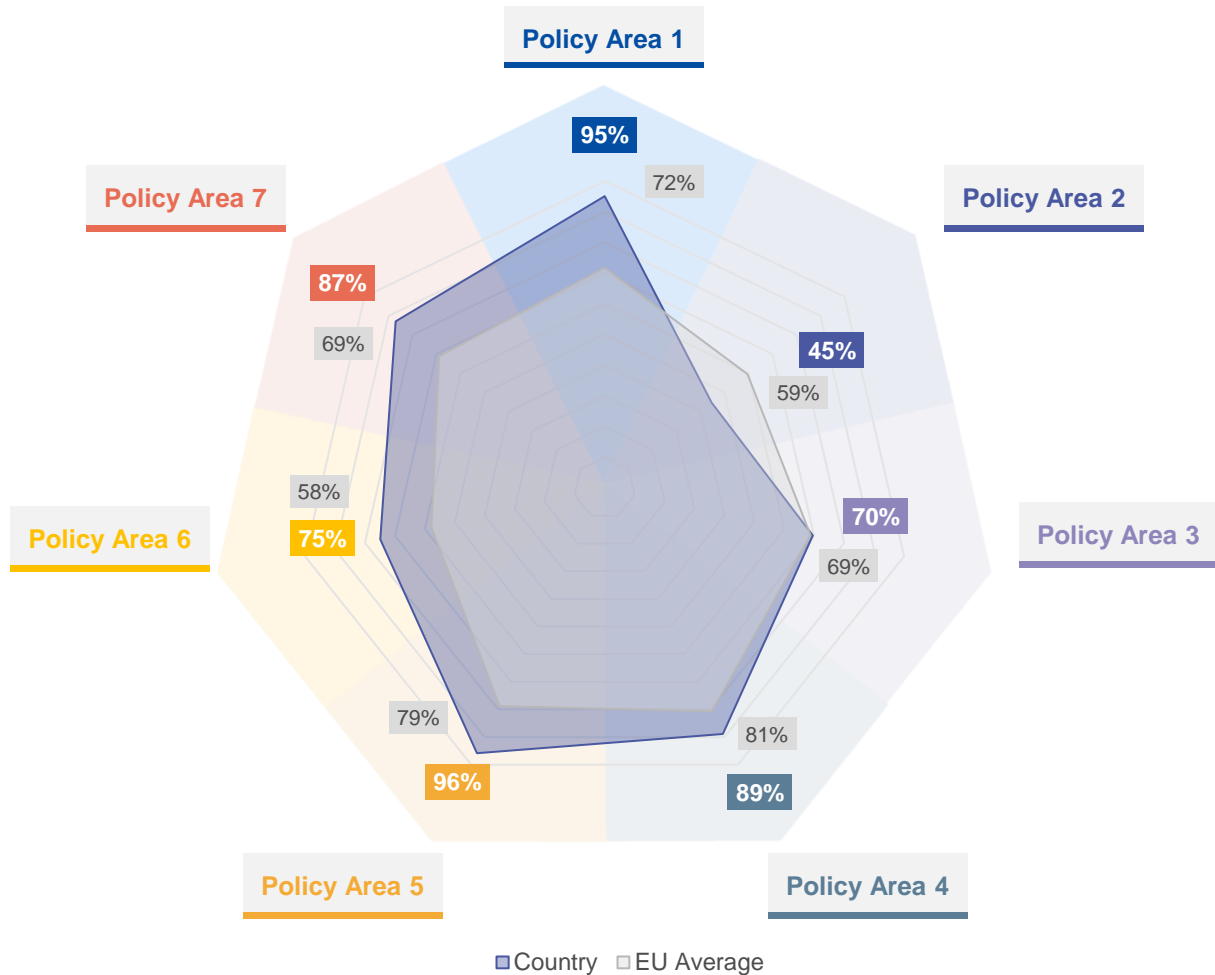EU Average
52%
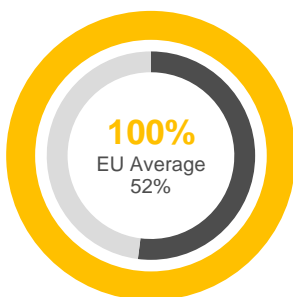
KPI 32

“In terms of transparency with regards to automated decision-making process used in digital public services, France has a legal framework ensuring that, whenever a decision is made on the basis of algorithmic processing, people are informed whether or not this decision is automatic (See: article 4 of Law No. 2016-1321 of October 7th, 2016 for a Digital Republic and Article L311-3-1 in Code of relations between the public and the administration).

As of July 1st, 2020, all automated processing have to include under risk of nullity, the obligation of explicit mention. Moreover, the same article specifies that 'the data controller shall ensure that the algorithmic processing and its evolution are under control in order to be able to explain, in detail and in an intelligible form, to the data subject, the way in which the processing has been implemented with regard to him'.

Etalab, a department of the Interministerial Digital Directorate (DINUM), has published a guide for public administrations, and a paper explaining it: 'With great power comes great responsibility: keeping public sector algorithms accountable', white paper for RightsCon Tunis, June 2019.”

GERMANY
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Germany | Policy Areas level of implementation

Policy Area 1
95%
72%

Policy Area 7
87%
69%

Policy Area 2
45%
59%

Policy Area 6
58%
75%

Policy Area 3
70%
69%

Policy Area 5
96%
79%

Policy Area 4
89%
81%

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.

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GERMANY
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Germany | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
95%

- **1.1 |** Include and translate fundamental rights into policies and technology procurement rules — 100%
- ⭐ **1.2 |** Raise awareness on value-based digital transformation — 85%
- **1.3 |** Establish ethical and technological expert councils — 100%

Policy Area 2
Enhance social participation and inclusion
45%

- **2.1 |** Encourage the use of digital tools to foster citizen participation in policy decision making — 4%
- **2.2 |** Ensure inclusiveness and accessibility for all to fully digital public services and information — No data
- **2.3 |** Provide easy access to services from mobiles — 85%

Policy Area 3
Foster digital empowerment and digital literacy
70%

- **3.1 |** Launch and promote initiatives for citizens' digital literacy — 41%
- **3.2 |** Provide easily accessible, user-friendly and seamless digital services — 68%
- **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector — 100%

Policy Area 4
Strengthen trust through security in the digital sphere
89%

- **4.1 |** Promote the rollout and use of notified eID in the public and private sectors — 67%
- **4.2 |** Promote responsible and legally compliant re-use of data — 100%
- **4.3 |** Consider ways to foster agreement on ICT security requirements — 100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
96%

- **5.1 |** Jointly work towards agreements on requirements for technology providers — 100%
- **5.2 |** Implement common standards and modular architectures in cross border digital solutions — 92%
- **5.3 |** Work with the EC to provide suitable online public services for EU cross-border use — No data

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
75%

- **6.1 |** Foster transparency and accountability when designing digital public services — 58%
- **6.2 |** Share best practices on the development of human-centric AI systems — 67%
- **6.3 |** Stimulate knowledge sharing on human centric technologies — 100%

Policy Area 7
Foster resilience and sustainability
87%

- **7.1 |** Assess and make transparent energy consumption of digital tools and infrastructures — 71%
- **7.2 |** Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — 78%
- **7.3 |** Initiate expert consultations on appropriate use of digital technologies — 100%
- ⭐ **7.4 |** Foster the exchange of crisis management data — 100%

Legend:
- ▭ EU Average
- ⭐ Good Practice

Axis: 0% 20% 40% 60% 80% 100%

40

Good Practices from Germany

Policy Action 1.2 | Engage in strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, i.e., by building platforms to exchange and further develop national and European strategies with regard to digital transformation ("digital round tables") and by organising cross-border and international exchange (i.e., workshops)

KPI 5 | Existence of strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation

100%
EU Average
86%
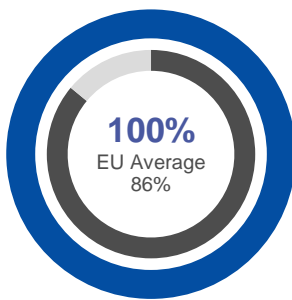
KPI 5

" Germany has implemented several initiatives to increase awareness of the relevance of a value-based digital transformation.

For instance, the Smart Cities dialogue platform has for objective to shape the digital transformation of municipalities in a sustainable way and in the sense of integrated urban development.

Additionally, the Data Strategy of the German Federal Government and the Artificial Intelligence Strategy of the German Federal Government respectively aim to advance sustainable, economic growth and facilitate economic and social innovation by harmonising tech innovation, data protection and cybersecurity, and to strengthen Germany as an internationally competitive centre of AI research, development and application.

In terms of knowledge sharing and engagement in strategic projects, digitisation labs have been established as a new, innovative method for developing user-friendly online solutions for digital public services. In these labs, experts from the federal and state governments, e-government, legal experts and citizens come together to ensure that public services are digitised in a user-centric and user-friendly manner. "

Policy Action 7.4 | Foster the exchange of crisis management data, in particular in the health sector, e.g. via the European Health Data Space.

KPI 44 | Active exchange of crisis management data between Member States

100%
EU Average
76%
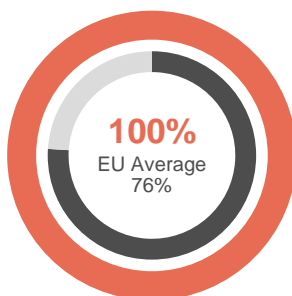
KPI 44

" According to Decision 1082/2013/EU, Germany shares cross-border health data within the Early Warning and Response System (EWRS) and The European Surveillance System (TESSy). The latter system is also used to transmit COVID-19 surveillance data to the WHO according to the International Health Regulations (IHR). For the exchange of crisis management data across borders beyond the EU level, the IHR National Focal Point System is used. However, this system mainly relies on email communication. Relevant crisis management data are published on WHO's Event Information Site (EIS) by the WHO.

Foundations for a reliable exchange of infrastructure for the sharing of crisis management data are legal frameworks which fulfill the GDPR requirements and IT security. Networks built before a crisis help to facilitate a trustful exchange.
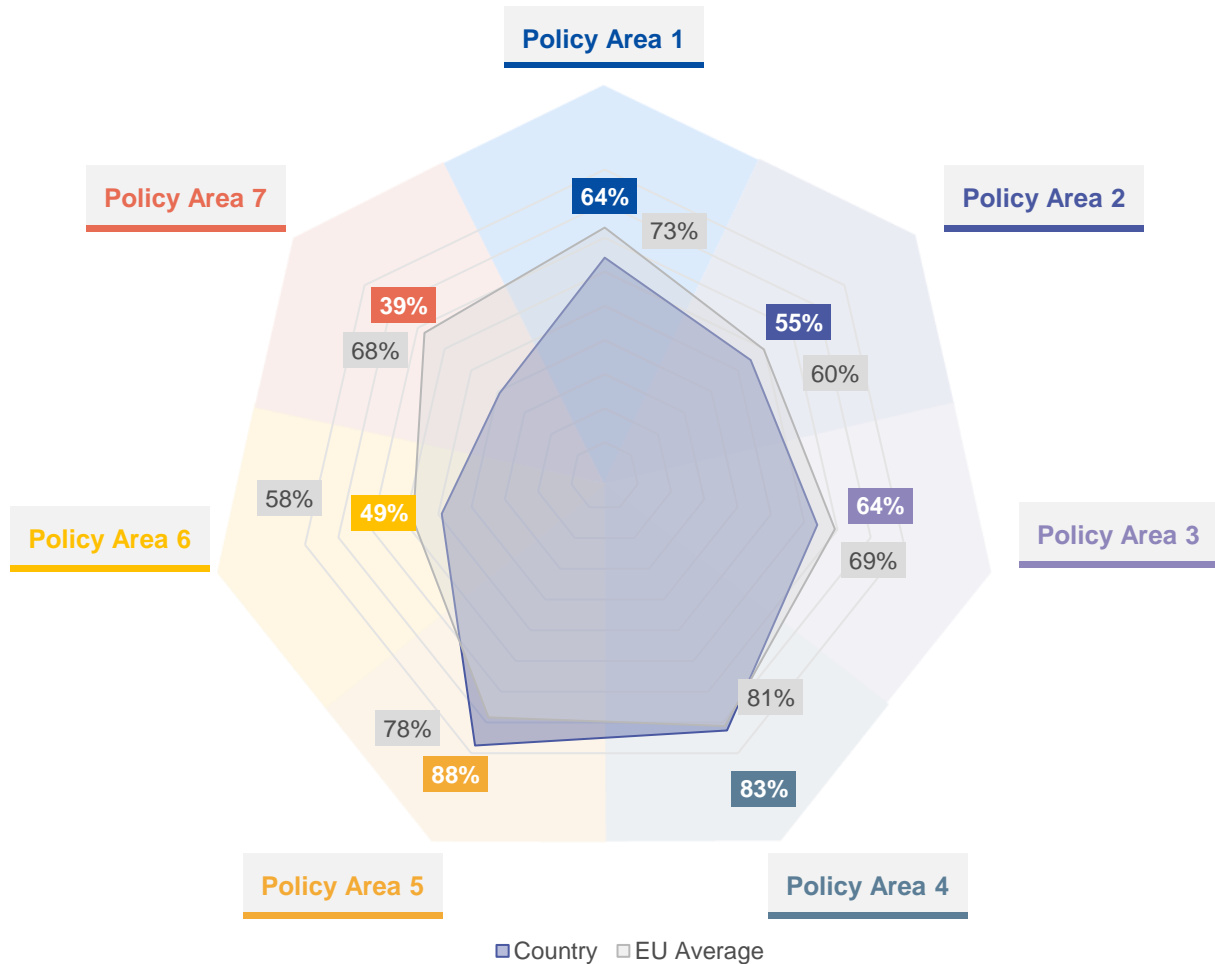
In particular, an interesting concrete example can be found in the EWRS, which proved to be very helpful in both allowing to inform the EU MSs about current developments in the COVID-19 crisis as well as to work bilaterally together with EU MSs. More information can be found in the following article. "

GREECE
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Greece | Policy Areas level of implementation

Policy Area 1 — 64% / 73%
Policy Area 2 — 55% / 60%
Policy Area 3 — 64% / 69%
Policy Area 4 — 83% / 81%
Policy Area 5 — 88% / 78%
Policy Area 6 — 49% / 58%
Policy Area 7 — 39% / 68%

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
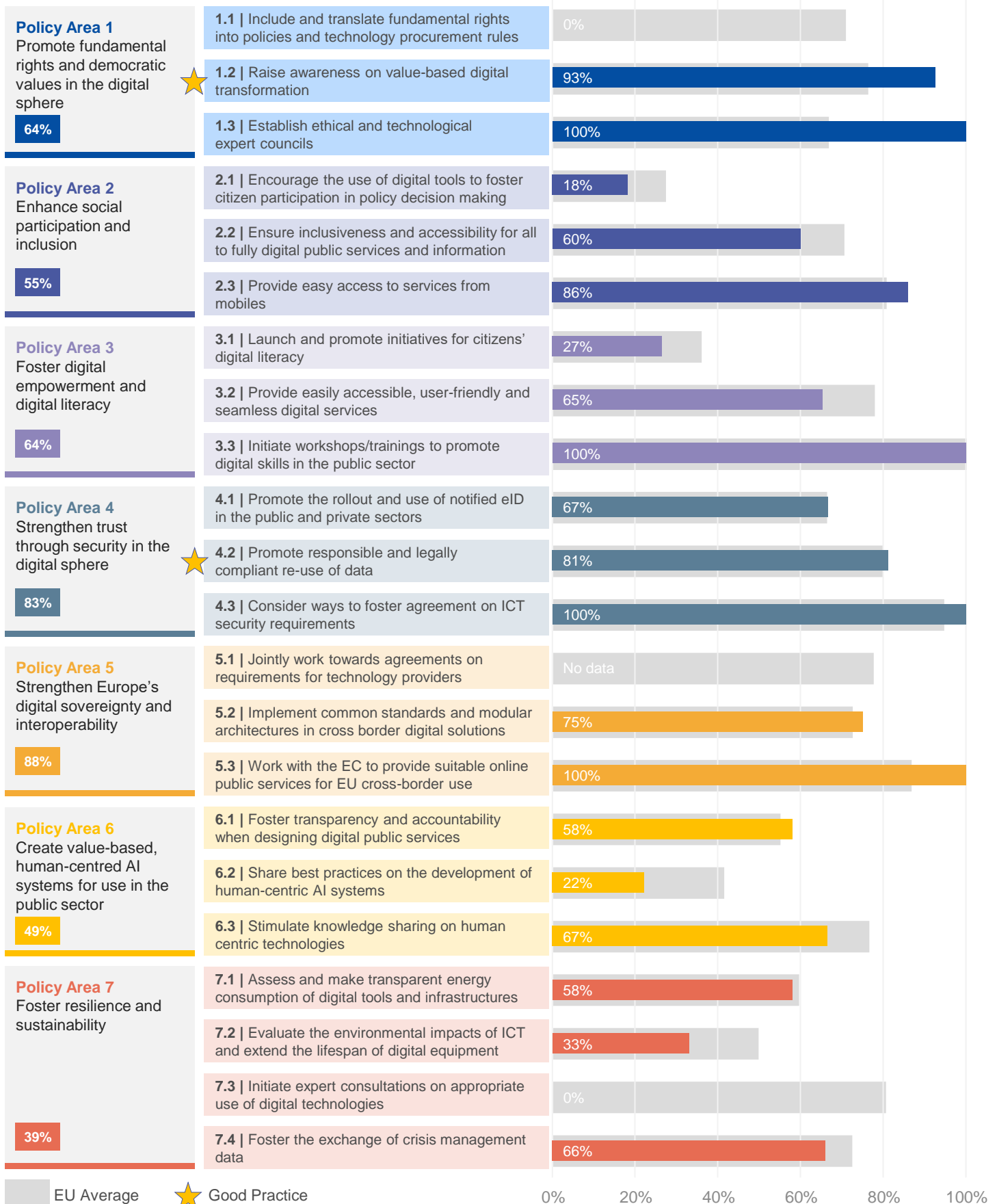The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

GREECE
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Greece | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
64%

1.1 | Include and translate fundamental rights into policies and technology procurement rules	0%
⭐ 1.2 | Raise awareness on value-based digital transformation	93%
1.3 | Establish ethical and technological expert councils	100%

Policy Area 2
Enhance social participation and inclusion
55%

2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	18%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	60%
2.3 | Provide easy access to services from mobiles	86%

Policy Area 3
Foster digital empowerment and digital literacy
64%

3.1 | Launch and promote initiatives for citizens' digital literacy	27%
3.2 | Provide easily accessible, user-friendly and seamless digital services	65%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
83%

4.1 | Promote the rollout and use of notified eID in the public and private sectors	67%
⭐ 4.2 | Promote responsible and legally compliant re-use of data	81%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
88%

5.1 | Jointly work towards agreements on requirements for technology providers	No data
5.2 | Implement common standards and modular architectures in cross border digital solutions	75%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
49%

6.1 | Foster transparency and accountability when designing digital public services	58%
6.2 | Share best practices on the development of human-centric AI systems	22%
6.3 | Stimulate knowledge sharing on human centric technologies	67%

Policy Area 7
Foster resilience and sustainability
39%

|	
7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	58%
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	33%
7.3 | Initiate expert consultations on appropriate use of digital technologies	0%
7.4 | Foster the exchange of crisis management data	66%

EU Average ⭐ Good Practice

0%   20%   40%   60%   80%   100%

Good Practices from Greece

Policy Action 1.2 | Engage in strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, i.e., by building platforms to exchange and further develop national and European strategies with regard to digital transformation ("digital round tables") and by organising cross-border and international exchange (i.e., workshops)

KPI 5 | Existence of strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation

100%
EU Average
86%
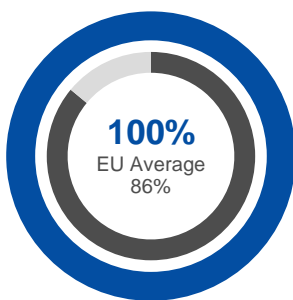
KPI 5

"In Greece, there are two main initiatives aiming at increasing awareness of the relevance of a value-based digital transformation.
One of them is the Central Government Agreement on Hybrid Cloud Computing. According to Law 4727 of 2020, the infrastructure of the Government Cloud Public Sector should be hosted almost all the important central information systems of public bodies until 1/1/2022 and all the important IT projects that are implemented and will be implemented soon in the Public Sector, the overall G-Cloud infrastructure has now been upgraded and transformed. Specifically, from the beginning of 2021, services are offered in Hybrid Cloud infrastructures through the signed Central Government Agreement for the distribution of Microsoft software and the provision of Azure Public Cloud services. This agreement is particularly important for the country as it concerns: Software distribution, the use of Microsoft Azure infrastructure with the aim of providing IaaS, PaaS and SaaS services to Public Bodies following the 'First Cloud Policy', Microsoft Premier and advisory services.
The second one is the eGovernment Interoperability Framework. A new and updated National Interoperability Framework, a comprehensive governance model as well as a practical implementation guide are under development in order to be harmonised with the latest version of the European Interoperability framework."

Policy Action 4.2 | Promote responsible and legally compliant re-use of data and the Once-Only Principle in line with the Tallinn Declaration and encourage new concepts such as personal data management based on user consent.

KPI 25 | Existence of specific activities to support for the reuse of Open Data
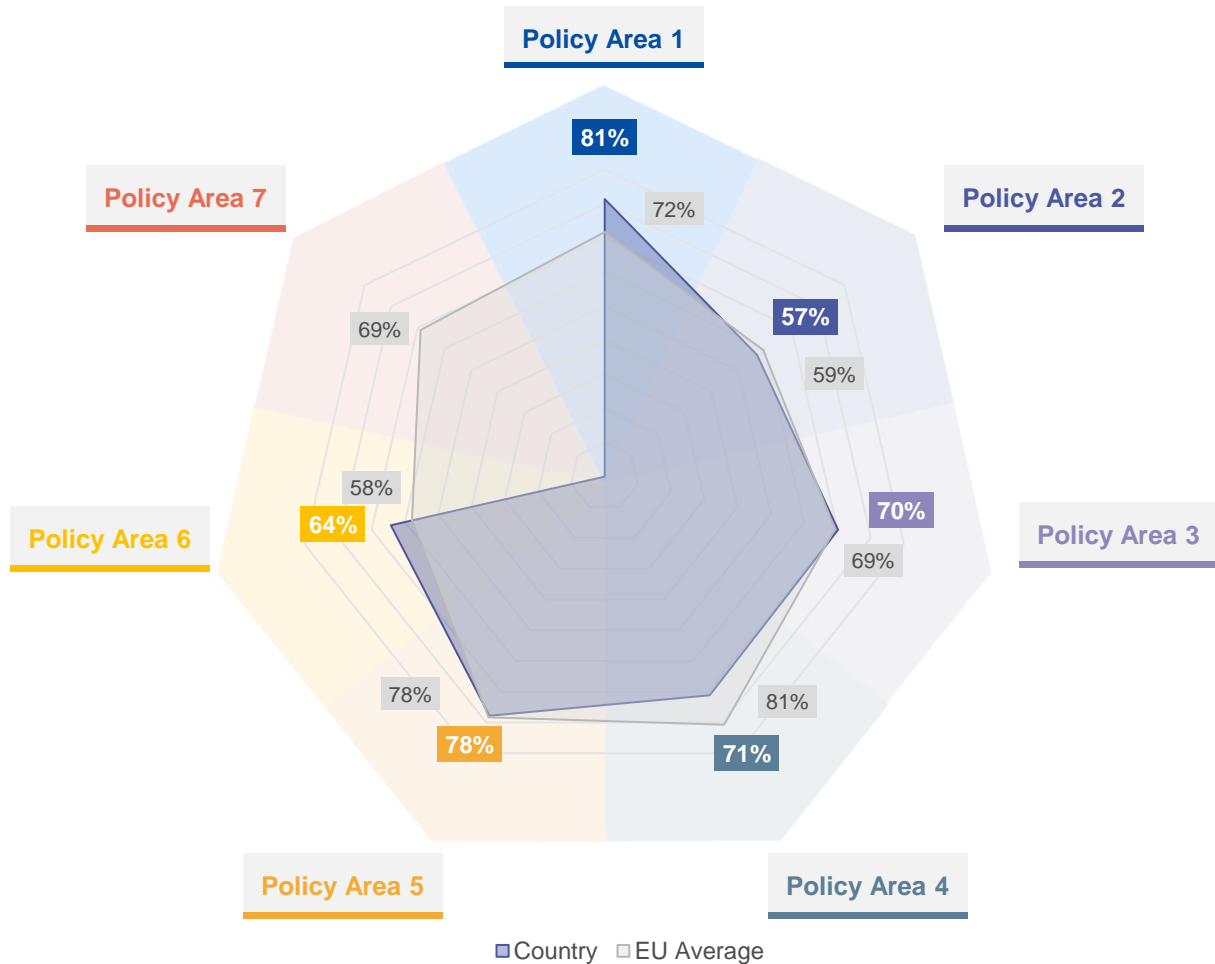
100%
EU Average
85%
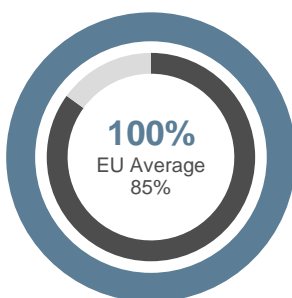
KPI 25

"The Hellenic Open Data Portal is the national portal for the dissemination of open data. It is the central directory of the public administration that provides free access to the open data databases of Greek government agencies. The implementation of a new version of the portal is in progress to improve the technical features and functions of the data repository but also to provide a quality upgrade to the information. The purpose of the Hellenic Open Data Portal is to increase the web accessibility of Greek public administration datasets by providing through APIs integrated services, e.g., cataloging, indexing, storage, search and availability of public sector data and information, as well as online services to citizens and third-party information systems."

