



eGovernment Benchmark 2022

Synchronising Digital Governments

BACKGROUND REPORT

Written by Capgemini, Sogeti, IDC and Politecnico di Milano
for the European Commission Directorate-General for Communications
Networks, Content and Technology
July – 2022

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Unit H.4 — eGovernment & Trust

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eGovernment Benchmark 2022 Background Report

Synchronising Digital Governments

Manuscript completed in March 2022
1st edition

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PDF	ISBN 978-92-76-49860-5	doi: 10.2759/204448	KK-08-22-087-EN-N
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Luxembourg: Publications Office of the European Union, 2022

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Glossary of Key Terminology

eGovernment: electronic government (also digital government).

Dimensions: the four pillars against which indicators for eGovernment are aggregated and measured.

1. **User Centricity:** the extent to which information and services are available online, supported online, and compatible with mobile devices.
2. **Transparency:** the extent to which service processes are transparent, services are designed with user involvement, and users can manage their personal data.
3. **Key Enablers:** the extent to which digital tools such as electronic identification (eID), eDocuments, Authentic Sources and Digital Post enable identification and communication between a user and a government service.
4. **Cross-border Services:** the extent to which citizens from other European countries can access online information and services in a usable and integrated way through electronic identification and eDocuments.

Life Event: a package of government services, usually provided by multiple agencies, that support citizens or entrepreneurs through key points of their lives, such as the birth of a child or starting of a business. The eGovernment Benchmark covers eight Life Events (government domains).

- Assessed 2021: Regular Business Operations, Health, Moving, Transport, Starting a Small Claims Procedure.
- Assessed in 2020: Business Start-up, Career, Studying and Family.

Life Event services: services within a user journey for national and cross-border users.

- **Informational services:** services and procedures that provide users with adequate and personalised insight into their situation.
- **Transactional services:** services and procedures needed to fulfil the essential requirements of a Life Event, such as registration.
- **Portal websites:** eGovernment websites that gather and provide information and services from multiple public administrations, also known as one-stop-shops.
- **National users:** citizens and entrepreneurs that seek for information and services in their own country.
- **Cross-border users:** citizens or entrepreneurs that seek information and services in a European country other than their own.

Method: the way in which we collected the data.

- **Mystery Shopping:** the primary type of data collection in the eGovernment Benchmark – a proven evaluation method that makes the user journey and experience the primary focus of attention.
- **Automated tools:** online tests through which urls of government websites are entered and assessed on a number of criteria.

1. Introducing the eGovernment Benchmark

*“The eGovernment Benchmark is key to **tracking continuous improvements** in online public services.”*

European Commission, Directorate-General for Communications Networks,
Content and Technology



1. Introducing the eGovernment Benchmark

1.1 A Deep-Dive into eGovernment Technologies and Policy Domains

As highlighted in the eGovernment Benchmark Insight Report, digital government plays a vital role in providing public services to citizens and businesses. This is especially so in times of social and economic disruption, such as during the COVID-19 coronavirus pandemic.

The **eGovernment Benchmark Background Report** further unravels government digitalisation. It pinpoints technological advancements and provides a clear path to understand and stimulate sectoral developments. This report helps professionals in various disciplines of eGovernment to gain a clearer understanding of the following:

1. To what extent different **technologies** are being implemented and how:

Chapter 2 presents technology specific findings (around mobile technologies, personal data solutions, electronic identification, etc.).

Findings are particularly relevant for policy makers responsible for digital affairs across different government branches, as well as innovation scholars, developers, business analysts and solution integrators who analyse, build and implement digital government applications and services.

2. To what extent and how specific **government domains** evolve:

Chapters 3-7 dive into this year's life events of *Regular Business Operations, Health, Moving, Transport and Starting a Small Claims Procedure*.

Findings are particularly relevant for domain experts and policy makers in the field of economic affairs, healthcare, internal affairs, (public) transportation and justice.

3. Which factors influence country performance and **how countries can learn from each other**:

Chapter 9 provides the Benchlearning Analysis in which relative performance of countries is explained.

Findings are particularly relevant for policy makers responsible for eGovernment strategy and international cooperation.

4. Lastly, a **collection of good practices** from all participating countries is listed in the Appendix.

Whereas the Insight Report mainly marks European trends, this Background Report takes a closer look at national perspectives. Concrete examples, best practices and success stories from various countries are presented throughout the report. Country rankings and service overviews are given to guide readers to the leading countries and specific services for further inspiration.

1.2 Analysing Digital Government Through the Eyes of Citizens and Entrepreneurs

The **eGovernment Benchmark** compares how governments deliver digital public services across Europe. It has become an internationally recognised study that looks at how platforms for citizens, businesses, tourists and expat communities continue to change and improve. The report has been extensively used by a wide range of eGovernment professionals and public authorities. It serves both as a source of inspiration for strategy making and a more practical companion for government digitalisation.

35 countries participated in the study. These countries are the 27 European Union Member States, European Free Trade Association countries¹ and the European Union candidate countries². Throughout the report, these countries will be referred to as 'Europe' or the 'EU27+'.