More information on the model and country results is available in Appendix II

Hungary

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Hungary | Policy Areas level of implementation

Radar chart — Country vs EU Average

- Policy Area 1: 81% (Country), 72% (EU Average)
- Policy Area 2: 57% (Country), 59% (EU Average)
- Policy Area 3: 70% (Country), 69% (EU Average)
- Policy Area 4: 71% (Country), 81% (EU Average)
- Policy Area 5: 78% (Country), 78% (EU Average)
- Policy Area 6: 64% (Country), 58% (EU Average)
- Policy Area 7: 69% (EU Average)

■ Country   □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
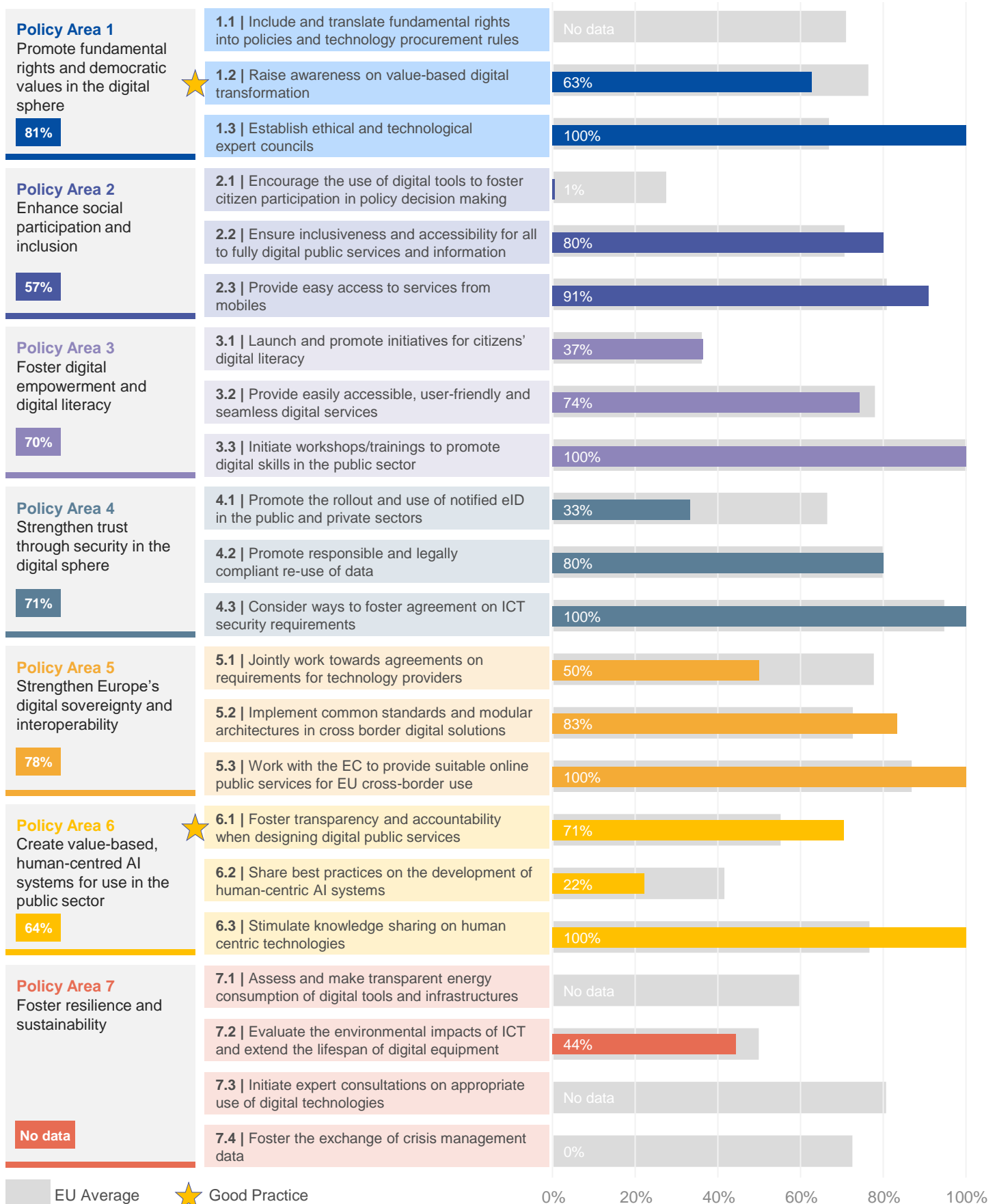
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Hungary

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Hungary | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere

81%

Policy Action	Result
1.1 | Include and translate fundamental rights into policies and technology procurement rules	No data
⭐ 1.2 | Raise awareness on value-based digital transformation	63%
1.3 | Establish ethical and technological expert councils	100%

Policy Area 2
Enhance social participation and inclusion

57%

Policy Action	Result
2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	1%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	80%
2.3 | Provide easy access to services from mobiles	91%

Policy Area 3
Foster digital empowerment and digital literacy

70%

Policy Action	Result
3.1 | Launch and promote initiatives for citizens' digital literacy	37%
3.2 | Provide easily accessible, user-friendly and seamless digital services	74%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere

71%

Policy Action	Result
4.1 | Promote the rollout and use of notified eID in the public and private sectors	33%
4.2 | Promote responsible and legally compliant re-use of data	80%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability

78%

Policy Action	Result
5.1 | Jointly work towards agreements on requirements for technology providers	50%
5.2 | Implement common standards and modular architectures in cross border digital solutions	83%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector

64%

Policy Action	Result
⭐ 6.1 | Foster transparency and accountability when designing digital public services	71%
6.2 | Share best practices on the development of human-centric AI systems	22%
6.3 | Stimulate knowledge sharing on human centric technologies	100%

Policy Area 7
Foster resilience and sustainability

No data

Policy Action	Result
7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	No data
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	44%
7.3 | Initiate expert consultations on appropriate use of digital technologies	No data
7.4 | Foster the exchange of crisis management data	0%

☐ EU Average   ⭐ Good Practice

0% 20% 40% 60% 80% 100%

Good Practices from Hungary

Policy Action 1.2 | Encourage the establishment of ethical and technological expert councils to provide advice to and foster debate among citizens.

KPI 6 | Existence of initiatives promoting the set-up of ethical and technological expert councils to provide advice to, and foster debate among citizens.
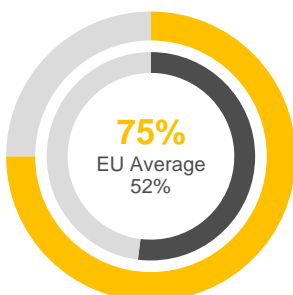
100%
EU Average
70%
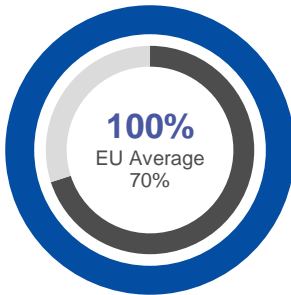
KPI 6

"The Digital Success Programme has been launched in 2015 following a public consultation initiated by the Government and related to the Internet and digital developments. The goal of the programme is to foster debate among citizens, businesses and the Government on the development of the sectoral information technology policies, as digitisation has become a fundamental phenomenon in everyday life. The Government's aim is to prepare citizens and businesses for digitalisation and involve them in the definition of the strategy. Digital Success Programme 2.0 started in 2017, and Digital Success Programme 2030 has been launched in 2020. Overall, the Digital Success Programme has deployed the following strategies: Digital Child Protection Strategy of Hungary; Digital Export Development Strategy of Hungary; Digital Education Strategy of Hungary; Digital Startup Strategy of Hungary; Digital Agriculture Strategy of Hungary; Fintech Strategy of Hungary; and the Artificial Intelligence Strategy of Hungary.

Also, the Digital Success Programme ensures the functioning of the Artificial Intelligence Coalition of Hungary. The AI Coalition provides a permanent professional and cooperation forum for Management Information (MI) developers, market and state actors representing the user side of MI, as well as academia, professional organizations and between public institutions, for both ethical and technological issues. The National Communications and Information Technology Council (NHIT) an advisory body to the Government also plays an important role at a national level to aggregate economic and societal expectations.

No specific digital code of conduct has been created; however, the development and provision of user-centric digital public services is a key strategic goal in Hungary. This is reflected in both the National Digitalisation Strategy as well as in the e-government policy criteria of the Ministry of Interior to ensure e-government developments are done in line with the strategic and policy goals."

Policy Action 6.1 | Foster transparency and accountability i.e., by revealing when automated decision-making processes are used in digital public services and ensure quality standards of data sets fed into AI systems when designing digital public services (e.g., by quality seals for data sets).

KPI 32 | Transparency with regards to automated decision-making process used in digital public services.
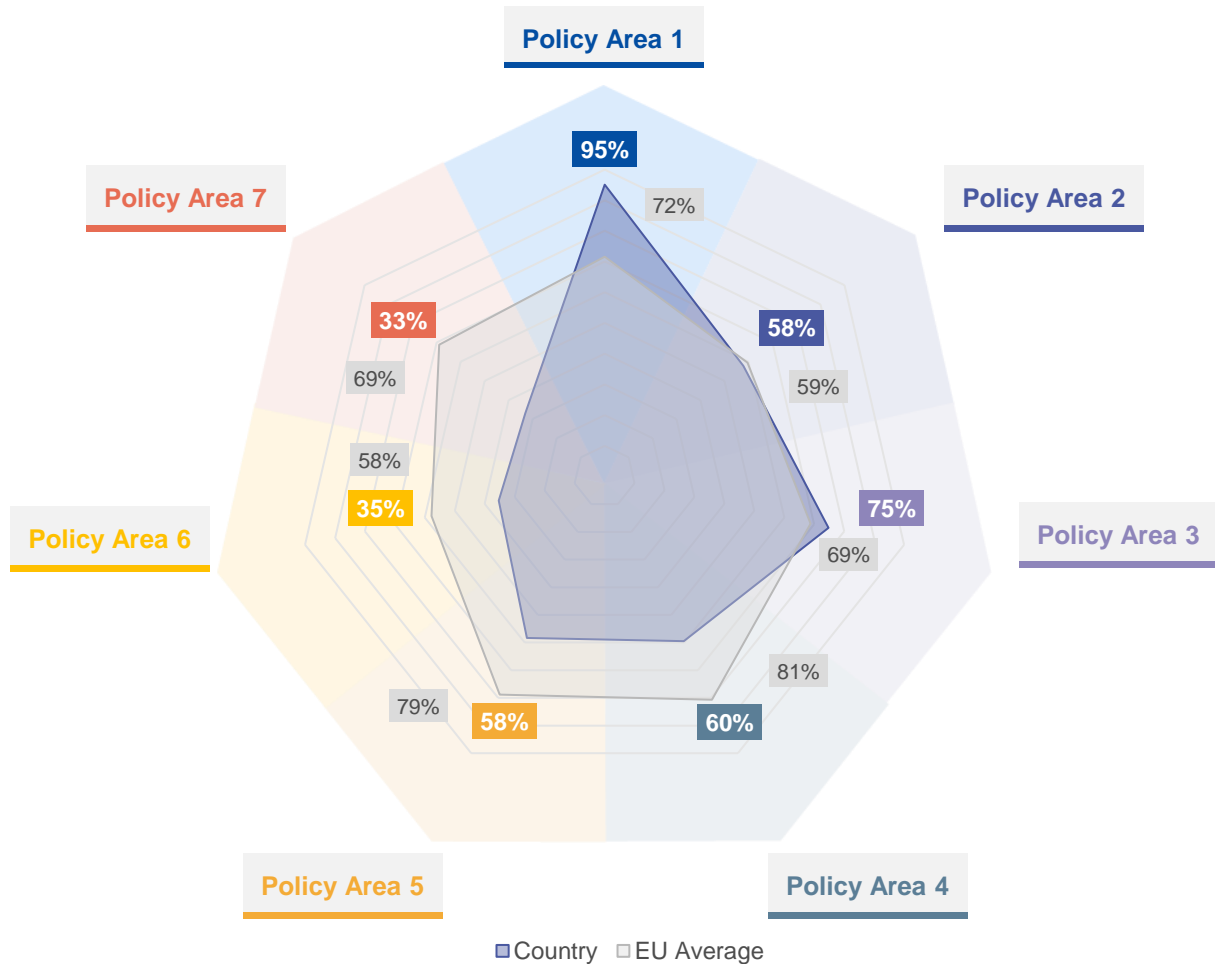
75%
EU Average
52%

KPI 32

"Transparency with regards to automated decision-making process used in digital public services is notably ensured by the Act on the Code of General Administrative Procedure. According to this act, automatic decision making shall apply if it is permitted by an Act or government decree. In this case, all data are available to the authority at the time of the submission of the application, decision making does not require deliberation, and there is no party with opposing interests. The existing digital public services that use automated decision-making explain clearly to the clients that they use automation. These services are not based on profiling, but on direct queries from base registries, or current factual data."

Ireland

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Ireland | Policy Areas level of implementation

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
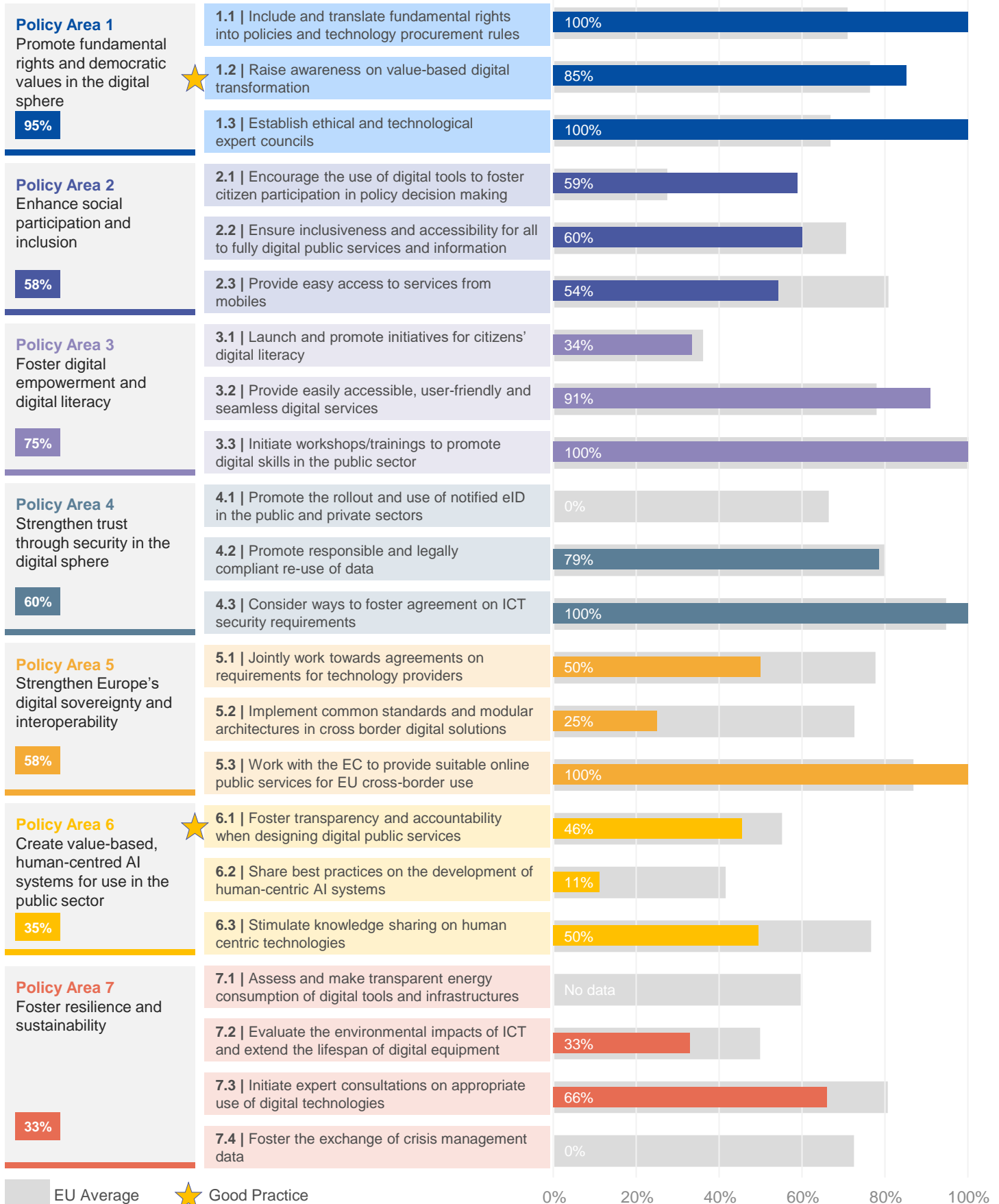The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Ireland

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Ireland | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
95%

- **1.1 |** Include and translate fundamental rights into policies and technology procurement rules — 100%
- ⭐ **1.2 |** Raise awareness on value-based digital transformation — 85%
- **1.3 |** Establish ethical and technological expert councils — 100%

Policy Area 2
Enhance social participation and inclusion
58%

- **2.1 |** Encourage the use of digital tools to foster citizen participation in policy decision making — 59%
- **2.2 |** Ensure inclusiveness and accessibility for all to fully digital public services and information — 60%
- **2.3 |** Provide easy access to services from mobiles — 54%

Policy Area 3
Foster digital empowerment and digital literacy
75%

- **3.1 |** Launch and promote initiatives for citizens' digital literacy — 34%
- **3.2 |** Provide easily accessible, user-friendly and seamless digital services — 91%
- **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector — 100%

Policy Area 4
Strengthen trust through security in the digital sphere
60%

- **4.1 |** Promote the rollout and use of notified eID in the public and private sectors — 0%
- **4.2 |** Promote responsible and legally compliant re-use of data — 79%
- **4.3 |** Consider ways to foster agreement on ICT security requirements — 100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
58%

- **5.1 |** Jointly work towards agreements on requirements for technology providers — 50%
- **5.2 |** Implement common standards and modular architectures in cross border digital solutions — 25%
- **5.3 |** Work with the EC to provide suitable online public services for EU cross-border use — 100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
35%

- ⭐ **6.1 |** Foster transparency and accountability when designing digital public services — 46%
- **6.2 |** Share best practices on the development of human-centric AI systems — 11%
- **6.3 |** Stimulate knowledge sharing on human centric technologies — 50%

Policy Area 7
Foster resilience and sustainability
33%

- **7.1 |** Assess and make transparent energy consumption of digital tools and infrastructures — No data
- **7.2 |** Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — 33%
- **7.3 |** Initiate expert consultations on appropriate use of digital technologies — 66%
- **7.4 |** Foster the exchange of crisis management data — 0%

Legend: ▭ EU Average   ⭐ Good Practice
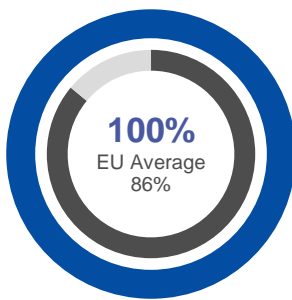
Scale: 0% 20% 40% 60% 80% 100%

Good Practices from Ireland

Policy Action 1.2 | Engage in strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, i.e., by building platforms to exchange and further develop national and European strategies with regard to digital transformation ("digital round tables") and by organising cross-border and international exchange (i.e. workshops)

KPI 5 | Existence of strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation

100%
EU Average
86%

KPI 5

" On the existence of strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, two initiatives are ongoing:

• The Civil Service Renewal 2030 , which identifies areas for further improvement and provides an opportunity to re-imagine aspects of the system to position the government to respond to future challenges.

• Our Public Service, the framework for development and innovation in Ireland's public service, led by the Public Service Reform team at the Department of Public Expenditure and Reform.

Besides, public and stakeholder consultations have been conducted to inform the Irish Digital Government Strategy and National Digital Strategy (published respectively in March and February 2022). These strategies focus on the fact that the Public Service in Ireland must harness digitalisation to drive a step-change in how people, businesses, and policy makers interact, ensuring interoperability across all levels of government and across public services. "

Policy Action 6.1 | Foster transparency and accountability i.e., by revealing when automated decision-making processes are used in digital public services, and ensure quality standards of data sets fed into AI systems when designing digital public services (e.g., by quality seals for data sets)

KPI 33 | Use of quality standards of data sets to fed into AI systems when designing digital public services

66%
EU Average
59%
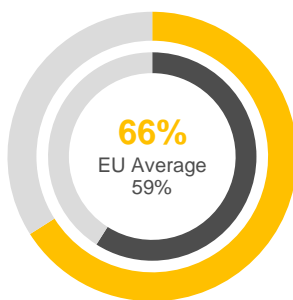
KPI 33

" The Irish national strategy on AI highlights the need for high-quality data and one of its strategic actions is to promulgate standards and guidelines for ethical data sharing within the Public Service. Additionally, Ireland has established 'Insight', the SFI Research Centre for Data Analytics, one of Europe's largest data analytics research organisations. Insight undertakes high-impact research, seeking to derive value from Big Data and providing innovative technology solutions for industry and society. "
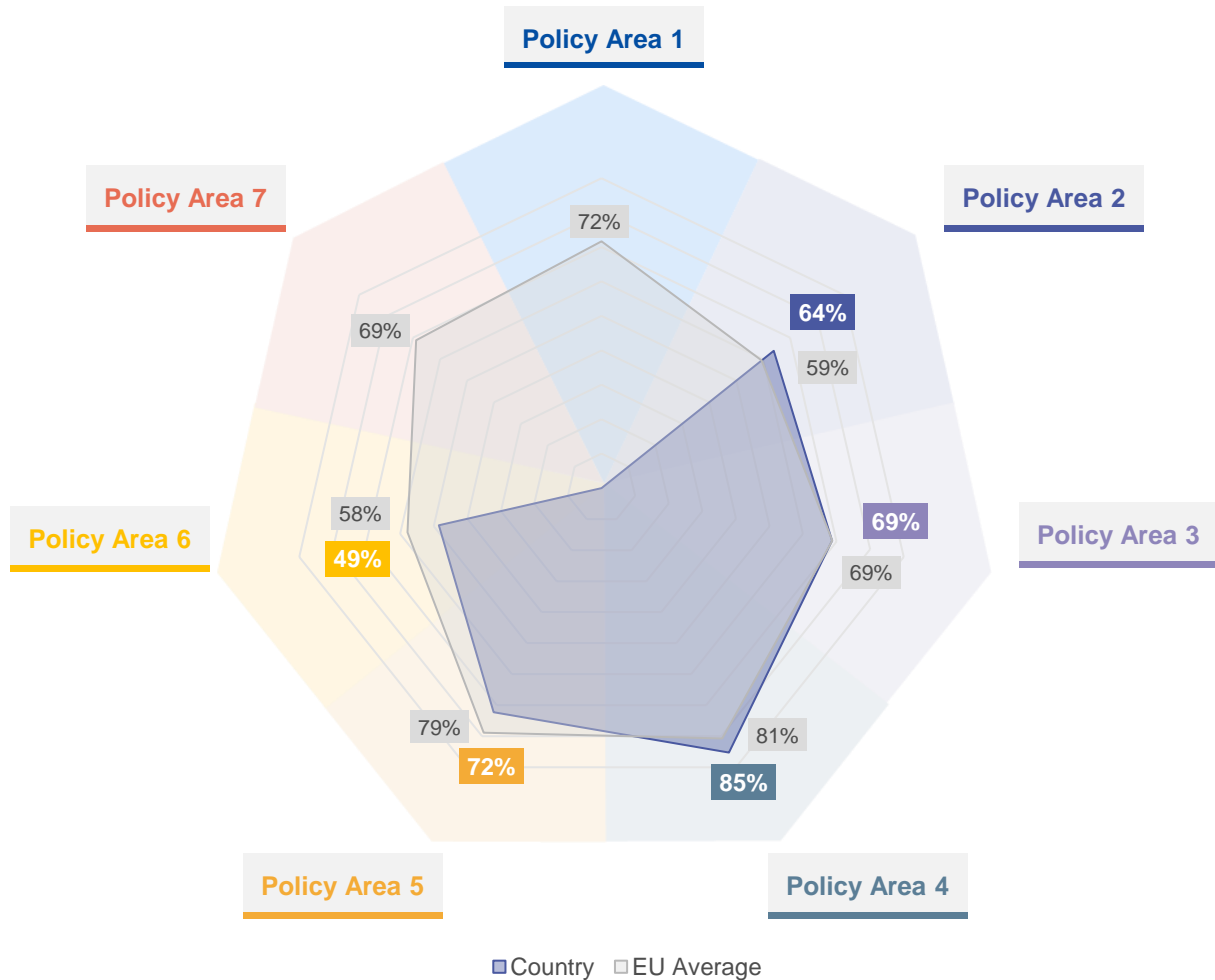
50

Italy

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Italy | Policy Areas level of implementation

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere	**Policy Area 5 |** Strengthen Europe's digital sovereignty and interoperability
Policy Area 2 | Enhance social participation and inclusion	**Policy Area 6 |** Create value-based, human-centred AI systems for use in the public sector
Policy Area 3 | Foster digital empowerment and digital literacy	**Policy Area 7 |** Foster resilience and sustainability
Policy Area 4 | Strengthen trust through security in the digital sphere	

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
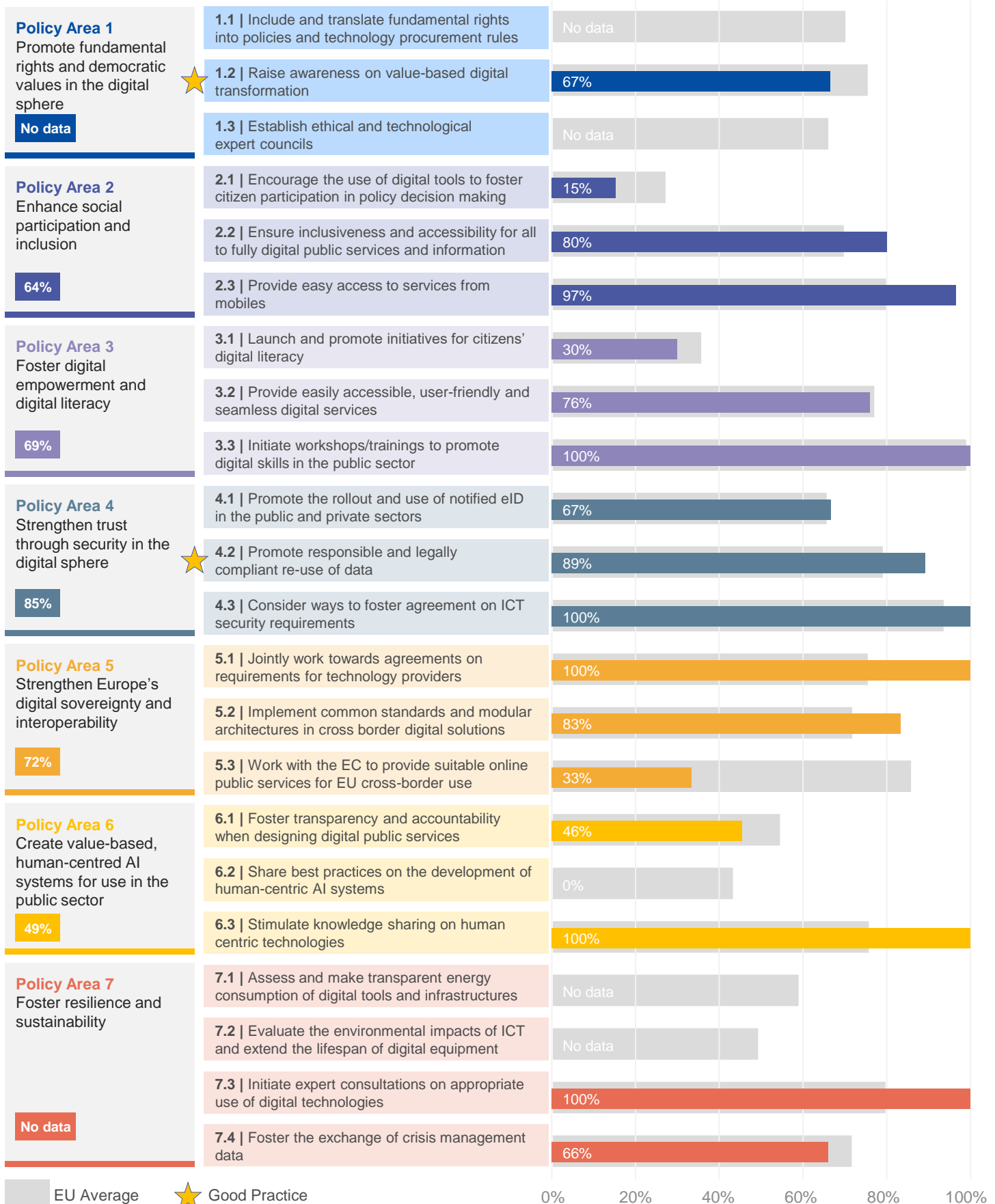The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Italy
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Italy | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere

No data

1.1 | Include and translate fundamental rights into policies and technology procurement rules	No data
⭐ 1.2 | Raise awareness on value-based digital transformation	67%
1.3 | Establish ethical and technological expert councils	No data

Policy Area 2
Enhance social participation and inclusion

64%

2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	15%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	80%
2.3 | Provide easy access to services from mobiles	97%

Policy Area 3
Foster digital empowerment and digital literacy

69%

3.1 | Launch and promote initiatives for citizens' digital literacy	30%
3.2 | Provide easily accessible, user-friendly and seamless digital services	76%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere

85%

4.1 | Promote the rollout and use of notified eID in the public and private sectors	67%
⭐ 4.2 | Promote responsible and legally compliant re-use of data	89%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability

72%

5.1 | Jointly work towards agreements on requirements for technology providers	100%
5.2 | Implement common standards and modular architectures in cross border digital solutions	83%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	33%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector

49%

6.1 | Foster transparency and accountability when designing digital public services	46%
6.2 | Share best practices on the development of human-centric AI systems	0%
6.3 | Stimulate knowledge sharing on human centric technologies	100%

Policy Area 7
Foster resilience and sustainability

No data

|	
7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	No data
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	No data
7.3 | Initiate expert consultations on appropriate use of digital technologies	100%
7.4 | Foster the exchange of crisis management data	66%

EU Average ⭐ Good Practice

0%   20%   40%   60%   80%   100%

Good Practices from Italy

Policy Action 1.2 | Engage in strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, i.e., by building platforms to exchange and further develop national and European strategies with regard to digital transformation ("digital round tables") and by organising cross-border and international exchange (i.e., workshops).

KPI 4 | Existence of platforms to exchange and further develop national strategies with regard to digital transformation

100%
EU Average
91%
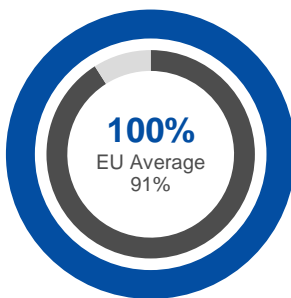
KPI 4

Designers Italia and Developers Italia are two platforms supporting public service development via a community of practices, events and toolkits. Designers Italia is the reference point for the design of digital public services. On one hand, it supports administrations and their suppliers with templates, kits, guidelines and primers to facilitate user-centred design processes. On the other hand, it acts as a connection ring of a community of stakeholders, organising events and activities to involve the public sector, ICT suppliers, academia and citizens in design processes (e.g., see the Public Administration Atlas created with the students of the Architecture University of Venice). Similarly, Developers Italia provides useful resources as well as a community for the development of novel digital public services and a National catalogue of free and open-source software created by Italian public administrations and made available for others to reuse. This catalogue is built by means of a decentralised standard called 'publiccode.yml', developed with international partners allowing an easier exchange of software. Moreover, interoperability also has a relevant spot on the platform. In fact, a selection of APIs is available allowing developers to easily interact with public platforms. Eventually, in order to ease such an adoption, some tools have been developed, including an API validator that supports the creation of APIs with a coherent and secure design across different agencies.

Policy Action 4.2 | Promote responsible and legally compliant re-use of data and the Once-Only Principle in line with the Tallinn Declaration and encourage new concepts such as personal data management based on user consent.

KPI 26 | Existence of raising awareness initiatives on new concepts such as personal data management based on user consent

80%
EU Average
57%
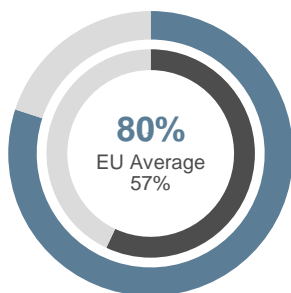
KPI 26

On new concepts such as 'Personal data management based on user consent', 'Digital Identity', 'Build trust in digital services provided by governments' and 'Co-creation of public services', Italy has been improving the current framework both via regulation and consolidated platforms. In particular, the National eID Framework is widening the range of supported use cases. The new article 50-ter of the Digital Administration Code instituted a national platform to support trust and identification for data exchanges between agencies. This national platform will support the co-creation and co-design of digital public services with a set of specific features related to the national Interoperability Framework based on APIs, including an API Catalogue and Marketplace that will streamline the organisational and technical procedures required to exchange information in the public sector, which is currently one of the major hindrances to the creation of digital public services.
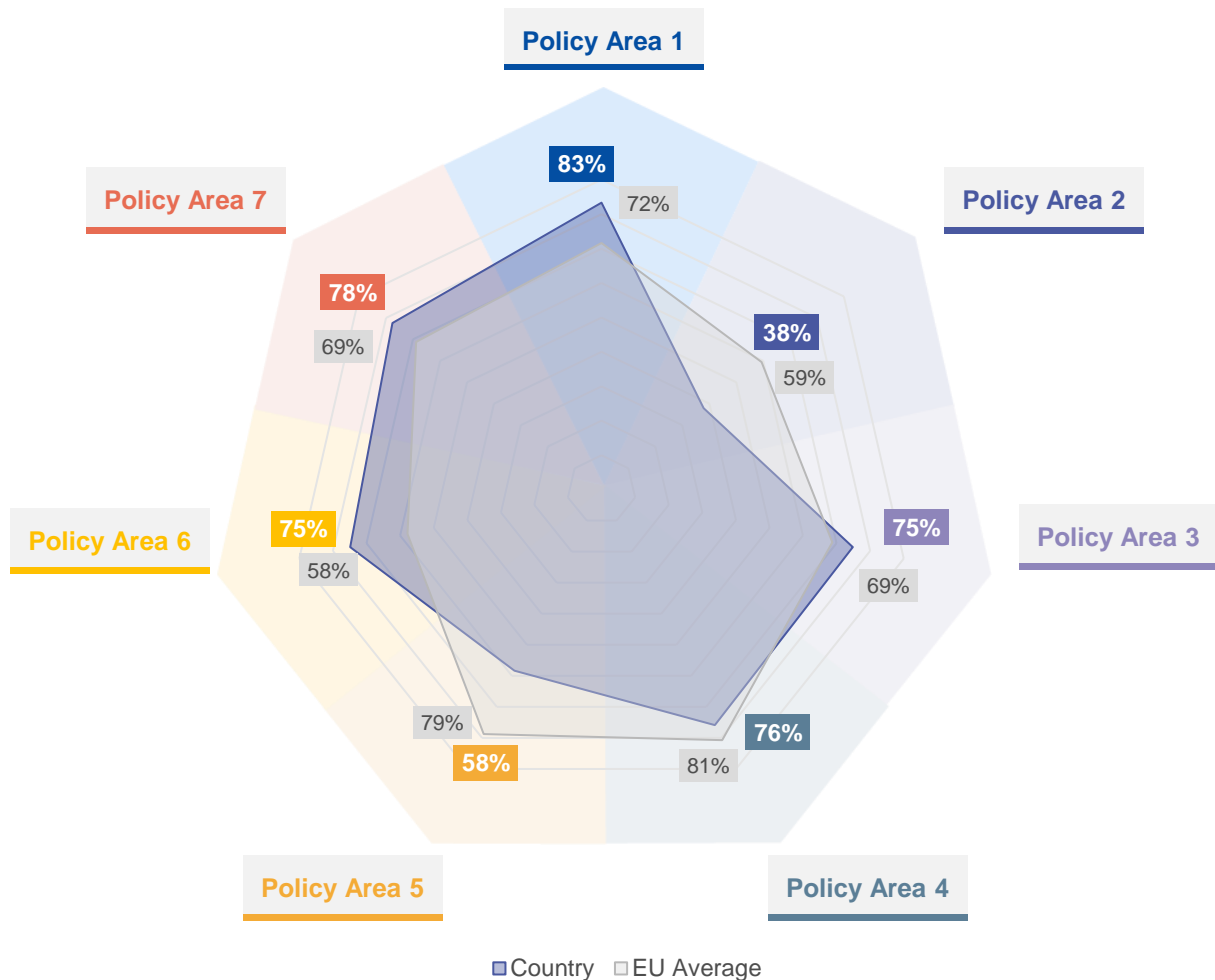
Latvia
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Latvia | Policy Areas level of implementation

Policy Area 1 — 83% (EU Average 72%)
Policy Area 2 — 38% (EU Average 59%)
Policy Area 3 — 75% (EU Average 69%)
Policy Area 4 — 76% (EU Average 81%)
Policy Area 5 — 58% (EU Average 79%)
Policy Area 6 — 75% (EU Average 58%)
Policy Area 7 — 78% (EU Average 69%)

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

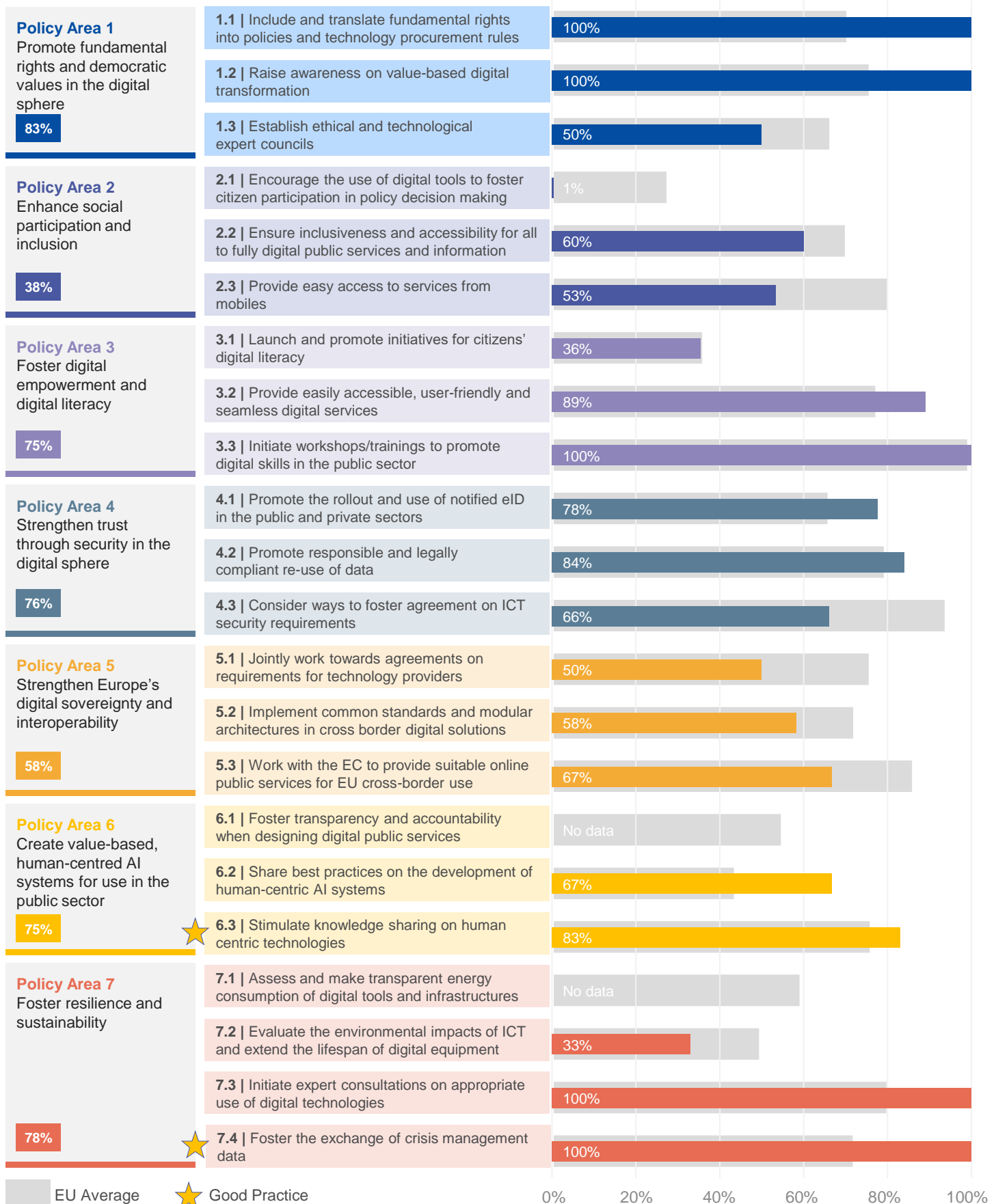**Policy Area 6 |** Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Latvia
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Latvia | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
83%

- **1.1 |** Include and translate fundamental rights into policies and technology procurement rules — 100%
- **1.2 |** Raise awareness on value-based digital transformation — 100%
- **1.3 |** Establish ethical and technological expert councils — 50%

Policy Area 2
Enhance social participation and inclusion
38%

- **2.1 |** Encourage the use of digital tools to foster citizen participation in policy decision making — 1%
- **2.2 |** Ensure inclusiveness and accessibility for all to fully digital public services and information — 60%
- **2.3 |** Provide easy access to services from mobiles — 53%

Policy Area 3
Foster digital empowerment and digital literacy
75%

- **3.1 |** Launch and promote initiatives for citizens' digital literacy — 36%
- **3.2 |** Provide easily accessible, user-friendly and seamless digital services — 89%
- **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector — 100%

Policy Area 4
Strengthen trust through security in the digital sphere
76%

- **4.1 |** Promote the rollout and use of notified eID in the public and private sectors — 78%
- **4.2 |** Promote responsible and legally compliant re-use of data — 84%
- **4.3 |** Consider ways to foster agreement on ICT security requirements — 66%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
58%

- **5.1 |** Jointly work towards agreements on requirements for technology providers — 50%
- **5.2 |** Implement common standards and modular architectures in cross border digital solutions — 58%
- **5.3 |** Work with the EC to provide suitable online public services for EU cross-border use — 67%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
75%

- **6.1 |** Foster transparency and accountability when designing digital public services — No data
- **6.2 |** Share best practices on the development of human-centric AI systems — 67%
- ⭐ **6.3 |** Stimulate knowledge sharing on human centric technologies — 83%

Policy Area 7
Foster resilience and sustainability
78%

- **7.1 |** Assess and make transparent energy consumption of digital tools and infrastructures — No data
- **7.2 |** Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — 33%
- **7.3 |** Initiate expert consultations on appropriate use of digital technologies — 100%
- ⭐ **7.4 |** Foster the exchange of crisis management data — 100%

Legend: ☐ EU Average   ⭐ Good Practice
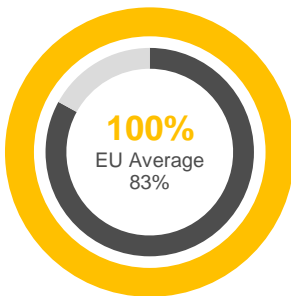
Scale: 0% 20% 40% 60% 80% 100%

Good Practices from Latvia

Policy Action 6.3 | Stimulate knowledge sharing between practitioners of administrative innovation strategies and on examples of human centric technologies in public administrations

**KPI 35 |** Knowledge sharing on public sector innovation strategies

100%
EU Average
83%

KPI 35

" At the end of 2019, #GovLabLatvia established the State Chancery Innovation Laboratory, whose mission is to develop a culture of innovation in public administration and to help national administrations find solutions to complex problems using innovative methods.

The Innovation Chancellery of the State Chancellery has received the European Public Sector Awards of the European Institute of Public Administration in the Good Practice Certificate category in the category 'Innovation', receiving recognition.

During the operation of the Innovation Laboratory, by the end of 2021, 77 co-productions, design thinking sessions and one hackathon had been organised, resulting in the development of 37 prototypes or solution projects with the potential to be implemented at least in the form of a pilot project.