¹ Iceland, Norway and Switzerland. Liechtenstein is not part of the evaluation.

² Albania, the Republic of North Macedonia, Montenegro, Serbia and Türkiye



Figure 1.1. Map of participating countries

This study evaluates online public services on four key dimensions, which consist of 14 underlying indicators, broken down into 48 survey questions. Findings for pilot indicators are not weighted into dimension scores nor included in the overall country maturity score.

Under the eGovernment Benchmark, a mature digital government shows:

1. **User Centricity** – To what extent are services provided online? How mobile friendly are they? And what online support and feedback mechanisms are in place?
2. **Transparency** – Are public administrations clear about how their services are delivered? Are they transparent about policy making and digital service design, as well as the way people's personal data is being processed?
3. **Key Enablers** – What technological enablers

are in place for the delivery of eGovernment services?

4. **Cross-Border Services** – How easily are citizens from abroad able to access and use the online services?

To provide a comprehensive overview of how countries are performing in eGovernment, 95 services, across nine **life events** were analysed. Life events are government domains, referring to a sequence of digital services that the average citizen or business is likely to require. The study covers 2,852 public administrations: 1,188 central, 426 regional and 1,238 local government bodies.

The assessment takes place annually. Data on the *Business Start-up, Career, Studying* and *Family* life events is collected in even years. In odd years the life events assessed are *Regular Business*

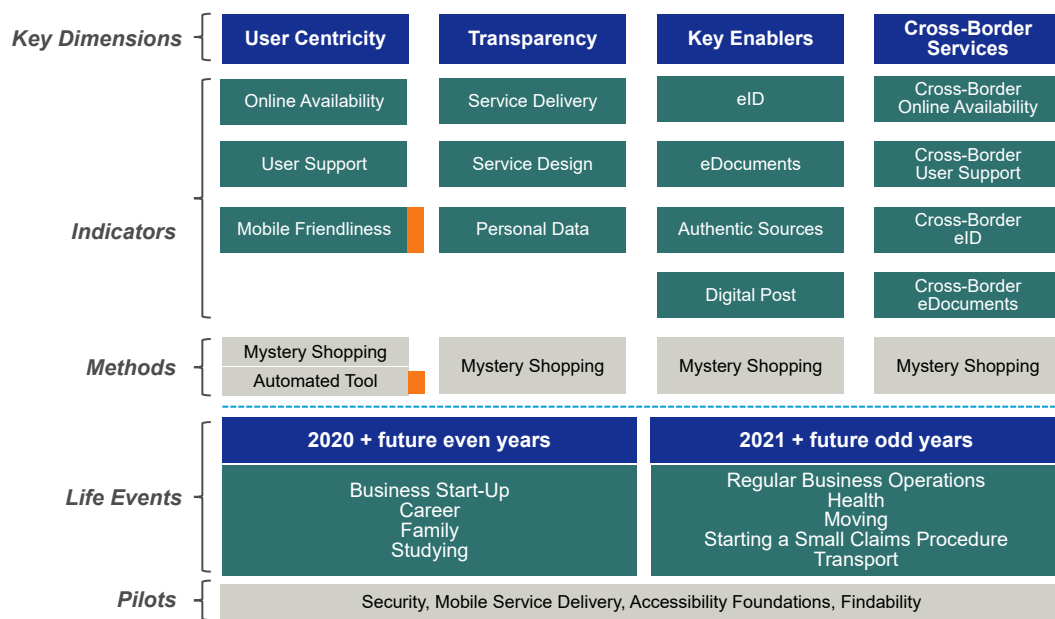


Figure 1.2. eGovernment Benchmark method framework

Operations, Health, Moving, Transport and Starting a Small Claims Procedure. This report presents the findings for data collected in 2021 and 2020.

To evaluate these life events, well-trained Mystery Shoppers - citizens from the participating countries - visited and evaluated 14,252 websites: 8,491 websites and 804 portals from their own governments, as well as 4,155 cross-border websites and 802 portals from other European countries.

Automated open tools were used to complement the Mystery Shoppers to assess *Mobile Friendliness*, *Findability*, *Accessibility Foundations* and *Web security*.

Importantly, method changes limit historical comparisons to a subset of indicators and services. **The 2020 method update has led to a break in the series, which makes one-to-one comparisons with earlier reports impossible.**

During the method update, the number of services per life event was reduced and the *Transparency of Public Organisations* indicator (eight questions) was replaced with the *Transparency of Service Design* indicator (four questions). A full description of the

method and a list of all evaluated services can be found in the separately published eGovernment Benchmark Method Paper.

All eGovernment Benchmark research data is openly available, free of charge and provided in a machine-readable format. The Commission's webpage also presents the data collected in previous measurements.