As a plus, the Innovation Laboratory continues to develop its international recognition and involvement in international projects, increasing its experience and promoting its development. At the end of 2021, it became known that the European Commission supported the next - already the third - project developed by the SAO for the development of the Latvian public administration innovation system (Support for further development of the public sector innovation system of Latvia). In addition, the Innovation Laboratory has started participating in the OECD OPSI Innovative Capacity Scan of the Romanian Public Sector as a member of the team. "

Policy Action 7.4 | Foster the exchange of crisis management data, in particular in the health sector, e.g., via the European Health Data Space

KPI 44 | Active exchange of crisis management data between Member States
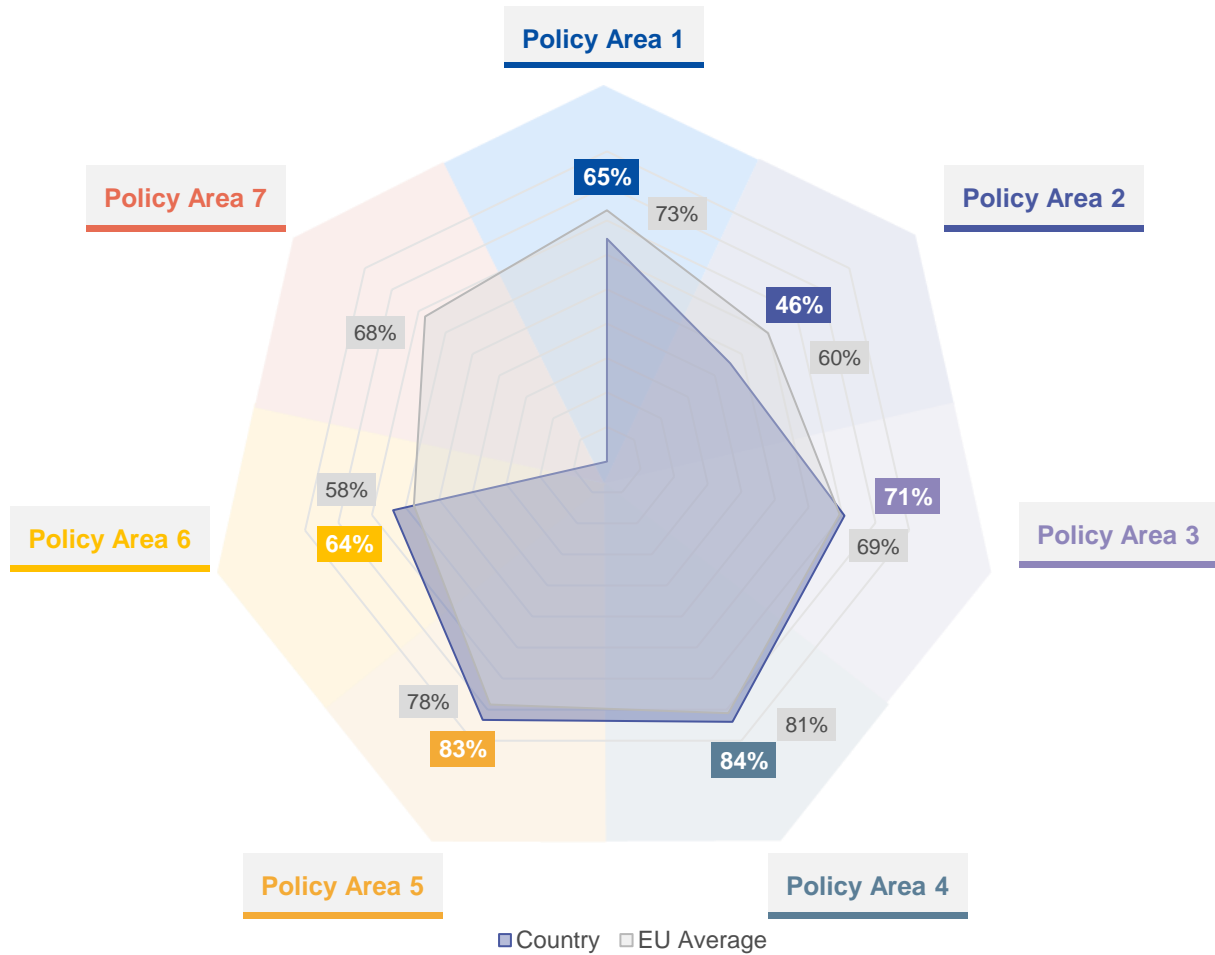
100%
EU Average
76%
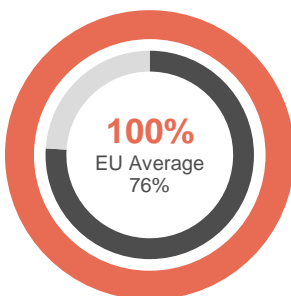
KPI 44

" In order to improve and harmonise the emergency medical services in the Estonian – Latvian border region, a cooperation project will be carried out between the Estonian Health Board, State Emergency Medical Service of Latvia, Vidzeme Hospital (LV) and Valga Hospital (EE). Managerial cooperation for harmonising procedures and joint trainings for medical personnel will enable EMS crews to provide services of equally high quality to residents throughout the region. "

Lithuania
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Lithuania | Policy Areas level of implementation

Policy Area 1 — 65% (Country), 73% (EU Average)
Policy Area 2 — 46% (Country), 60% (EU Average)
Policy Area 3 — 71% (Country), 69% (EU Average)
Policy Area 4 — 84% (Country), 81% (EU Average)
Policy Area 5 — 83% (Country), 78% (EU Average)
Policy Area 6 — 64% (Country), 58% (EU Average)
Policy Area 7 — 68% (EU Average)

■ Country   □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
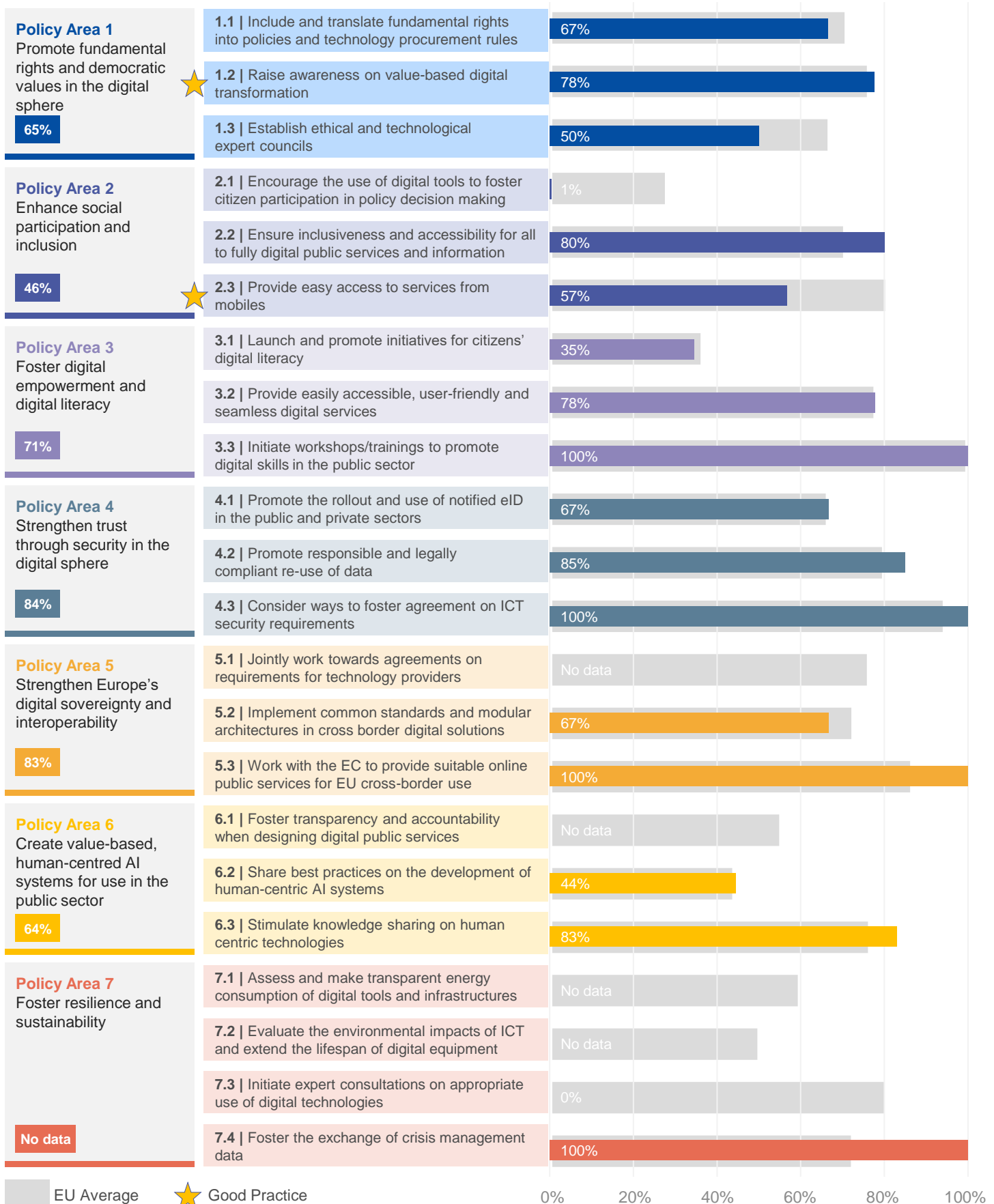
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Lithuania

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Lithuania | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
65%

1.1 | Include and translate fundamental rights into policies and technology procurement rules — 67%

1.2 | Raise awareness on value-based digital transformation — 78% ⭐

1.3 | Establish ethical and technological expert councils — 50%

Policy Area 2
Enhance social participation and inclusion
46%

2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making — 1%

2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information — 80%

2.3 | Provide easy access to services from mobiles — 57% ⭐

Policy Area 3
Foster digital empowerment and digital literacy
71%

3.1 | Launch and promote initiatives for citizens' digital literacy — 35%

3.2 | Provide easily accessible, user-friendly and seamless digital services — 78%

3.3 | Initiate workshops/trainings to promote digital skills in the public sector — 100%

Policy Area 4
Strengthen trust through security in the digital sphere
84%

4.1 | Promote the rollout and use of notified eID in the public and private sectors — 67%

4.2 | Promote responsible and legally compliant re-use of data — 85%

4.3 | Consider ways to foster agreement on ICT security requirements — 100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
83%

5.1 | Jointly work towards agreements on requirements for technology providers — No data

5.2 | Implement common standards and modular architectures in cross border digital solutions — 67%

5.3 | Work with the EC to provide suitable online public services for EU cross-border use — 100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
64%

6.1 | Foster transparency and accountability when designing digital public services — No data

6.2 | Share best practices on the development of human-centric AI systems — 44%

6.3 | Stimulate knowledge sharing on human centric technologies — 83%

Policy Area 7
Foster resilience and sustainability
No data

7.1 | Assess and make transparent energy consumption of digital tools and infrastructures — No data

7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — No data

7.3 | Initiate expert consultations on appropriate use of digital technologies — 0%

7.4 | Foster the exchange of crisis management data — 100%

EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

58

Good Practices from Lithuania

Policy Action 1.2 | Engage in strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, i.e., by building platforms to exchange and further develop national and European strategies with regard to digital transformation ("digital round tables") and by organising cross-border and international exchange (i.e., workshops)

KPI 4 | Existence of platforms to exchange and further develop national strategies with regard to digital transformation.

100%
EU Average
91%
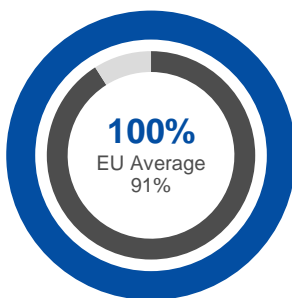
KPI 4

"Over the past two years, the GovTech Lab has been a platform for the exchange of best practices in digital transformation in the public sector. The team has organised four Demo Days where innovative digital government solutions have been presented and expertise shared. The GovTech Lab Lithuania consists of a team in the public sector focused on encouraging the creation and use of innovative solutions for the government.

The GovTech Lab helps the public sector identify challenges that can be solved by emerging technologies, engages startups and SMEs to create innovative solutions and accelerates startups in the GovTech space. Its main goal is to connect public sector institutions that have challenges and teams with innovative ideas and capabilities in the entrepreneur community, academia, or NGO. To achieve this, the GovTech Lab created the GovTech Challenge Series, a structured programme to build GovTech solutions to solving the most pressing challenges."

Policy Action 2.3 | Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders

KPI 12 | Existence of a national strategy to enable citizens to use their mobile devices to carry out digital public services

100%
EU Average
84%
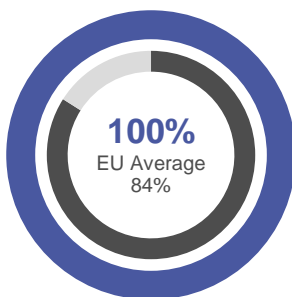
KPI 12

"Lithuania has approved the National Digitisation Development Programme 2021-2030, one of the priorities of which is to develop advanced technological tools and solutions and integrate them into e-services in order to ensure interoperability, security, convenience and accessibility (especially for people with disabilities) of these services, not only at national level but also across borders. This priority aims to make digital public services available on all types of devices, fixed and mobile. Lithuania's GovTech Lab has created a process called the GovTech Challenge Series, which opens up public sector technology challenges and invites individual entrepreneurs, startups and innovative companies to co-create digital solutions for the public sector."
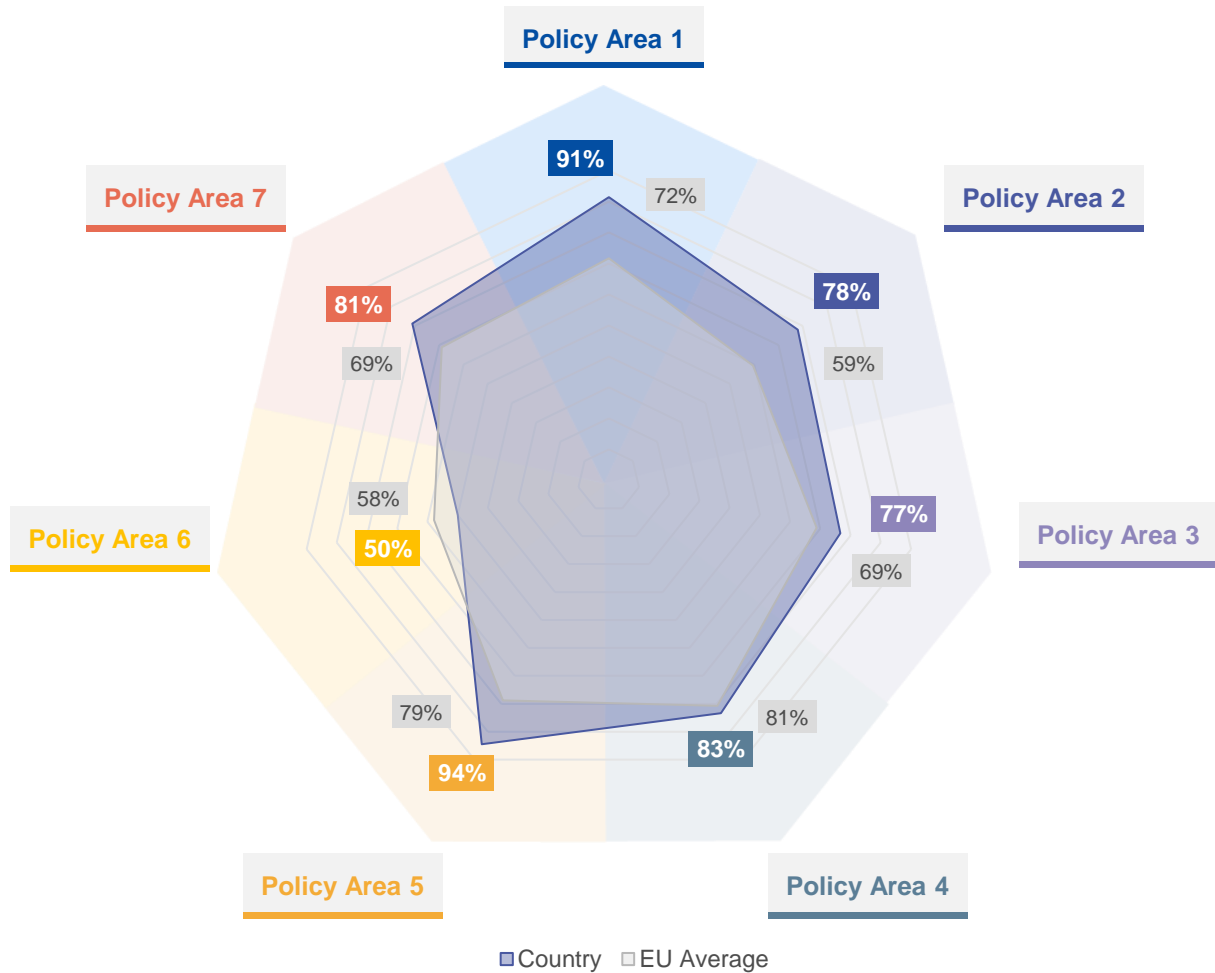
Luxembourg

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Luxembourg | Policy Areas level of implementation

Radar chart — Country vs. EU Average:

- **Policy Area 1:** 91% (Country), 72% (EU Average)
- **Policy Area 2:** 78% (Country), 59% (EU Average)
- **Policy Area 3:** 77% (Country), 69% (EU Average)
- **Policy Area 4:** 83% (Country), 81% (EU Average)
- **Policy Area 5:** 94% (Country), 79% (EU Average)
- **Policy Area 6:** 50% (Country), 58% (EU Average)
- **Policy Area 7:** 81% (Country), 69% (EU Average)

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
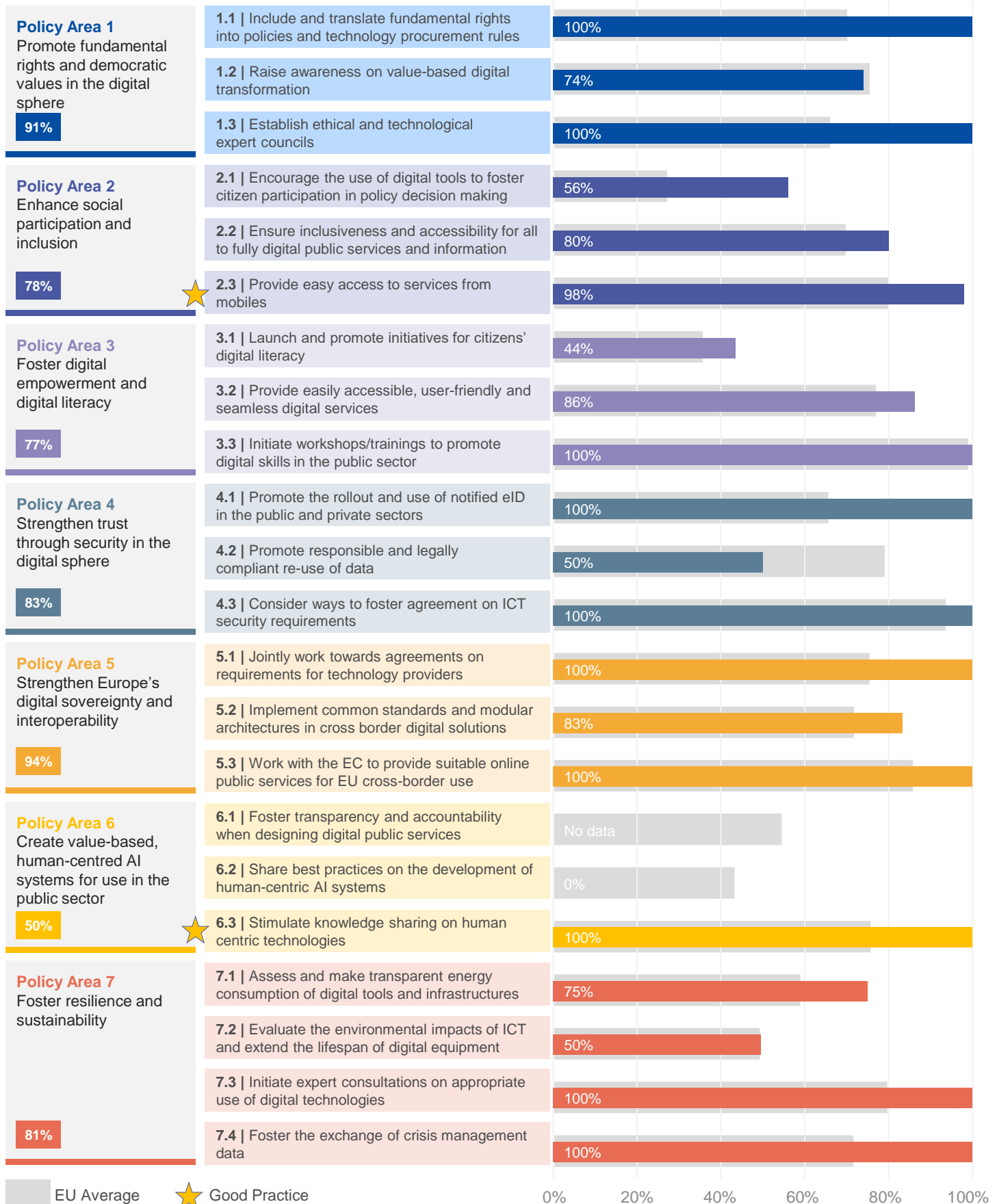
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Luxembourg
2021 | Berlin Declaration Monitoring (BDM)

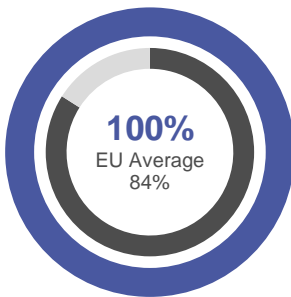**2021 BDM Results for Luxembourg | Policy Actions level of implementation**

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
91%

Policy Action	Result
1.1 | Include and translate fundamental rights into policies and technology procurement rules	100%
1.2 | Raise awareness on value-based digital transformation	74%
1.3 | Establish ethical and technological expert councils	100%

Policy Area 2
Enhance social participation and inclusion
78%

Policy Action	Result
2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	56%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	80%
⭐ **2.3 |** Provide easy access to services from mobiles	98%

Policy Area 3
Foster digital empowerment and digital literacy
77%

Policy Action	Result
3.1 | Launch and promote initiatives for citizens' digital literacy	44%
3.2 | Provide easily accessible, user-friendly and seamless digital services	86%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
83%

Policy Action	Result
4.1 | Promote the rollout and use of notified eID in the public and private sectors	100%
4.2 | Promote responsible and legally compliant re-use of data	50%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
94%

Policy Action	Result
5.1 | Jointly work towards agreements on requirements for technology providers	100%
5.2 | Implement common standards and modular architectures in cross border digital solutions	83%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
50%

Policy Action	Result
6.1 | Foster transparency and accountability when designing digital public services	No data
6.2 | Share best practices on the development of human-centric AI systems	0%
⭐ **6.3 |** Stimulate knowledge sharing on human centric technologies	100%

Policy Area 7
Foster resilience and sustainability
81%

Policy Action	Result
7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	75%
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	50%
7.3 | Initiate expert consultations on appropriate use of digital technologies	100%
7.4 | Foster the exchange of crisis management data	100%

EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

61

Good Practices from Luxembourg

Policy Action 2.3 | Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders

KPI 12 | Existence of a national strategy to enable citizens to use their mobile devices to carry out digital public services

100%
EU Average
84%

KPI 12

" The Luxembourg government has been systematically using responsive design for the implementation of public websites for many years. The website renow.lu presents the relevant results of the eGovernment benchmark. A dedicated native mobile application has been set up for MyGuichet.lu. This application allows citizens to access their private space in MyGuichet.lu. This application is free and can be downloaded onto the phone and facilitates access to online administrative procedures for citizens as well as their contacts with Luxembourg administrations and public bodies. When it was launched, the MyGuichet.lu app already offered a number of these procedures and functionalities:
• Carrying out and following up administrative procedures;
• Adding attachments using the camera on your mobile device;
• Consultation of communications; and
• Direct access to your CovidCheck certificates.
LuxTrust is a qualified trust service provider capable of meeting the most complex customer requirements for digital trust services. LuxTrust allows to use its eID and to authenticate also on mobile phones. Certified according to the European eIDAS regulation and thus acting in compliance with the latest European regulations (DSP2, RGPD, ETSI, AML). It offers services related to the identification and authentication of natural persons, the creation and management of electronic certificates and the creation and validation of electronic signatures. "

Policy Action 6.3 | Stimulate knowledge sharing between practitioners of administrative innovation strategies and on examples of human centric technologies in public

KPI 36 | Knowledge sharing on human centric technologies

100%
EU Average
69%
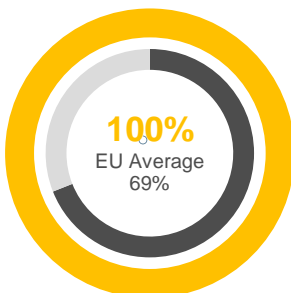
KPI 36

" Different initiatives aim to enhance knowledge sharing on human-centric technologies. More concretely, on 13 December 2006, Luxembourg ratified the UN Convention regarding the Rights of Persons with Disabilities, which promotes access by persons with disabilities to new information and communication technologies, and thus in particular the accessibility of Web and mobile applications. Web accessibility is defined by the Web Accessibility Initiative (WAI), the implementation of which is supported by the Government's Information and Press Service (SIP). Additionally, the Grand Duchy of Luxembourg's digital accessibility portal provides a range of resources for making websites and mobile applications accessible to all. The digital accessibility process therefore makes it possible to provide a better quality of life through easier access to public services, and as such, it is a Government priority. The SIP is responsible for carrying out periodic accessibility checks on the websites and mobile applications of public sector bodies. These checks are regularly reported to the European Commission. In addition, the SIP is in charge of dealing with the complaints about the digital accessibility of mobile websites or applications in collaboration with the concerned public sector bodies. Finally, the SIP has a mission to inform, raise awareness and train public sector bodies on e-accessibility. "
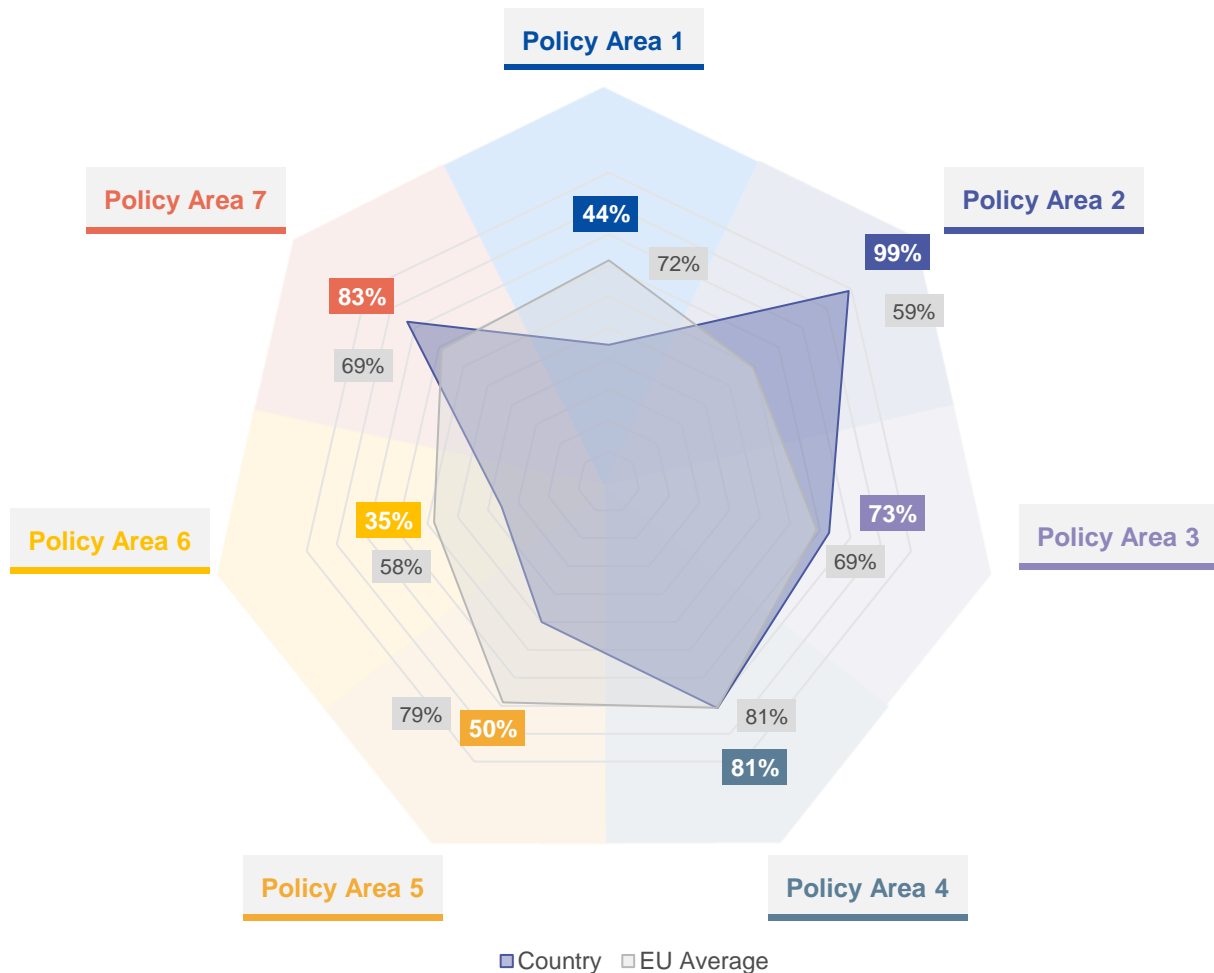
62

Malta

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Malta | Policy Areas level of implementation

Policy Area 1 — 44% (EU 72%)
Policy Area 2 — 99% (EU 59%)
Policy Area 3 — 73% (EU 69%)
Policy Area 4 — 81% (EU 81%)
Policy Area 5 — 50% (EU 79%)
Policy Area 6 — 35% (EU 58%)
Policy Area 7 — 83% (EU 69%)

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
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Malta

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Malta | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
44%

1.1	Include and translate fundamental rights into policies and technology procurement rules	No data
1.2	Raise awareness on value-based digital transformation	56%
1.3	Establish ethical and technological expert councils	33%

Policy Area 2
Enhance social participation and inclusion
99%

2.1	Encourage the use of digital tools to foster citizen participation in policy decision making	100%
2.2	Ensure inclusiveness and accessibility for all to fully digital public services and information	No data
2.3	Provide easy access to services from mobiles	98%

Policy Area 3
Foster digital empowerment and digital literacy
73%

3.1	Launch and promote initiatives for citizens' digital literacy	40%
⭐ 3.2	Provide easily accessible, user-friendly and seamless digital services	79%
3.3	Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
81%

4.1	Promote the rollout and use of notified eID in the public and private sectors	67%
4.2	Promote responsible and legally compliant re-use of data	76%
4.3	Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
50%

5.1	Jointly work towards agreements on requirements for technology providers	0%
5.2	Implement common standards and modular architectures in cross border digital solutions	No data
5.3	Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
35%

6.1	Foster transparency and accountability when designing digital public services	29%
⭐ 6.2	Share best practices on the development of human-centric AI systems	44%
6.3	Stimulate knowledge sharing on human centric technologies	33%

Policy Area 7
Foster resilience and sustainability
83%

7.1	Assess and make transparent energy consumption of digital tools and infrastructures	No data
7.2	Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	50%
7.3	Initiate expert consultations on appropriate use of digital technologies	100%
7.4	Foster the exchange of crisis management data	100%

⬜ EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

Good Practices from Malta

Policy Action 3.2 | Continue to provide easily accessible, user-friendly services and seamless digital public services, tools and applications

KPI 18 | Digital Public Services Dimension comprising of eGovernment

78%
EU Average
72%
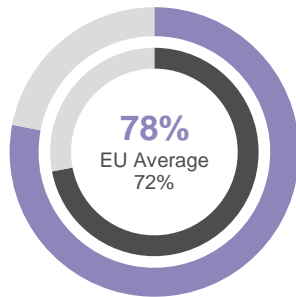
KPI 18

"The inGOV project in Malta aims to develop and deploy a comprehensive Integrated Public Services (IPS) holistic framework and ICT mobile tools that will support IPS co-creation and governance. The project will enhance and where needed re-design existing EU solutions, including EIF, EIRA, Core Vocabularies. With respect to the Malta pilot for which Malta Information Technology Agency (MITA) is responsible, MITA shall be modernising the digital household unit public service for use by the relevant Government entities, including for Social Security, Taxation, Utility and Retail, and Citizen Identity purposes. This IPS framework will identify different household unit compositions (e.g., families, shared residences) as used throughout the Maltese public administration."

Policy Action 6.2 | Share best practices on the development of successful human-centric AI systems in the public sector

KPI 34 | Share best practices on the development of successful human-centric AI systems in the public sector that can be used by all public administrations at European, national and sub-national levels

44%
EU Average
42%
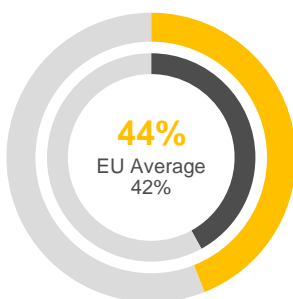
KPI 34

"The Malta National Language Technology Platform (NLTP) is an ongoing effort that aims to provide a basis for enhancing Malta's official languages, namely Maltese and English, using Machine Translation. The Malta NLTP shall act as a central repository for Maltese language tools and resources, primarily in the context of automated translation, such as online Computer Assistance Translation tools and Neural Machine Translation systems. It will act as a one-stop-shop for its stakeholders, including SMEs, public entities, researchers, and citizens and residents of Malta. Moreover, it shall continuously support the curation of any Maltese language tools and resources for multiple domains, and the Maltese low-resourced language, in particular as required for Machine Translation. The Malta NLTP will ensure the presence of the Maltese language in digital environments and counter the threat of 'digital extinction' of the language. More information on the Malta NLTP can be accessed here."

The Netherlands
2021 | Berlin Declaration Monitoring (BDM)

**2021 BDM Results for Netherlands | Policy Areas level of implementation**

Policy Area 1 — 88% / 72%
Policy Area 2 — 61% / 59%
Policy Area 3 — 79% / 69%
Policy Area 4 — 93% / 81%
Policy Area 5 — 81% / 79%
Policy Area 6 — 86% / 58%
Policy Area 7 — 85% / 69%

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

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More information on the model and country results is available in Appendix II

The Netherlands
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Netherlands | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
88%

- 1.1 | Include and translate fundamental rights into policies and technology procurement rules — 100%
- 1.2 | Raise awareness on value-based digital transformation — 96%
- 1.3 | Establish ethical and technological expert councils — 67%

Policy Area 2
Enhance social participation and inclusion
61%

- 2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making — 58%
- 2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information — 60%
- 2.3 | Provide easy access to services from mobiles — 66%

Policy Area 3
Foster digital empowerment and digital literacy
79%

- 3.1 | Launch and promote initiatives for citizens' digital literacy — 47%
- 3.2 | Provide easily accessible, user-friendly and seamless digital services — 91%
- 3.3 | Initiate workshops/trainings to promote digital skills in the public sector — 100%

Policy Area 4
Strengthen trust through security in the digital sphere
93%

- 4.1 | Promote the rollout and use of notified eID in the public and private sectors — 100%
- 4.2 | Promote responsible and legally compliant re-use of data — 80%
- 4.3 | Consider ways to foster agreement on ICT security requirements — 100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
81%

- 5.1 | Jointly work towards agreements on requirements for technology providers — 100%
- 5.2 | Implement common standards and modular architectures in cross border digital solutions — 75%
- 5.3 | Work with the EC to provide suitable online public services for EU cross-border use — 67%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
86%

- 6.1 | Foster transparency and accountability when designing digital public services — 58%
- 6.2 | Share best practices on the development of human-centric AI systems — 100%
- 6.3 | Stimulate knowledge sharing on human centric technologies — 100%

Policy Area 7
Foster resilience and sustainability
85%

- 7.1 | Assess and make transparent energy consumption of digital tools and infrastructures — 75%
- 7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — 66%
- 7.3 | Initiate expert consultations on appropriate use of digital technologies — 100%
- 7.4 | Foster the exchange of crisis management data — 100%

EU Average   ⭐ Good Practice   0% 20% 40% 60% 80% 100%

Good Practices from the Netherlands

Policy Action 1.1 | Translate abstract fundamental rights regulations into tangible policies and strive to set an example by incorporating fundamental rights into public sector.

KPI 1 | Inclusion of fundamental rights principles in public sector innovation policies.

100%
EU Average
68%
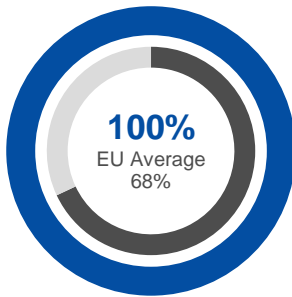
KPI 1

"The toolbox for ethically responsible innovation contains seven core principles and assists government organisations to implement digital innovations in an ethically responsible manner. For each core principle, a series of specific recommendations and tools are provided. It includes:
- A Guidebook for design principles of AI systems that contains practical guidelines to assist developers in preventing discrimination by AI systems.
- An Impact Assessment for human rights in the use of algorithms (IAMA). An organisation can use this IA to assess and mitigate the risks to human rights in the life cycle of algorithmic systems.
- A Code for Good Digital Governance, which devotes attention to the consequences of digitisation for public administration, by means of principles and values that have been incorporated into three anchor points (democracy, rule of law and administrative power). In addition, the code contains an impetus for the organisational actions needed to safeguard public values and human rights.

Policy Action 7.1 | Consider how to assess and make transparent the energy sources and consumption of digital tools and infrastructures as well as ways to improve their efficiency.

KPI 39 | Actions at national or sub-national level for improving energy efficiency, optimise local consumption of digital tools and infrastructures.

100%
EU Average
66%
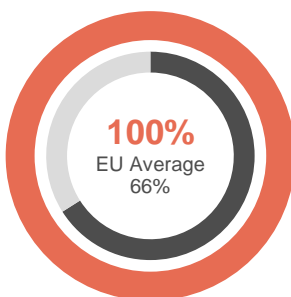
KPI 39

"In October 2019, the sustainable, social and innovative procurement strategy for central government 'Procurement with Impact' was adopted. For ICT tendering processes, good preparation is customary, and consultation with the market plays an important role. Together with the market, the government examines which sustainability requirements can have an additional impact and which are accepted by the market. The objectives are as follows:
- To purchase only the most energy-efficient hardware, networks, services and telephone equipment.
- Data centres use sustainable energy with a DCiE (Data Centre Infrastructure Efficiency) score of at least 50%, weighted over a year.
- ICT hardware is one of the six business categories that is designed in a circular way. The results are reported in the annual report on central government operations.
Additionally, the Generic Government Digital Infrastructure (GDI) has been developed gradually and consists of conventions, standards and IT modules for functionalities such as service provision and interaction with citizens and businesses, authentication, basic registers and data exchange. GDI enables citizens and businesses to be served in the same way, in a user-friendly and secure manner, and service providers in government to work together effectively, efficiently and securely. Legislation is being considered in Parliament to make GDI modules mandatory, starting with the eID, in order to maximise use (including at local and regional level). Proposals for other modules are expected to follow in the near future. Besides, ROAD 2020 is the central government tender for Data Centres 2020. It is a four-year exclusive contract for the provision of data center resources and associated services. It notably aims to ensure that data centers operate as sustainably as possible.

Poland

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Poland | Policy Areas level of implementation

Policy Area 1

Policy Area 7

Policy Area 2

72%

69%

58%

59%

58%

Policy Area 6

38%

67%

Policy Area 3

69%

79%

81%

71%

75%

Policy Area 5

Policy Area 4

☐ Country   ☐ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Poland

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Poland | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
No data

Action	Value
1.1 | Include and translate fundamental rights into policies and technology procurement rules	No data
1.2 | Raise awareness on value-based digital transformation	72%
1.3 | Establish ethical and technological expert councils	No data

Policy Area 2
Enhance social participation and inclusion
58%

Action	Value
2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	1%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	80%
2.3 | Provide easy access to services from mobiles	95%

Policy Area 3
Foster digital empowerment and digital literacy
67%

Action	Value
3.1 | Launch and promote initiatives for citizens' digital literacy	31%
3.2 | Provide easily accessible, user-friendly and seamless digital services	69%
⭐ **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
75%

Action	Value
4.1 | Promote the rollout and use of notified eID in the public and private sectors	67%
⭐ **4.2 |** Promote responsible and legally compliant re-use of data	57%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
71%

Action	Value
5.1 | Jointly work towards agreements on requirements for technology providers	No data
5.2 | Implement common standards and modular architectures in cross-border digital solutions	75%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	67%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
38%

Action	Value
6.1 | Foster transparency and accountability when designing digital public services	25%
6.2 | Share best practices on the development of human-centric AI systems	No data
6.3 | Stimulate knowledge sharing on human centric technologies	50%

Policy Area 7
Foster resilience and sustainability
No data

Action	Value
7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	58%
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	No data
7.3 | Initiate expert consultations on appropriate use of digital technologies	0%
7.4 | Foster the exchange of crisis management data	No data

☐ EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

Good Practices from Poland

Policy Action 3.3 | Initiate workshops, training etc. in order to promote digital skills and awareness in the public sector.

KPI 19 | Promotion of digital skills and awareness in the public sector.

100%
EU Average
100%

KPI 19

" Poland has put in place information and educational campaigns to raise awareness in four domains: Quality of life; Public e-services; Online safety; and Programming. These initiatives will last till 2023 and will be continued in the next years until 2030 with an emphasis on digital skills. The government is also preparing the Digital Competence Development Programme (2020-2030) which will aim to provide coordinated actions aiming to raise the level of digital skills in Poland, develop digital education and increase the number of ICT specialists. All these actions will be accompanied by the above-mentioned awareness campaigns.

At the same time, the Programme also aims to foster a collaborative environment, in which ICT professionals can develop further their technological skills, in the context of the digital transformation or skills needed to work with key emerging technologies, such as Artificial Intelligence (AI), cloud and data, cybersecurity and others. The Digital Competence Development Programme operates within the framework of the 4 pillars of the EU Digital Skills and Jobs Coalition - skills for all citizens, the labour force, education and digital experts. "

Policy Action 4.2 | Promote responsible and legally compliant re-use of data and the Once-Only Principle in line with the Tallinn Declaration and encourage new concepts such as personal data management based on user consent.

KPI 23 | Strategy/policy outline measures supporting the re-use of open data by the public sector.

100%
EU Average
89%
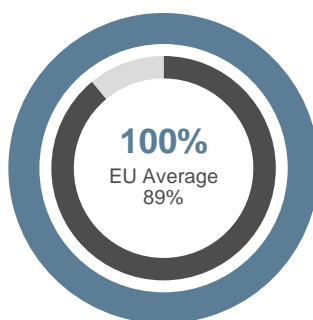
KPI 23

" For several years Poland has been leading a coherent, evidenced-based open data policy. The country adopted a new comprehensive regulatory and strategic documents in this area. In the regulatory aspect, the 2021 Act on open data facilitates the re-use of public sector information and will increase the availability of open data that have potential for innovative re-use, e.g., in digital services or mobile applications. Among the new developments, the Act emphasises the automated and real-time provision of data via the open data portal and through an API, and introduces the foundations for data sharing by new entities, like public undertakings and research and scientific institutions. The act includes solutions regarding the open data strategy and network of open data officers, it defines pillars and principles of openness, introduces uniform terminology, regulates standard open licensing or publication of source codes designed in connection with public tasks.

In strategic terms, the open data policy is based on the Open Data Programme for 2021-2027. The Programme complements the Act on open data and contains mechanisms for implementing, coordinating and evaluating open data activities at the government level.

Moving on the operational level, one of important elements of our institutional environment is the network of open data officers in all ministries and Central Statistical Office. They are responsible for publication of new datasets on the portal dane.gov.pl and they supervise data quality and compliance with standards.

The open data portal provides a central access point to data and their metadata in Poland. The portal provides fast and free access to data that can be re-used in products, services and new business models. "

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Portugal
2021 | Berlin Declaration Monitoring (BDM)

**2021 BDM Results for Portugal | Policy Areas level of implementation**

Policy Area 1: **89%** / 73%
Policy Area 2: **63%** / 60%
Policy Area 3: **72%** / 69%
Policy Area 4: **100%** / 81%
Policy Area 5: **81%** / 78%
Policy Area 6: **54%** / 58%
Policy Area 7: **73%** / 68%

■ Country ☐ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

More information on the model and country results is available in Appendix II

Portugal

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Portugal | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
89%

Action	Value
1.1 | Include and translate fundamental rights into policies and technology procurement rules	No data
1.2 | Raise awareness on value-based digital transformation	78%
1.3 | Establish ethical and technological expert councils	100%

Policy Area 2
Enhance social participation and inclusion
63%

Action	Value
2.1 | Encourage the use of digital tools to foster citizen participation in policy decision making	33%
2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	60%
⭐ 2.3 | Provide easy access to services from mobiles	96%

Policy Area 3
Foster digital empowerment and digital literacy
72%

Action	Value
3.1 | Launch and promote initiatives for citizens' digital literacy	36%
3.2 | Provide easily accessible, user-friendly and seamless digital services	81%
3.3 | Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
100%

Action	Value
4.1 | Promote the rollout and use of notified eID in the public and private sectors	100%
4.2 | Promote responsible and legally compliant re-use of data	100%
4.3 | Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
81%

Action	Value
5.1 | Jointly work towards agreements on requirements for technology providers	100%
5.2 | Implement common standards and modular architectures in cross border digital solutions	75%
5.3 | Work with the EC to provide suitable online public services for EU cross-border use	67%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
54%

Action	Value
6.1 | Foster transparency and accountability when designing digital public services	58%
6.2 | Share best practices on the development of human-centric AI systems	22%
⭐ 6.3 | Stimulate knowledge sharing on human centric technologies	83%

Policy Area 7
Foster resilience and sustainability
73%

Action	Value
7.1 | Assess and make transparent energy consumption of digital tools and infrastructures	25%
7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	67%
7.3 | Initiate expert consultations on appropriate use of digital technologies	100%
7.4 | Foster the exchange of crisis management data	100%

EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

73

Good Practices from Portugal

Policy Action 2.3 | Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders

KPI 11 | Cooperation between EU Member States to ensure cross-border access to services via the mobile channel.

100%
EU Average
66%
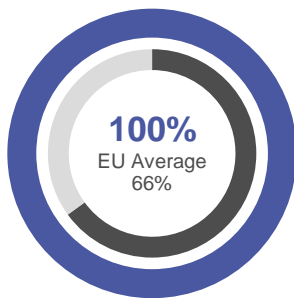
KPI 11

"Portugal has an active role in the discussion of the new EU Regulation proposal for implementing a European Digital Identity, which specifically focuses on the mobile channel through the creation of European Digital Identity Wallets (apps). It is worth mentioning that Portugal already has a digital identity app, ID.GOV.PT, which allows the user to access, consult and share his personal identification documents, with the same legal value of the original, paper-based cards. ID.GOV.PT makes use of the Digital Mobile Key, the national mobile solution for digital identity that is fully compliant with the eIDAS Regulation, with a Level of Assurance 'High'. Portugal participates in other cross-border interoperability projects that also address the mobile channel, such as the national implementation of the Single Digital Gateway Regulation (and which will articulate with the aforementioned new European Digital Identity Regulation) and projects co-financed by the European programmes H2020 and CEF, including (among others) the DE4A (DigitalEurope4All) initiative (a large scale pilot aimed at the implementation of cross-border digital services) and the implementation/evolution of the Portuguese eIDAS node and eDelivery node. Another example is SEFMobile, a mobile border control system that will be used as a fallback on the entry-exit system, and whose technology is being shared and shown with the other Member States."

Policy Action 6.3 | Stimulate knowledge sharing between practitioners of administrative innovation strategies and on examples of human centric technologies in public administrations.

KPI 35 | Knowledge sharing on public sector innovation strategies.

100%
EU Average
83%
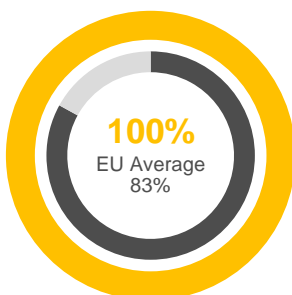
KPI 35

"Several initiatives allow the sharing of knowledge on public sector innovation strategies in Portugal. Among them, the LabX- Innovators Network, which is a community of practice within the public administration with the objective of promoting collaborative work, sharing of knowledge and experiences resulting from experimental projects and/or approaches, including support guides, good practices, work instruments or case studies that demonstrate promising or effective results. The network is aimed at all public workers who are enthusiastic about innovation and its applicability in their entities.
Additionally, the Network of Experimentation Laboratories consists of public administration teams that work collaboratively in rapid prototyping cycles to materialise experimentation in projects conducted to (re)design better public services. Currently, and in addition to the LabX – Centre for Innovation in the Public Sector, the network includes LMx – Coimbra City Council, LxLEM – Lisbon City Council, DAL_he – Tourism of Portugal and LouléXLab – Municipality of Loulé."

Romania
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Romania | Policy Areas level of implementation

Policy Area 1 — 33% / 73%
Policy Area 2 — 16% / 60%
Policy Area 3 — 42% / 69%
Policy Area 4 — 81%
Policy Area 5 — 50% / 78%
Policy Area 6 — 58%
Policy Area 7 — 68%

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
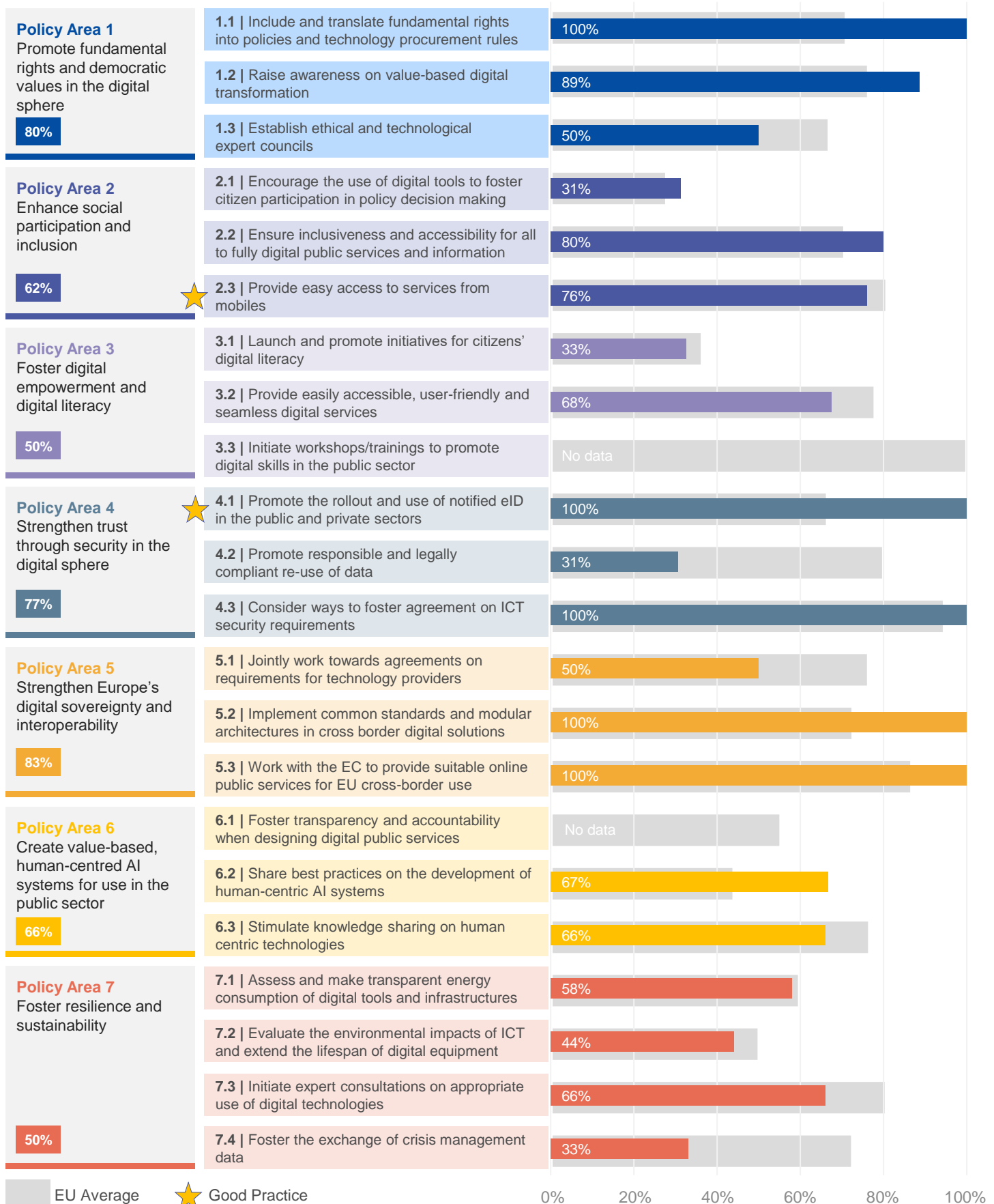
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Romania

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Romania | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
33%

1.1	Include and translate fundamental rights into policies and technology procurement rules	0%
1.2	Raise awareness on value-based digital transformation	48%
1.3	Establish ethical and technological expert councils	50%

Policy Area 2
Enhance social participation and inclusion
16%

2.1	Encourage the use of digital tools to foster citizen participation in policy decision making	5%
2.2	Ensure inclusiveness and accessibility for all to fully digital public services and information	20%
2.3	Provide easy access to services from mobiles	24%

Policy Area 3
Foster digital empowerment and digital literacy
42%

3.1	Launch and promote initiatives for citizens' digital literacy	32%
3.2	Provide easily accessible, user-friendly and seamless digital services	52%
3.3	Initiate workshops/trainings to promote digital skills in the public sector	No data

Policy Area 4
Strengthen trust through security in the digital sphere
No data

4.1	Promote the rollout and use of notified eID in the public and private sectors	0%
4.2	Promote responsible and legally compliant re-use of data	No data
4.3	Consider ways to foster agreement on ICT security requirements	No data

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
50%

5.1	Jointly work towards agreements on requirements for technology providers	No data
5.2	Implement common standards and modular architectures in cross border digital solutions	0%
5.3	Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
0%

6.1	Foster transparency and accountability when designing digital public services	0%
6.2	Share best practices on the development of human-centric AI systems	0%
6.3	Stimulate knowledge sharing on human centric technologies	0%

Policy Area 7
Foster resilience and sustainability
0%

7.1	Assess and make transparent energy consumption of digital tools and infrastructures	0%
7.2	Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	0%
7.3	Initiate expert consultations on appropriate use of digital technologies	0%
7.4	Foster the exchange of crisis management data	No data

EU Average ⭐ Good Practice

0% 20% 40% 60% 80% 100%

Slovakia

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Slovakia | Policy Areas level of implementation

Policy Area 1 — 80% / 72%
Policy Area 2 — 62% / 59%
Policy Area 3 — 50% / 69%
Policy Area 4 — 77% / 81%
Policy Area 5 — 83% / 79%
Policy Area 6 — 66% / 58%
Policy Area 7 — 50% / 69%

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
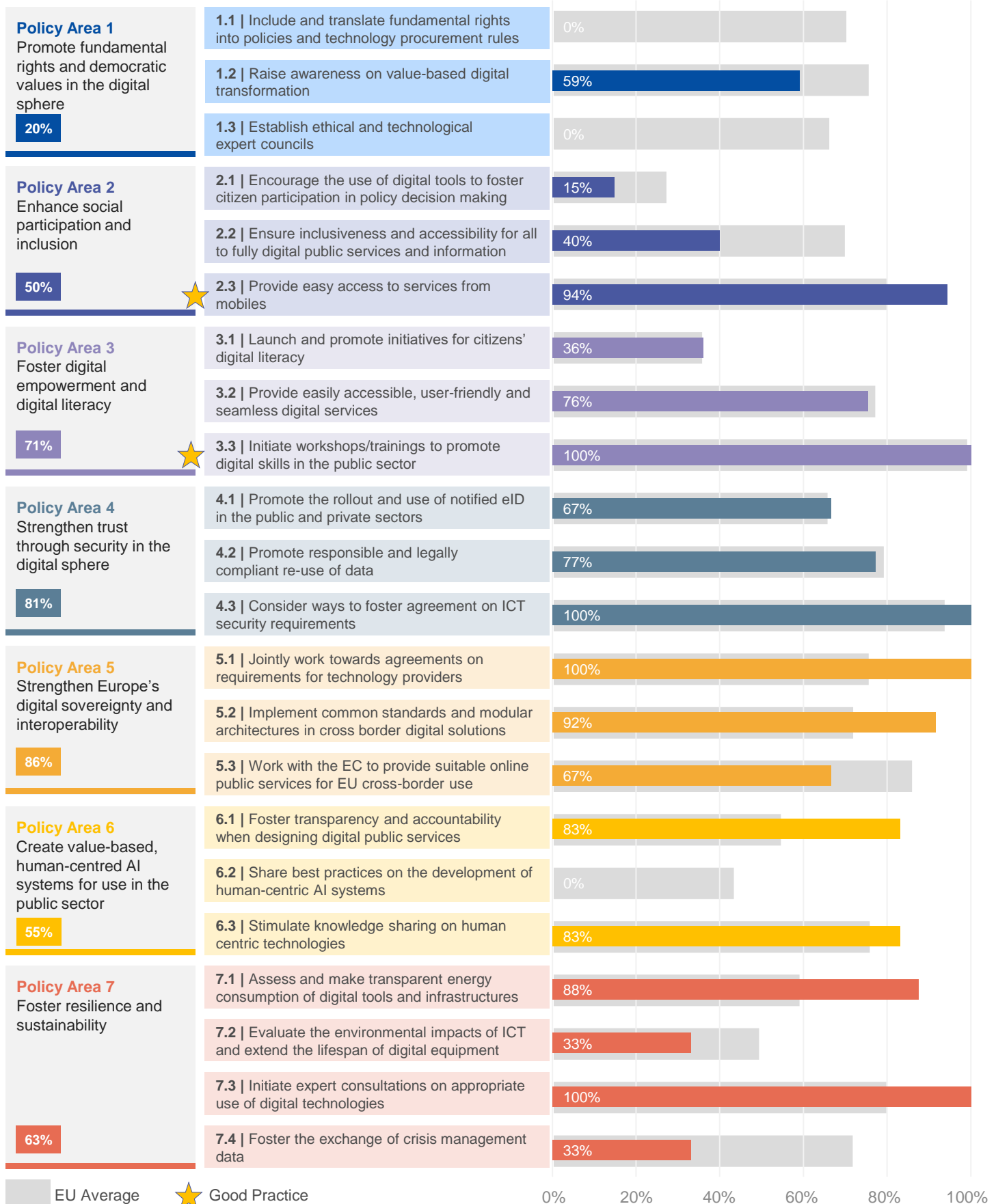
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More information on the model and country results is available in Appendix II

Slovakia

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Slovakia | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
80%

- **1.1 |** Include and translate fundamental rights into policies and technology procurement rules — 100%
- **1.2 |** Raise awareness on value-based digital transformation — 89%
- **1.3 |** Establish ethical and technological expert councils — 50%

Policy Area 2
Enhance social participation and inclusion
62%

- **2.1 |** Encourage the use of digital tools to foster citizen participation in policy decision making — 31%
- **2.2 |** Ensure inclusiveness and accessibility for all to fully digital public services and information — 80%
- ⭐ **2.3 |** Provide easy access to services from mobiles — 76%

Policy Area 3
Foster digital empowerment and digital literacy
50%

- **3.1 |** Launch and promote initiatives for citizens' digital literacy — 33%
- **3.2 |** Provide easily accessible, user-friendly and seamless digital services — 68%
- **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector — No data

Policy Area 4
Strengthen trust through security in the digital sphere
77%

- ⭐ **4.1 |** Promote the rollout and use of notified eID in the public and private sectors — 100%
- **4.2 |** Promote responsible and legally compliant re-use of data — 31%
- **4.3 |** Consider ways to foster agreement on ICT security requirements — 100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
83%

- **5.1 |** Jointly work towards agreements on requirements for technology providers — 50%
- **5.2 |** Implement common standards and modular architectures in cross border digital solutions — 100%
- **5.3 |** Work with the EC to provide suitable online public services for EU cross-border use — 100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
66%

- **6.1 |** Foster transparency and accountability when designing digital public services — No data
- **6.2 |** Share best practices on the development of human-centric AI systems — 67%
- **6.3 |** Stimulate knowledge sharing on human centric technologies — 66%

Policy Area 7
Foster resilience and sustainability
50%

- **7.1 |** Assess and make transparent energy consumption of digital tools and infrastructures — 58%
- **7.2 |** Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — 44%
- **7.3 |** Initiate expert consultations on appropriate use of digital technologies — 66%
- **7.4 |** Foster the exchange of crisis management data — 33%

EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

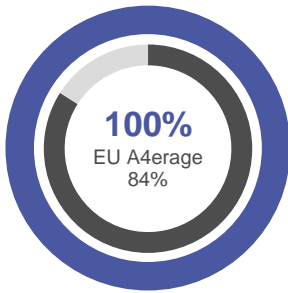More information on the model and country results is available in Appendix II

Good Practices from Slovakia

Policy Action 2.3 | Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders.

**KPI 12 |** Existence of a national strategy to enable citizens to use their mobile devices to carry out digital public services.

100%
EU Average
84%
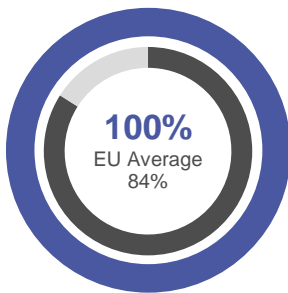
KPI 12

"Mobile eGov services are currently one of the key priorities for development in the coming years.
The 2030 Digital Transformation Strategy for Slovakia, including target architecture, was adopted last year.
Currently, several national implementation projects (such as "Slovakia on Mobile") are carried out with the aim to enable identification and authentication with mobile devices, access to the mobile version of eGov services, management of personal data and API for the development of third-party mobile applications."

Policy Action 4.1 | Promote the rollout and use of notified eID means and introduce incentives for the private sector to use European trustworthy and notified eID.

KPI 21 | Number of eIDAS nodes that have passed the interoperability test.

100%
EU Average
81%
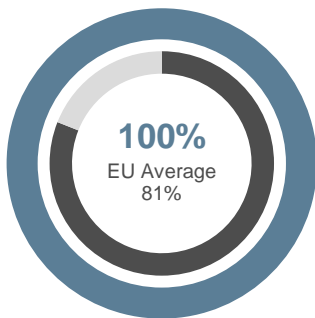
KPI 21

"Slovakia notified its first eID scheme in 2019. At the same time, the integration of the eIDAS node into the eGovernment services was implemented at the very central level. As a result, every service which allows for authentication with the Slovak eID, also accepts authentication with all notified authentication means. Furthermore, Slovakia actively tackles the problem of identity matching by implementation of the mechanism which will leverage the identities of the cross-border users to be fully on par with the national ones."

79

Slovenia
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Slovenia | Policy Areas level of implementation

Radar chart comparing Country vs EU Average:

- Policy Area 1: Country **20%**, EU Average 72%
- Policy Area 2: Country **50%**, EU Average 59%
- Policy Area 3: Country **71%**, EU Average 69%
- Policy Area 4: Country **81%**, EU Average 81%
- Policy Area 5: Country **86%**, EU Average 79%
- Policy Area 6: Country **55%**, EU Average 58%
- Policy Area 7: Country **63%**, EU Average 69%

■ Country ■ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
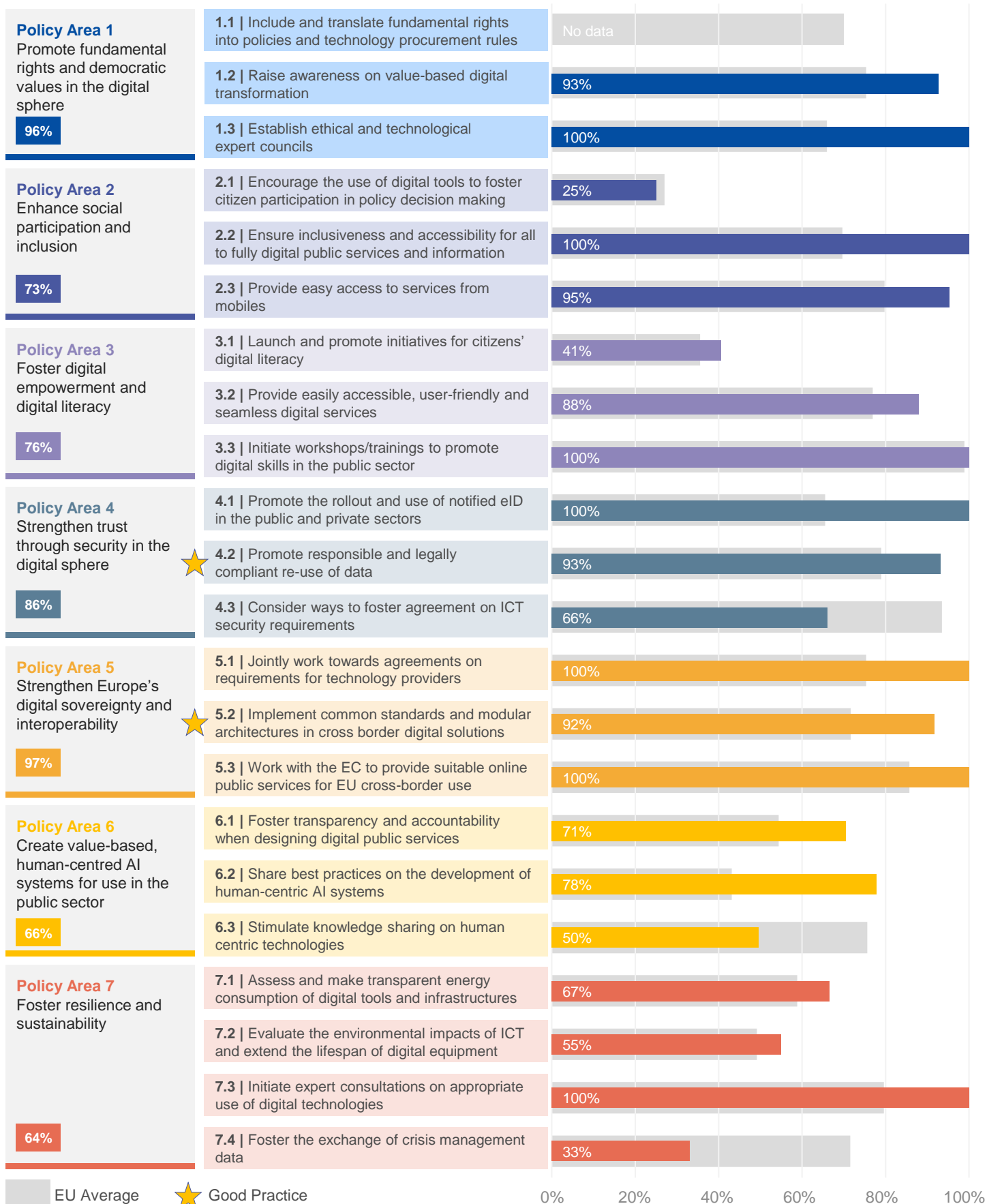The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Slovenia

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Slovenia | Policy Actions level of implementation

Policy Area	Policy Action	Result
Policy Area 1 Promote fundamental rights and democratic values in the digital sphere — **20%**	**1.1 |** Include and translate fundamental rights into policies and technology procurement rules	0%
	1.2 | Raise awareness on value-based digital transformation	59%
	1.3 | Establish ethical and technological expert councils	0%
Policy Area 2 Enhance social participation and inclusion — **50%**	**2.1 |** Encourage the use of digital tools to foster citizen participation in policy decision making	15%
	2.2 | Ensure inclusiveness and accessibility for all to fully digital public services and information	40%
	⭐ **2.3 |** Provide easy access to services from mobiles	94%
Policy Area 3 Foster digital empowerment and digital literacy — **71%**	**3.1 |** Launch and promote initiatives for citizens' digital literacy	36%
	3.2 | Provide easily accessible, user-friendly and seamless digital services	76%
	⭐ **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector	100%
Policy Area 4 Strengthen trust through security in the digital sphere — **81%**	**4.1 |** Promote the rollout and use of notified eID in the public and private sectors	67%
	4.2 | Promote responsible and legally compliant re-use of data	77%
	4.3 | Consider ways to foster agreement on ICT security requirements	100%
Policy Area 5 Strengthen Europe's digital sovereignty and interoperability — **86%**	**5.1 |** Jointly work towards agreements on requirements for technology providers	100%
	5.2 | Implement common standards and modular architectures in cross border digital solutions	92%
	5.3 | Work with the EC to provide suitable online public services for EU cross-border use	67%
Policy Area 6 Create value-based, human-centred AI systems for use in the public sector — **55%**	**6.1 |** Foster transparency and accountability when designing digital public services	83%
	6.2 | Share best practices on the development of human-centric AI systems	0%
	6.3 | Stimulate knowledge sharing on human centric technologies	83%
Policy Area 7 Foster resilience and sustainability — **63%**	**7.1 |** Assess and make transparent energy consumption of digital tools and infrastructures	88%
	7.2 | Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	33%
	7.3 | Initiate expert consultations on appropriate use of digital technologies	100%
	7.4 | Foster the exchange of crisis management data	33%

Legend: ▭ EU Average ⭐ Good Practice

Scale: 0% 20% 40% 60% 80% 100%

81

Good Practices from Slovenia

Policy Action 2.3 | Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders

KPI 12 | Existence of a national strategy to enable citizens to use their mobile devices to carry out digital public services

100%
EU A4erage
84%

KPI 12

" In May 2021, the government adopted its national programme dedicated to encouraging the development and use of artificial intelligence (AI) by 2025 and put the Public Administration Ministry in charge of coordination and implementation of measures from the programme. It contains extensive measures to support innovation and the transfer of knowledge from research to application and to coordinate national stakeholders in the development of a dynamic innovation ecosystem are proposed. (See more information on the Digital Slovenia 2030 Strategy). "

Policy Action 3.3 | Initiate workshops, training etc. in order to promote digital skills and awareness in the public sector

KPI 19 | Promotion of digital skills and awareness in the public sector

100%
EU Average
100%
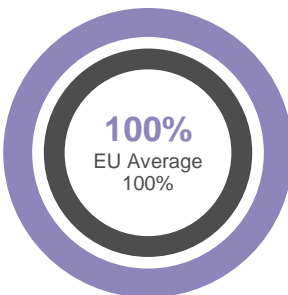
KPI 19

" Slovenia offers a varied programme of training courses through the Administration Academy. The Administration Academy organises and conducts these training courses and professional examinations for public employees to improve their professional competences, work efficiency, and personal development. The Academy continuously updates the contents to match demand, while ensuring that modern forms of training are used.

These trainings are provided on a regular basis in the frame of appointments to regulated work position. There are seminars and workshops on topics such as legislation, civil service system, public finances, data management, acquisition of various skills and Digital Skills Training Area (e.g., Heckatons – sectorial initiatives). "

82

Spain

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Spain | Policy Areas level of implementation

Policy Area 1 — 96% / 72%
Policy Area 2 — 73% / 59%
Policy Area 3 — 76% / 69%
Policy Area 4 — 86% / 81%
Policy Area 5 — 97% / 79%
Policy Area 6 — 66% / 58%
Policy Area 7 — 64% / 69%

■ Country ▫ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
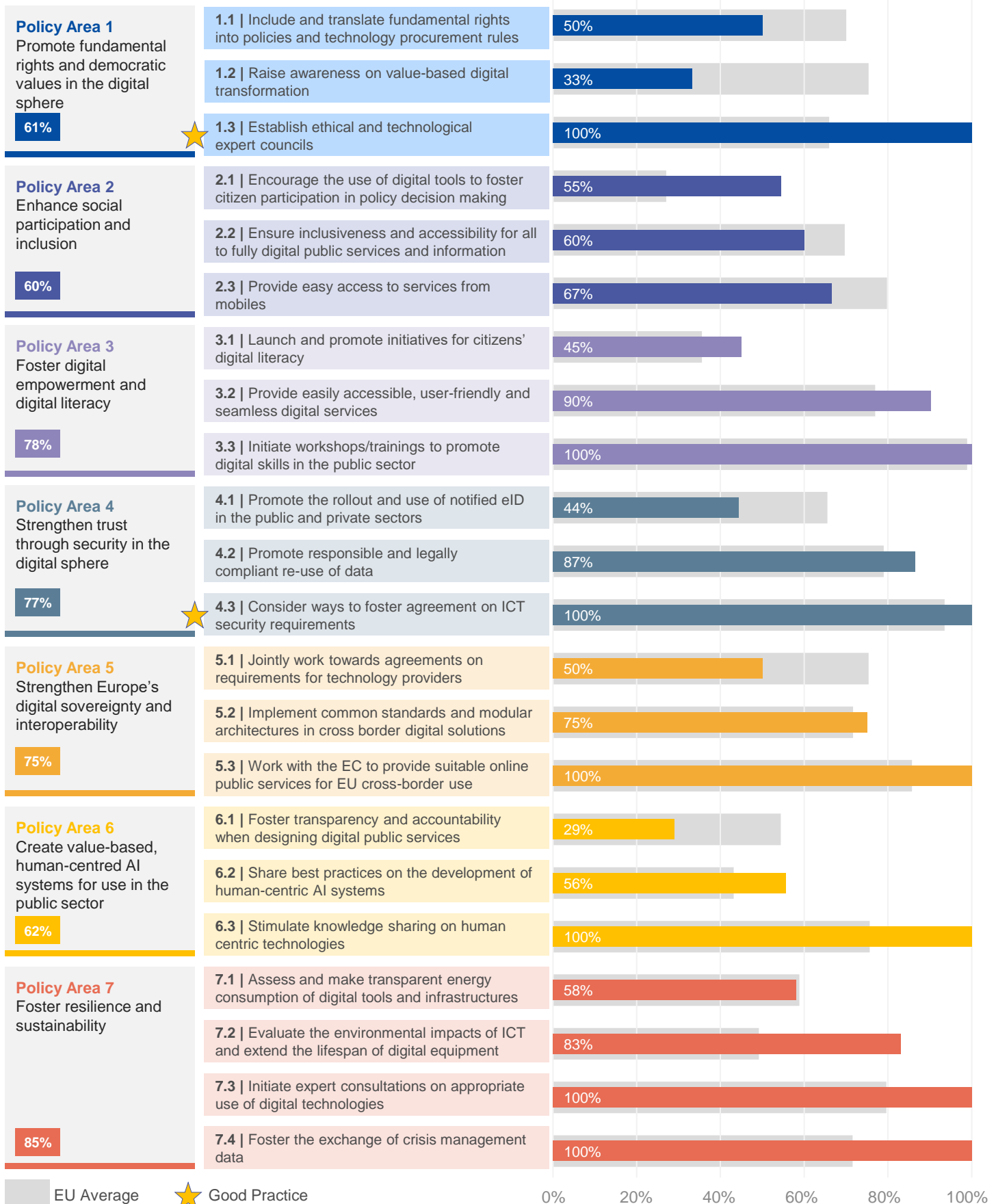
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Spain

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Spain | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
96%

- **1.1 |** Include and translate fundamental rights into policies and technology procurement rules — No data
- **1.2 |** Raise awareness on value-based digital transformation — 93%
- **1.3 |** Establish ethical and technological expert councils — 100%

Policy Area 2
Enhance social participation and inclusion
73%

- **2.1 |** Encourage the use of digital tools to foster citizen participation in policy decision making — 25%
- **2.2 |** Ensure inclusiveness and accessibility for all to fully digital public services and information — 100%
- **2.3 |** Provide easy access to services from mobiles — 95%

Policy Area 3
Foster digital empowerment and digital literacy
76%

- **3.1 |** Launch and promote initiatives for citizens' digital literacy — 41%
- **3.2 |** Provide easily accessible, user-friendly and seamless digital services — 88%
- **3.3 |** Initiate workshops/trainings to promote digital skills in the public sector — 100%

Policy Area 4
Strengthen trust through security in the digital sphere
86%

- **4.1 |** Promote the rollout and use of notified eID in the public and private sectors — 100%
- ⭐ **4.2 |** Promote responsible and legally compliant re-use of data — 93%
- **4.3 |** Consider ways to foster agreement on ICT security requirements — 66%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
97%

- **5.1 |** Jointly work towards agreements on requirements for technology providers — 100%
- ⭐ **5.2 |** Implement common standards and modular architectures in cross border digital solutions — 92%
- **5.3 |** Work with the EC to provide suitable online public services for EU cross-border use — 100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
66%

- **6.1 |** Foster transparency and accountability when designing digital public services — 71%
- **6.2 |** Share best practices on the development of human-centric AI systems — 78%
- **6.3 |** Stimulate knowledge sharing on human centric technologies — 50%

Policy Area 7
Foster resilience and sustainability
64%

- **7.1 |** Assess and make transparent energy consumption of digital tools and infrastructures — 67%
- **7.2 |** Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment — 55%
- **7.3 |** Initiate expert consultations on appropriate use of digital technologies — 100%
- **7.4 |** Foster the exchange of crisis management data — 33%

Legend: ▢ EU Average ⭐ Good Practice

Scale: 0% 20% 40% 60% 80% 100%

84

Good Practices from Spain

Policy Action 4.2 | Promote responsible and legally compliant re-use of data and the Once-Only Principle in line with the Tallinn Declaration and encourage new concepts such as personal data management based on user consent.

KPI 27 | Compliance with the Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services.

66%
EU Average
49%
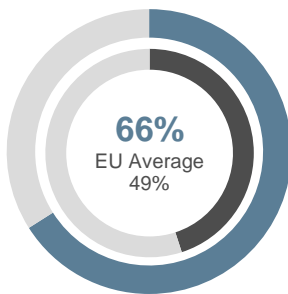
KPI 27

"Pursuant to Article 62 of Royal Decree 203/2021, the Intermediation Platform of the General State Administration (PID) shall act as a connection point with the technical system regulated by Regulation (EU) No. 2018/1724. of the European Parliament and of the Council for the automatic exchange of data or documents at European level.

The Data Intermediation Platform (PID) entered into service on 01/01/2007 and is a horizontal service that enables the 'once only' principle by simplifying administrative procedures so that citizens or businesses do not have to deliver data or documents already held by public authorities and reduces fraud in applications and related procedures. With this interoperable data exchange platform, there has been a spectacular growth in the number and types of data inquiry and verification services that can be automatically accessed online by public authorities. With an annual growth of data transmission above 20%, the service enables all public administrations, irrespective of their size or resources, to enforce the law and makes a significant contribution to social equity, reduction of administrative burden, and to adequate, sustainable efficiency and effectiveness. Citizens can also see the personal data exchanges through the one-stop-shop service called 'Citizen's folder', thus providing total transparency on the PID exchanges carried out between competent authorities."

Policy Action 5.2 | Establishing common standards and modular architectures.

KPI 30 | Use of common standards, modular architecture and consideration of open-source software in the development and deployment of cross-border digital solutions.

92%
EU Average
72%
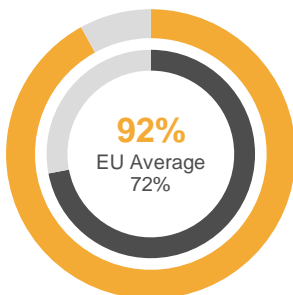
KPI 30

"Regarding common standards and modular architectures, Spain relies on the Spanish Royal Decree 4/2010 which stipulates the use of modular and multiplatform architectures that ease sharing, reusing and collaboration, as one of its three base principles. For example, ACCEDA (Citizens' Access to Administration Files) is a modular platform that integrates three main components: a Sede-e to provide a website for online administrative procedures, a complete manager for the electronic processing of the files that are initiated at the site, and a tool for its administration and configuration, which includes a content manager of the site and its own form editor. On the other hand, ACCEDA is integrated with other services such as Cl@ve. Regarding to open-source solutions, Article 157 of Law 40/2015, addresses the regime of reuse of applications and systems among public administrations, establishing the possibility of declaring these applications as open source and the provision of a directory, under the authority of the General State Administration, with the reusable solutions owned by any public administration. Royal Decree 4/2010 develops in its article 16 the licensing conditions applicable to the assets that are declared as open-source and indicates that in order to facilitate the establishment of the licensing conditions, the public administrations will include in the technical specifications of those contracts whose purpose is the development of new software applications that in the case of starting from open source products, it is possible to declare as open-source the future developed application."

Sweden
2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Sweden | Policy Areas level of implementation

■ Country □ EU Average

Policy Area 1 | Promote fundamental rights and democratic values in the digital sphere

Policy Area 2 | Enhance social participation and inclusion

Policy Area 3 | Foster digital empowerment and digital literacy

Policy Area 4 | Strengthen trust through security in the digital sphere

Policy Area 5 | Strengthen Europe's digital sovereignty and interoperability

Policy Area 6 | Create value-based, human-centred AI systems for use in the public sector

Policy Area 7 | Foster resilience and sustainability

The Berlin Declaration on Digital Society and Value-based Digital Government has reaffirmed European leaders' commitment to fundamental rights and European values, emphasizing the importance of digital public services and asserting the role of public administrations in driving a value-based digital transformation of European societies.
The BDM is targeted at assessing the level of implementation of the 22 Policy Actions, clustered into 7 Policy Areas taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024.

Sweden

2021 | Berlin Declaration Monitoring (BDM)

2021 BDM Results for Sweden | Policy Actions level of implementation

Policy Area 1
Promote fundamental rights and democratic values in the digital sphere
61%

1.1	Include and translate fundamental rights into policies and technology procurement rules	50%
1.2	Raise awareness on value-based digital transformation	33%
⭐ 1.3	Establish ethical and technological expert councils	100%

Policy Area 2
Enhance social participation and inclusion
60%

2.1	Encourage the use of digital tools to foster citizen participation in policy decision making	55%
2.2	Ensure inclusiveness and accessibility for all to fully digital public services and information	60%
2.3	Provide easy access to services from mobiles	67%

Policy Area 3
Foster digital empowerment and digital literacy
78%

3.1	Launch and promote initiatives for citizens' digital literacy	45%
3.2	Provide easily accessible, user-friendly and seamless digital services	90%
3.3	Initiate workshops/trainings to promote digital skills in the public sector	100%

Policy Area 4
Strengthen trust through security in the digital sphere
77%

4.1	Promote the rollout and use of notified eID in the public and private sectors	44%
4.2	Promote responsible and legally compliant re-use of data	87%
⭐ 4.3	Consider ways to foster agreement on ICT security requirements	100%

Policy Area 5
Strengthen Europe's digital sovereignty and interoperability
75%

5.1	Jointly work towards agreements on requirements for technology providers	50%
5.2	Implement common standards and modular architectures in cross border digital solutions	75%
5.3	Work with the EC to provide suitable online public services for EU cross-border use	100%

Policy Area 6
Create value-based, human-centred AI systems for use in the public sector
62%

6.1	Foster transparency and accountability when designing digital public services	29%
6.2	Share best practices on the development of human-centric AI systems	56%
6.3	Stimulate knowledge sharing on human centric technologies	100%

Policy Area 7
Foster resilience and sustainability
85%

7.1	Assess and make transparent energy consumption of digital tools and infrastructures	58%
7.2	Evaluate the environmental impacts of ICT and extend the lifespan of digital equipment	83%
7.3	Initiate expert consultations on appropriate use of digital technologies	100%
7.4	Foster the exchange of crisis management data	100%

EU Average   ⭐ Good Practice

0%   20%   40%   60%   80%   100%

Good Practices from Sweden

Policy Action 1.3 | Encourage the establishment of ethical and technological expert councils to provide advice to and foster debate among citizens

KPI 6 | Existence of initiatives promoting the set up of ethical and technological expert councils to provide advice to, and foster debate among citizens.

100%
EU Average
70%

KPI 6

> Sweden has established an expert council that combines ethical and technological perspectives: the Committee for Technological Innovation and Ethics (Komet) that strives to create good conditions for innovation and competitiveness, while developing and disseminating new technologies safely and with a long-term societal perspective. The Swedish Committee has participated in the development of a digital tool which is a self-evaluation tool to promote an ethical approach to the development, use and dissemination of new technologies and to contribute to an environmentally, socially and economically sustainable society. This tool provides support for making your own business more responsible. Responsible technology development is about applying an ethical approach to the development, use and diffusion of new technologies and contributing to an environmentally, socially and economically sustainable society.

Policy Action 4.3 | Consider ways to foster agreement on ICT security requirements

KPI 28 | Existence of initiatives to foster agreement on ICT security requirements for the public procurement of data processing services

100%
EU Average
95%
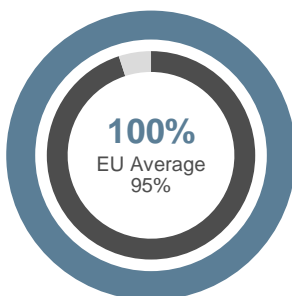
KPI 28

> The Swedish Civil Contingencies Agency published a specific guideline for ICT security requirements when procuring data processing services in the public sector.
> This guide provides support in setting clear information on security requirements so that the information is handled in a secure manner during the procurement work and so that the information handled by the product or service being procured receives appropriate and maintained protection. The guide can be used in all types of procurements and can be used by all types of organisations. It is aimed at CISO (chief information security officers), IT security managers, IT managers, clients, procurers and project managers for projects where goods and services are to be procured.

Appendix I – Methodology

The development and deployment of the BDM relies on a two-step approach: the design phase followed by the implementation phase.

1.1 Approach to design the monitoring mechanism

1.1.1 Design phase

The design phase is meant to define the theoretical framework on which the monitoring mechanism is based, as well as its underlying indicators. More specifically, the design phase includes:

> Designing the structure of the monitoring mechanism defining the elements to be measured, the granularity levels and how they relate to one another (i.e., the theoretical framework) based on the Declaration itself;

> Identifying a set of secondary indicators from existing data sources to assess each of the Policy Actions, complemented with custom-made primary indicators;

> Defining the scoring mechanism (i.e., the method to aggregate the indicators) with support from the Joint Research Centre - Competence Centre on Composite Indicators and Scoreboards (JRC – COIN) to ensure the creation of a statistically solid assessment framework;

> Validating the drafted monitoring mechanism through stakeholder consultations (i.e., volunteer Member States and relevant contact points in the Member States); and

> Designing the questionnaire to collect primary data from the Member States.

The output of the design phase is the BDM itself with a defined theoretical framework, a robust set of indicators and a statistically sound methodology to conduct the analysis of gathered data.

1.1.2 Implementation phase

Following the design of the BDM, the implementation phase consists in launching the data collection through an EU wide questionnaire to gather data for primary indicators. The data collection will be conducted jointly with the one of the EIF monitoring mechanisms in a combined online questionnaire to reduce reporting burden on the Member States.

1.2. Theoretical Framework

The BDM is targeted at assessing the level of implementation of the 22 Policy Actions (detailed in Appendix III) taken by the EU Member States with the signature of the Berlin Declaration. These are a set of statements that the Member States have committed to achieve in their respective countries by 2024. They are clustered into 7 Policy Areas (detailed in Appendix III), which are themselves in line with the 7 principles set out by the Declaration. The BDM's objectives are focused on monitoring the implementation of the Policy Actions by the Member States; as such, the Policy Actions mentioned in the Berlin Declaration to be achieved by the European Commission and other EU institutions are discarded from the BDM.

The architecture of the BDM is based on three granularity levels: the 7 Policy Areas (level 1) aggregating the 22 Policy Actions (level 2) assessed through a set of KPIs (level 3). For each level, all elements encompassed do not overlap and are of equal importance and weight. Figure 1 below shows an excerpt of the theoretical framework with the three levels for Policy Area 1 on the promotion of fundamental rights and democratic values in the digital sphere.

Figure 1 Excerpt of the theoretical framework for Policy Area 1
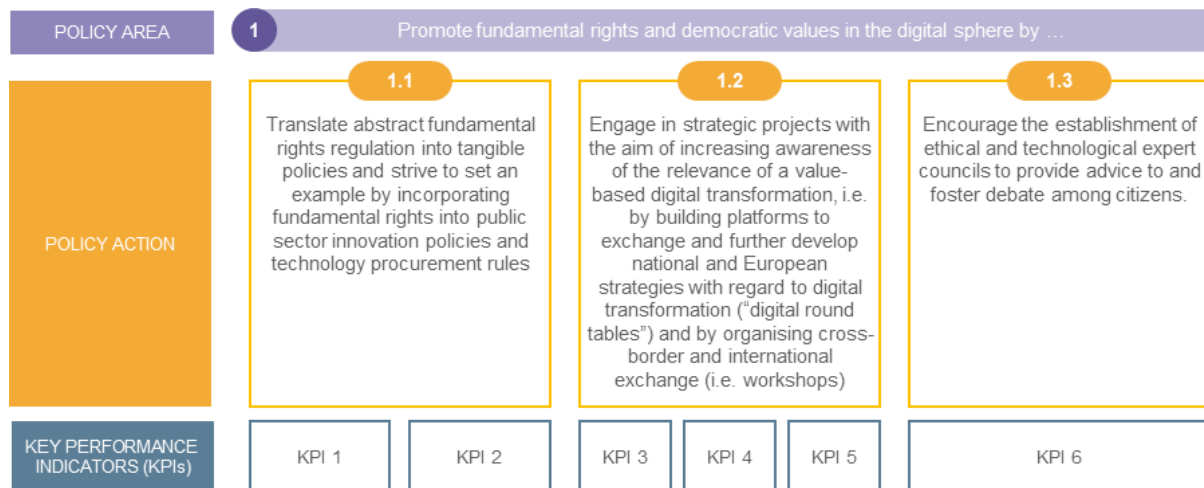
The assessment of each Policy Action relies on a set of primary and/or secondary KPIs. The secondary indicators are collected from existing information sources publicly available (e.g., Open Data Portal, Digital Economy and Society Index (DESI)) to avoid the duplication of data requests in line with the Once-Only Principle. For Policy Actions that cannot be fully evaluated using secondary data sources, a set of custom-made primary indicators is designed and collected through a questionnaire issued to contact points in all the Member States.

1.3. Scoring Mechanism

The implementation of the Policy Actions defined under the Berlin Declaration by the Member States was assessed on a **percentage scale** (i.e., from 1 to 100%), based on the level of completion of each of the KPIs. Such a scale allows to align the BDM with existing monitoring activities such as the European Commission's eGovernment Benchmark and to provide a clearly readable score.

The percentage of implementation for each Policy Action has been calculated as the **arithmetic mean[5]** of the KPIs, designed to assess the corresponding Policy Action, for which it is assumed that all KPIs are of equal importance and weight. Similarly, the percentage of implementation for each Policy Area will be calculated as the **arithmetic mean** of the percentages of implementation of all of its underlying Policy Actions. At each granularity level, the aggregation provides a result only if at least two thirds (66.66%) of underlying values are available. Meaning that if there is above 33.33% of unavailable values (i.e., "no data"), the following aggregation level will provide a "no data" result as well. Such a statistical rule has been established to ensure that the aggregated results at Policy Action and Area level are relevant with sufficient underlying data to carry meaning.

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[5] The arithmetic mean, also called the mean or the average, is the sum of a collection of numbers divided by the count of numbers in the collection.

Appendix II – BDM databases

This appendix will present the BDM structure as well as the results of the BDM per level: Policy Area, Policy Action and KPIs levels.

1 BDM database (structure)

Principle	ID Policy area	Policy area	ID MS Policy action	MS Policy action	ID KPI	KPIs	Source
Validity and respect of fundamental rights and democratic values	1	Promote fundamental rights and democratic values in the digital sphere by	1,1	Translate abstract fundamental rights regulations into tangible policies and strive to set an example by incorporating fundamental rights into public sector innovation policies and technology procurement rules.	KPI 1	Inclusion of fundamental rights principles in public sector innovation policies.	Survey
					KPI 2	Inclusion of fundamental rights principles in technology procurement rules.	Survey
			1,2	Engage in strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, i.e. by building platforms to exchange and further develop national and European strategies with regard to digital transformation ("digital round tables") and by organising cross-border and international exchange (i.e. workshops)	KPI 3	Number of workshops/events organised on cross-border initiatives at national level or European level.	Survey
					KPI 4	Existence of platforms to exchange and further develop national strategies with regard to digital transformation.	Survey
					KPI 5	Existence of strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation	Survey
			1,3	Encourage the establishment of ethical and technological expert councils to provide advice to and foster debate among citizens.	KPI 6	Existence of initiatives promoting the set up of ethical and technological expert councils to provide advice to, and foster debate among citizens.	Survey
Social participation and digital inclusion to shape the digital world	2	Enhance social participation and inclusion by	2,1	Put co-creation and collaboration with citizens into practice and encourage the use of digital tools to foster participation of citizens in political-decision-making	KPI 7*	Online information on citizens ability to participate in policy making processes.	eGovernment Benchmark
					KPI 8*	Online information on how users can enrol in activities to improve the design and delivery of services.	eGovernment Benchmark
			2,2	Ensure that the digital transformation is inclusive of and accessible for persons with disabilities and elderly persons and increase our efforts to make public services and information fully digitally accessible in accordance with the Web Accessibility Directive and the European Accessibility Act	KPI 9	Compliance with the European accessibility standards of the Directive on the accessibility of the websites and mobile applications of public-sector bodies	EIF Monitoring Mechanism
			2,3	Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders	KPI 10*	Mobile Friendliness	eGovernment Benchmark
					KPI 11	Cooperation between EU Member States to ensure cross-border access to services via the mobile channel	Survey
					KPI 12	Existence of a national strategy to enable citizens to use their mobile devices to carry out digital public services	Survey
Empowerment and digital literacy	3	Foster digital empowerment and digital literacy by	3,1	Launch and promote initiatives to ensure that the general public is equipped with access and a minimum understanding of digital technologies and digital skills (i.e. online service of "digital ambassadors")	KPI 13*	Human capital – digital skills	DESI
					KPI 14*	Connectivity	DESI
			3,2	Continue to provide easily accessible, user-friendly services and seamless digital public services, tools and applications	KPI 15*	Online Availability - User Centricity	eGovernment Benchmark
					KPI 16*	Extent to which strategies or frameworks take the EIF into account	EIF Monitoring Mechanism
					KPI 17	Internet use - Interaction with public authorities	EIF Monitoring Mechanism
					KPI 18*	Digital Public Services Dimension comprising of eGovernment	DESI
			3,3	Initiate workshops, training etc. in order to promote digital skills and awareness in the public sector	KPI 19	Promotion of digital skills and awareness in the public sector	Survey
Trust and security in digital government interactions	4	Strengthen trust through security in the digital sphere by	4,1	Promote the rollout and use of notified eID means and introduce incentives for the private sector to use European trustworthy and notified eID	KPI 20	Notification to the European Commission of the national eID scheme	CEF Dashboard
					KPI 21	Number of eIDAS nodes that have passed the interoperability test	CEF Dashboard
					KPI 22	Incentives for private sector bodies to use European trustworthy and notified eID	Survey
			4,2	Promote responsible and legally compliant re-use of data and the Once-Only Principle in line with the Tallinn Declaration and encourage new concepts such as personal data management based on user consent.	KPI 23	Strategy/policy outline measures supporting the re-use of open data by the public sector	Open Data Portal
					KPI 24	Existence of an Open Data portal (extent to which data can easily be found at one central place for reuse purposes)	Open Data Portal
					KPI 25	Existence of specific activities to support for the reuse of Open Data	Open Data Portal
					KPI 26	Existence of raising awareness initiatives on new concepts such as personal data management based on user consent	Survey
					KPI 27	Compliance with the Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services.	Survey
			4,3	Consider ways to foster agreement on ICT security requirements	KPI 28	Existence of initiatives to foster agreement on ICT security requirements for the public procurement of data processing services	Survey
Digital sovereignty and interoperability	5	Strengthen Europe's digital sovereignty and interoperability by	5,1	Jointly work towards agreements on requirements for technology providers and solutions in the public sector that are essential for digital sovereignty	KPI 29	Participation of Member States in EU Actions essential for digital sovereignty	Survey
			5,2	Establishing common standards and modular architectures	KPI 30	Use of common standards, modular architecture and consideration of open source software in the development and deployment of cross-border digital solutions	Survey
			5,3	Work with the European Commission to jointly agree on concrete deadlines and criteria such as a demand driven approach for providing further suitable public services online for EU cross-border use	KPI 31	Extent to which a Member State is meeting the requirements set by the Single Digital Gateway Regulation on the online availability and accessibility of the administrative procedures	EIF Monitoring Mechanism
Human-centred systems and innovative technologies in the public sector	7	Create value-based, human-centred AI systems for use in the public sector by	6,1	Foster transparency and accountability i.e. by revealing when automated decision-making processes are used in digital public services, and ensure quality standards of data sets fed into AI systems when designing digital public services (e.g. by quality seals for data sets);	KPI 32	Transparency with regards to automated decision making process used in digital public services	Survey
					KPI 33	Use of quality standards of data sets to fed into AI systems when designing digital public services	Survey
			6,2	Share best practices on the development of successful human-centric AI systems in the public sector;	KPI 34	Share best practices on the development of successful human-centric AI systems in the public sector that can be used by all public administrations at European, national and sub-national levels.	Survey
			6,3	Stimulate knowledge sharing between practitioners of administrative innovation strategies and on examples of human centric technologies in public administrations.	KPI 35	Knowledge sharing on public sector innovation strategies	Survey
					KPI 36	Knowledge sharing on human centric technologies	Survey
					KPI 38	Participation to actions at EU Level for improving the interoperability in smart buildings and products	Survey
					KPI 39	Actions at national or sub-national level for improving energy efficiency, optimise local consumption of digital tools and infrastructures	Survey
			7,2	Evaluate the environmental impacts of ICT using a multi-criteria lifecycle analysis and establish a strategy to extend the lifespan of digital equipment and promote the eco-design of ICT products to improve circular product cycles	KPI 40	Evaluation of the energy consumption and GHG emissions resulting from ICT activities in the public sector	Survey
					KPI 41	Lifespan of digital equipment used by the public sector	Survey
					KPI 42	Ecodesign of digital public services	Survey
			7,3	Initiate expert consultations to provide guidelines on healthy and appropriate use of digital technologies and work-life balance to prevent adverse impact on mental or physical human health development	KPI 43	Guidelines on healthy and appropriate use of digital technologies;	Survey
			7,4	Foster the exchange of crisis management data, in particular in the health sector, e.g. via the European Health Data Space	KPI 44	Active exchange of crisis management data between Member States	Survey

* The KPI value is from 2020 and will be updated when the 2021 value is available. Please note that also the scores of related policy areas and policy actions may be affected.

2. BDM database (results at Policy Area level)

Policy Area	1	2	3	4	5	6	7
Austria	76%	72%	72%	84%	89%	92%	89%
Belgium	50%	55%	74%	92%	86%	64%	68%
Bulgaria	54%	48%	62%	64%	83%	57%	48%
Croatia	67%	70%	48%	65%	92%	36%	73%
Cyprus	No Data	59%	63%	68%	58%	34%	No Data
Czech Republic	78%	57%	71%	81%	75%	54%	77%
Denmark	95%	92%	80%	93%	88%	69%	85%
Estonia	65%	56%	74%	93%	75%	94%	76%
Finland	89%	64%	79%	76%	88%	73%	68%
France	93%	57%	70%	93%	81%	57%	81%
Germany	95%	45%	70%	89%	96%	75%	87%
Greece	64%	55%	64%	83%	88%	49%	39%
Hungary	81%	57%	70%	71%	78%	64%	No Data
Ireland	95%	58%	75%	60%	58%	35%	33%
Italy	No Data	64%	69%	85%	72%	49%	No Data
Latvia	83%	38%	75%	76%	58%	75%	78%
Lithuania	65%	46%	71%	84%	83%	64%	No Data
Luxembourg	91%	78%	77%	83%	94%	50%	81%
Malta	44%	99%	73%	81%	50%	35%	83%
Netherlands	88%	61%	79%	93%	81%	86%	85%
Poland	No Data	58%	67%	75%	71%	38%	No Data
Portugal	89%	63%	72%	100%	81%	54%	73%
Romania	33%	16%	42%	No Data	50%	0%	0%
Slovakia	80%	62%	50%	77%	83%	66%	50%
Slovenia	20%	50%	71%	81%	86%	55%	63%
Spain	96%	73%	76%	86%	97%	66%	64%
Sweden	61%	60%	78%	77%	75%	62%	85%
EU Average	**73%**	**60%**	**69%**	**81%**	**78%**	**58%**	**68%**

2. BDM database (results at Policy Action level)

Policy Action	1,1	1,2	1,3	2,1	2,2	2,3	3,1	3,2	3,3	4,1	4,2	4,3
Austria	100%	94%	33%	15%	100%	100%	35%	81%	100%	67%	85%	100%
Belgium	50%	51%	50%	4%	80%	82%	38%	83%	100%	100%	77%	100%
Bulgaria	83%	78%	0%	25%	60%	59%	25%	62%	100%	0%	92%	100%
Croatia	33%	100%	No Data	23%	100%	87%	32%	65%	No Data	67%	64%	No Data
Cyprus	No Data	85%	No Data	6%	80%	91%	28%	62%	100%	67%	71%	66%
Czech Republic	67%	100%	67%	6%	80%	84%	34%	79%	100%	89%	89%	66%
Denmark	100%	85%	100%	75%	100%	100%	45%	95%	100%	100%	80%	100%
Estonia	100%	44%	50%	44%	60%	65%	37%	86%	100%	100%	80%	100%
Finland	67%	100%	100%	33%	60%	100%	42%	94%	100%	33%	93%	100%
France	100%	78%	100%	30%	40%	100%	36%	75%	100%	78%	100%	100%
Germany	100%	85%	100%	4%	No Data	85%	41%	68%	100%	67%	100%	100%
Greece	0%	93%	100%	18%	60%	86%	27%	65%	100%	67%	81%	100%
Hungary	No Data	63%	100%	1%	80%	91%	37%	74%	100%	33%	80%	100%
Ireland	100%	85%	100%	59%	60%	54%	34%	91%	100%	0%	79%	100%
Italy	No Data	67%	No Data	15%	80%	97%	30%	76%	100%	67%	89%	100%
Latvia	100%	100%	50%	1%	60%	53%	36%	89%	100%	78%	84%	66%
Lithuania	67%	78%	50%	1%	80%	57%	35%	78%	100%	67%	85%	100%
Luxembourg	100%	74%	100%	56%	80%	98%	44%	86%	100%	100%	50%	100%
Malta	No Data	56%	33%	100%	No Data	98%	40%	79%	100%	67%	76%	100%
Netherlands	100%	96%	67%	58%	60%	66%	47%	91%	100%	100%	80%	100%
Poland	No Data	72%	No Data	1%	80%	95%	31%	69%	100%	67%	57%	100%
Portugal	No Data	78%	100%	33%	60%	96%	36%	81%	100%	100%	100%	100%
Romania	0%	48%	50%	5%	20%	24%	32%	52%	No Data	0%	No Data	No Data
Slovakia	100%	89%	50%	31%	80%	76%	33%	68%	No Data	100%	31%	100%
Slovenia	0%	59%	0%	15%	40%	94%	36%	76%	100%	67%	77%	100%
Spain	No Data	93%	100%	25%	100%	95%	41%	88%	100%	100%	93%	66%
Sweden	50%	33%	100%	55%	60%	67%	45%	90%	100%	44%	87%	100%
EU Average	**71%**	**77%**	**70%**	**27%**	**70%**	**81%**	**36%**	**78%**	**100%**	**67%**	**80%**	**95%**

2. BDM database (results at Policy Action level)

Policy Action	5,1	5,2	5,3	6,1	6,2	6,3	7,1	7,2	7,3
Austria	100%	67%	100%	88%	89%	100%	No Data	67%	100%
Belgium	100%	92%	67%	No Data	44%	83%	71%	33%	No Data
Bulgaria	No Data	67%	100%	71%	33%	66%	58%	33%	0%
Croatia	100%	75%	100%	No Data	56%	17%	42%	50%	100%
Cyprus	50%	58%	67%	46%	22%	No Data	No Data	50%	100%
Czech Republic	50%	75%	100%	58%	22%	83%	54%	55%	100%
Denmark	No Data	75%	100%	63%	44%	100%	No Data	55%	100%
Estonia	50%	75%	100%	83%	100%	100%	71%	66%	100%
Finland	100%	75%	No Data	71%	67%	83%	83%	22%	100%
France	100%	75%	67%	50%	22%	100%	No Data	77%	100%
Germany	100%	92%	No Data	58%	67%	100%	71%	78%	100%
Greece	No Data	75%	100%	58%	22%	67%	58%	33%	0%
Hungary	50%	83%	100%	71%	22%	100%	No Data	44%	No Data
Ireland	50%	25%	100%	46%	11%	50%	No Data	33%	66%
Italy	100%	83%	33%	46%	0%	100%	No Data	No Data	100%
Latvia	50%	58%	67%	No Data	67%	83%	No Data	33%	100%
Lithuania	No Data	67%	100%	No Data	44%	83%	No Data	No Data	0%
Luxembourg	100%	83%	100%	No Data	0%	100%	75%	50%	100%
Malta	0%	No Data	100%	29%	44%	33%	No Data	50%	100%
Netherlands	100%	75%	67%	58%	100%	100%	75%	66%	100%
Poland	No Data	75%	67%	25%	No Data	50%	58%	No Data	0%
Portugal	100%	75%	67%	58%	22%	83%	25%	67%	100%
Romania	No Data	0%	100%	0%	0%	0%	0%	0%	0%
Slovakia	50%	100%	100%	No Data	67%	66%	58%	44%	66%
Slovenia	100%	92%	67%	83%	0%	83%	88%	33%	100%
Spain	100%	92%	100%	71%	78%	50%	67%	55%	100%
Sweden	50%	75%	100%	29%	56%	100%	58%	83%	100%
EU Average	**76%**	**72%**	**87%**	**55%**	**42%**	**76%**	**59%**	**49%**	**77%**

3. BDM database (results at KPI level)

KPI	KPI 1	KPI 2	KPI 3	KPI 4	KPI 5	KPI 6	KPI 7	KPI 8	KPI 9	KPI 10	KPI 11	KPI 12	KPI 13	KPI 14	KPI 15	KPI 16	KPI 17	KPI 18	KPI 19	KPI 20	KPI 21	KPI 22
Austria	100%	100%	89%	100%	No data	33%	20%	10%	100%	99%	100%	100%	33%	36%	96%	75%	73%	81%	100%	0%	100%	100%
Belgium	0%	100%	22%	66%	66%	50%	8%	1%	80%	97%	No data	66%	30%	46%	89%	100%	70%	72%	100%	100%	100%	No data
Bulgaria	66%	100%	67%	100%	66%	0%	50%	1%	60%	76%	0%	100%	15%	34%	82%	75%	27%	62%	100%	0%	0%	0%
Croatia	33%	33%	No data	100%	100%	No data	1%	45%	100%	95%	100%	66%	27%	36%	84%	75%	45%	56%	No data	100%	100%	0%
Cyprus	No data	No data	56%	100%	100%	No data	11%	1%	80%	81%	100%	No data	23%	32%	73%	50%	57%	69%	100%	0%	100%	100%
Czech Republic	100%	33%	100%	100%	100%	67%	12%	1%	80%	85%	100%	66%	31%	37%	85%	100%	68%	62%	100%	100%	100%	66%
Denmark	100%	100%	56%	100%	100%	100%	100%	50%	100%	100%	100%	100%	35%	55%	99%	100%	92%	87%	100%	100%	100%	100%
Estonia	100%	100%	0%	66%	66%	50%	62%	25%	60%	95%	0%	100%	31%	43%	96%	75%	82%	89%	100%	100%	100%	100%
Finland	33%	100%	100%	100%	100%	100%	33%	33%	60%	100%	100%	No data	38%	46%	98%	100%	89%	87%	100%	0%	100%	0%
France	100%	100%	33%	100%	100%	100%	10%	50%	40%	99%	100%	100%	29%	42%	91%	50%	81%	77%	100%	33%	100%	100%
Germany	100%	100%	56%	100%	100%	100%	1%	8%	No data	89%	100%	66%	35%	47%	87%	No data	50%	66%	100%	100%	0%	100%
Greece	0%	0%	78%	100%	100%	100%	36%	1%	60%	83%	75%	100%	25%	28%	79%	75%	55%	52%	100%	0%	100%	100%
Hungary	No data	100%	22%	66%	100%	100%	1%	1%	80%	73%	100%	100%	24%	49%	91%	75%	73%	58%	100%	0%	100%	0%
Ireland	100%	100%	56%	100%	100%	100%	73%	45%	60%	97%	0%	66%	27%	40%	92%	100%	91%	81%	100%	0%	0%	0%
Italy	33%	No data	No data	100%	33%	No data	30%	1%	80%	93%	No data	100%	21%	39%	86%	75%	No data	67%	100%	100%	100%	0%
Latvia	100%	100%	No data	100%	100%	50%	1%	1%	60%	94%	0%	66%	21%	50%	94%	100%	77%	85%	100%	100%	100%	33%
Lithuania	100%	33%	67%	100%	66%	50%	1%	1%	80%	70%	0%	100%	28%	41%	93%	75%	62%	81%	100%	100%	100%	0%
Luxembourg	100%	100%	22%	100%	100%	100%	50%	62%	80%	94%	100%	100%	32%	55%	93%	100%	78%	74%	100%	100%	100%	No data
Malta	No data	No data	11%	No data	100%	33%	100%	100%	No data	96%	No data	100%	28%	52%	99%	75%	63%	78%	100%	0%	100%	100%
Netherlands	100%	100%	89%	100%	100%	67%	58%	58%	60%	97%	0%	100%	40%	53%	94%	100%	87%	81%	100%	100%	100%	100%
Poland	No data	No data	44%	100%	No data	No data	1%	1%	80%	89%	No data	100%	22%	40%	88%	75%	47%	67%	100%	0%	100%	100%
Portugal	100%	No data	33%	100%	100%	100%	33%	33%	60%	87%	100%	100%	26%	46%	99%	100%	49%	75%	100%	100%	100%	100%
Romania	0%	0%	44%	66%	33%	50%	9%	1%	20%	71%	0%	0%	15%	48%	70%	75%	15%	48%	No data	0%	0%	0%
Slovakia	100%	100%	100%	100%	66%	50%	62%	1%	80%	78%	50%	100%	27%	38%	83%	75%	56%	56%	No data	100%	100%	100%
Slovenia	0%	0%	11%	100%	66%	0%	29%	1%	40%	83%	100%	100%	28%	44%	87%	75%	69%	71%	100%	0%	100%	100%
Spain	100%	No data	78%	100%	100%	100%	40%	10%	100%	86%	100%	100%	29%	52%	96%	100%	69%	87%	100%	100%	100%	100%
Sweden	0%	100%	0%	0%	100%	100%	91%	18%	60%	100%	100%	0%	36%	54%	91%	100%	91%	79%	100%	33%	0%	100%
EU Average	68%	76%	51%	91%	86%	70%	34%	21%	70%	89%	66%	84%	28%	44%	89%	84%	66%	72%	100%	54%	81%	64%

3. BDM database (results at KPI level)

KPI	KPI 23	KPI 24	KPI 25	KPI 26	KPI 27	KPI 28	KPI 29	KPI 30	KPI 31	KPI 32	KPI 33	KPI 34	KPI 35	KPI 36	KPI 38	KPI 39	KPI 40	KPI 41	KPI 42	KPI 43	KPI 44
Austria	100%	100%	100%	40%	No data	100%	100%	67%	100%	75%	100%	89%	100%	100%	No data	100%	No data	33%	100%	100%	100%
Belgium	100%	100%	100%	20%	66%	100%	100%	92%	67%	No data	66%	44%	100%	66%	75%	66%	33%	0%	66%	No data	100%
Bulgaria	100%	100%	100%	No data	66%	100%	No data	67%	100%	75%	66%	33%	66%	66%	50%	66%	No data	0%	66%	0%	100%
Croatia	100%	100%	100%	20%	0%	No data	100%	75%	100%	No data	66%	56%	33%	0%	50%	33%	No data	66%	33%	100%	100%
Cyprus	100%	100%	100%	20%	33%	66%	50%	58%	67%	25%	66%	22%	66%	No data	No data	66%	0%	No data	100%	100%	No data
Czech Republic	100%	100%	100%	80%	66%	66%	50%	75%	100%	50%	66%	22%	100%	66%	75%	33%	66%	33%	66%	100%	100%
Denmark	100%	100%	100%	100%	0%	100%	No data	75%	100%	25%	100%	44%	100%	100%	No data	66%	100%	0%	66%	100%	100%
Estonia	100%	100%	100%	20%	No data	100%	50%	75%	100%	100%	66%	100%	100%	100%	75%	66%	66%	66%	66%	100%	66%
Finland	100%	100%	100%	100%	66%	100%	100%	75%	No data	75%	66%	67%	100%	66%	100%	66%	0%	33%	33%	100%	66%
France	100%	100%	100%	100%	No data	100%	100%	75%	67%	100%	0%	22%	100%	100%	No data	100%	66%	100%	66%	100%	66%
Germany	100%	100%	100%	100%	No data	100%	100%	92%	No data	50%	66%	67%	100%	100%	75%	66%	100%	33%	100%	100%	100%
Greece	100%	100%	100%	40%	66%	100%	No data	75%	100%	50%	66%	22%	100%	33%	50%	66%	0%	66%	33%	0%	66%
Hungary	100%	100%	100%	20%	No data	100%	50%	83%	100%	75%	66%	22%	100%	100%	No data	100%	100%	0%	33%	No data	0%
Ireland	100%	100%	100%	60%	33%	100%	50%	25%	100%	25%	66%	11%	66%	33%	No data	66%	No data	0%	66%	66%	0%
Italy	100%	100%	100%	80%	66%	100%	100%	83%	33%	25%	66%	0%	100%	100%	No data	100%	No data	No data	33%	100%	66%
Latvia	100%	100%	100%	20%	100%	66%	50%	58%	67%	0%	No data	67%	100%	66%	No data	66%	0%	33%	66%	100%	100%
Lithuania	100%	100%	100%	40%	No data	100%	No data	67%	100%	75%	No data	44%	100%	66%	No data	66%	No data	No data	No data	0%	100%
Luxembourg	0%	100%	0%	100%	No data	100%	100%	83%	100%	No data	100%	0%	100%	100%	50%	100%	No data	33%	66%	100%	100%
Malta	100%	100%	100%	80%	0%	100%	0%	No data	100%	25%	33%	44%	33%	33%	No data	66%	No data	66%	33%	100%	100%
Netherlands	100%	100%	100%	20%	No data	100%	100%	75%	67%	50%	66%	100%	100%	100%	50%	100%	66%	66%	66%	100%	100%
Poland	100%	100%	0%	20%	66%	100%	No data	75%	67%	50%	0%	No data	100%	0%	50%	66%	No data	No data	66%	0%	No data
Portugal	100%	100%	100%	100%	No data	100%	100%	75%	67%	50%	66%	22%	100%	66%	50%	0%	100%	No data	33%	100%	100%
Romania	0%	100%	0%	No data	No data	No data	No data	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	No data	0%	0%	No data
Slovakia	0%	100%	0%	20%	33%	100%	50%	100%	100%	No data	No data	67%	66%	66%	50%	66%	66%	33%	33%	66%	33%
Slovenia	100%	100%	100%	20%	66%	100%	100%	92%	67%	100%	66%	0%	66%	100%	75%	100%	66%	33%	0%	100%	33%
Spain	100%	100%	100%	100%	66%	66%	100%	92%	100%	75%	66%	78%	33%	66%	100%	33%	33%	66%	66%	100%	33%
Sweden	100%	100%	100%	100%	33%	100%	50%	75%	100%	25%	33%	56%	100%	100%	50%	66%	No data	100%	66%	100%	100%
EU Average	89%	100%	85%	57%	49%	95%	76%	72%	87%	52%	59%	42%	83%	69%	60%	66%	51%	41%	55%	77%	76%

Appendix III – Policy Areas & Policy Actions of the Berlin Declaration

The Berlin Declaration sets out 7 key Policy Areas, related to the principles on which the Declaration is based. The Policy Areas constitute the highest aggregation level of the BDM and include then several Policy Actions to be implemented by 2024 in the Member States.

1. Promote **fundamental rights and democratic** values in the digital sphere;

   1.1 Translate abstract fundamental rights regulation into tangible policies and strive to set an example by incorporating fundamental rights into public sector innovation policies and technology procurement rules.

   1.2 Engage in strategic projects with the aim of increasing awareness of the relevance of a value-based digital transformation, i.e., by building platforms to exchange and further develop national and European strategies with regard to digital transformation ("digital round tables") and by organising cross-border and international exchange (i.e. workshops).

   1.3 Encourage the establishment of ethical and technological expert councils to provide advice to and foster debate among citizens.

2. Enhance **social participation and digital inclusion**, to shape the digital world;

   2.1 Put co-creation and collaboration with citizens into practice and encourage the use of digital tools to foster participation of citizens in political-decision-making.

   2.2 Ensure that the digital transformation is inclusive of and accessible for persons with disabilities and elderly persons and increase our efforts to make public services and information fully digitally accessible in accordance with the Web Accessibility Directive and the European Accessibility Act.

   2.3 Provide easy access to services for the mobile channel by enabling citizens to use their mobile devices to carry out digital public services and by cooperating at EU level in establishing necessary elements for ensuring mobile device interoperability across borders.

3. Foster **digital empowerment and digital literacy,** to allow all citizens to participate in the digital sphere;

    3.1 Launch and promote initiatives to ensure that the general public is equipped with access and a minimum understanding of digital technologies and digital skills (i.e., online service of "digital ambassadors").

    3.2 Continue to provide easily accessible, user-friendly services and seamless digital public services, tools and applications.

    3.3 Initiate workshops, training etc. in order to promote digital skills and awareness in the public sector.

4. Strengthen **trust through security** in the digital sphere, to allow everyone to navigate the digital world safely, authenticate and be digitally recognised within the EU conveniently;

    4.1 Promote the rollout and use of notified eID means and introduce incentives for the private sector to use European trustworthy and notified eID.

    4.2 Promote responsible and legally compliant re-use of data and the Once-Only Principle in line with the Tallinn Declaration and encourage new concepts such as personal data management based on user consent.

    4.3 Consider ways to foster agreement on ICT security requirements.

5. Strengthen **Europe's digital sovereignty and interoperability**, as a key in ensuring the ability of citizens and public administrations to make decisions and act self-determined in the digital world;

    5.1 Jointly work towards agreements on requirements for technology providers and solutions in the public sector that are essential for digital sovereignty.

    5.2 Implement common standards, modular architectures and – when suitable – open-source technologies in the development and deployment of cross-border digital solutions.

    5.3 Work with the European Commission to jointly agree on concrete deadlines and criteria such as a demand driven approach for providing further suitable public services online for EU cross-border use.

6. Create **value-based, human-centred AI systems** for use in the public sector, strengthening its pioneering role in the research on secure and trustworthy technology design:

    6.1 Foster transparency and accountability i.e., by revealing when automated decision-making processes are used in digital public services, and ensure quality standards of data sets fed into AI systems when designing digital public services (e.g., by quality seals for data sets).

    6.2 Share best practices on the development of successful human-centric AI systems in the public sector.

    6.3 Stimulate knowledge sharing between practitioners of administrative innovation strategies and on examples of human centric technologies in public administrations.

7. Foster **resilience and sustainability** in the digital society, preserving our natural foundations of life in line with the Green Deal and using digital technologies to enhance the sustainability of our health systems.

   7.1 Consider how to assess and make transparent the energy sources and consumption of digital tools and infrastructures as well as ways to improve their efficiency.

   7.2 Evaluate the environmental impacts of ICT using a multi-criteria lifecycle analysis and establish a strategy to extend the lifespan of digital equipment and promote the eco-design of ICT products to improve circular product cycles.

   7.3 Initiate expert consultations to provide guidelines on healthy and appropriate use of digital technologies and work-life balance to prevent adverse impact on mental or physical human health development.

   7.4 Foster the exchange of crisis management data, in particular in the health sector, e.g., via the European Health Data Space.