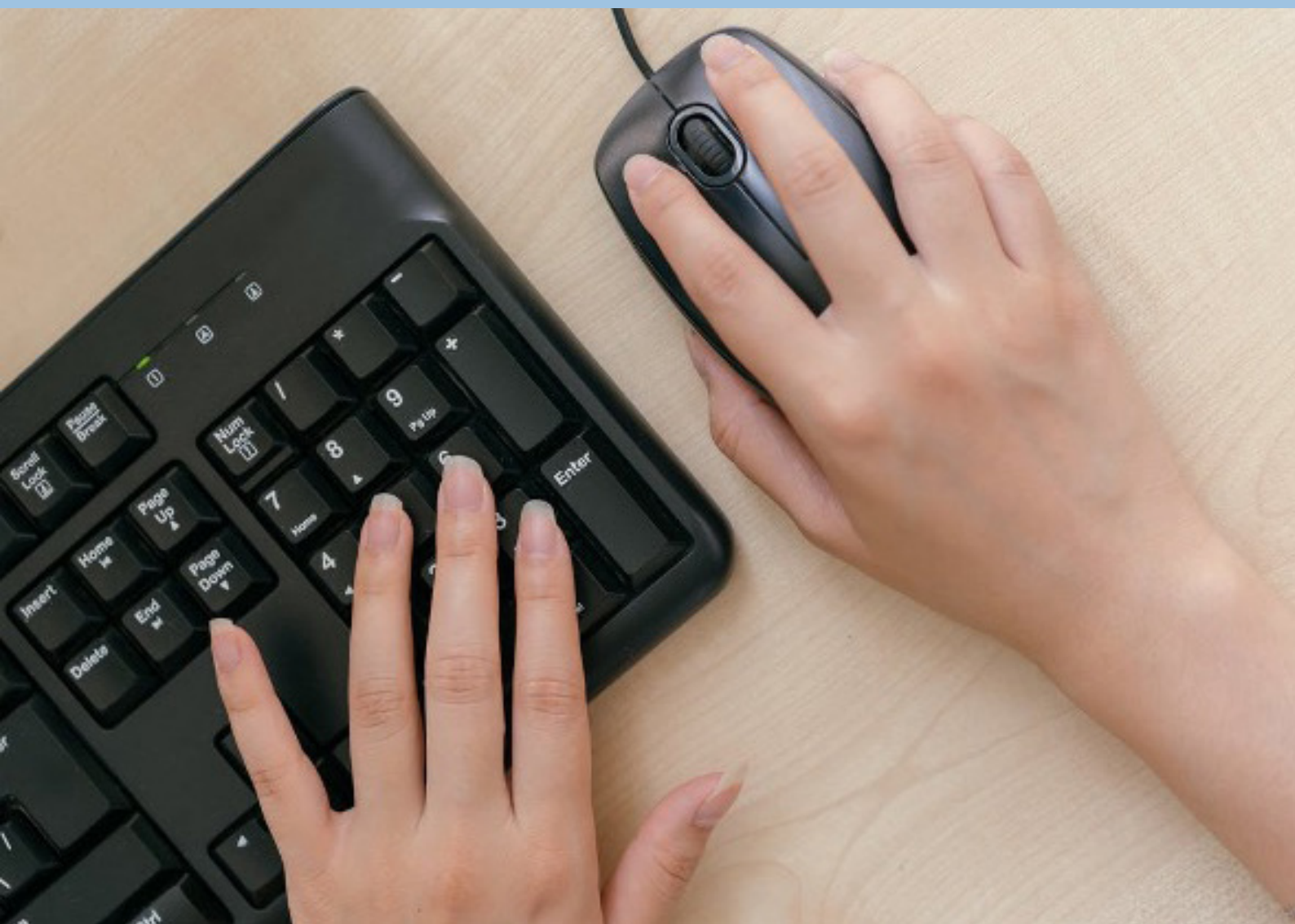
The Mystery Shopping Exercise at a Glance:

- Mystery Shoppers are responsible for collecting the eGovernment Benchmark data by visiting and evaluating government websites.
- Mystery Shoppers are users of government services themselves, which provides a certain level of validity and involvement in the measurement: how they experience the eGovernment services is a valid real-life user experience.
- The Mystery Shoppers are selected via the research network of the four parties in the consortium behind the eGovernment Benchmark.
- All Mystery Shoppers are briefed and clearly instructed to minimise subjectivity. Additionally, they assess the life events using specific personas. This standardises possible differences in personal situations.
- In principle, every country is evaluated by two Mystery Shoppers and their results are compared. Inconsistencies are re-evaluated by the research team in order to achieve a high level of reliability. For cross-border services, all participating countries are assessed by two Mystery Shoppers from another country.
- Every Mystery Shopper is a country national owning a national eID (if any).
- The questionnaire that the Mystery Shoppers fill in is a formatted and standardised Excel file.
- After completion of the Mystery Shopping exercise, results are sent for validation to the EU27+ country representatives. This is an intense collaborative process. The representatives are involved at the start and at the end of the evaluation: at the start in order to validate the sample and key characteristics of the services under assessment; at the end to validate the research results and to correct potential obvious erroneous findings in collaboration with the responsible organisations in a country.

2. Synthesis of Key Dimensions and Most Important Scores

*“We want everyone to be empowered to take an active part in our **increasingly digitised societies.**”*

European Commission Executive Vice-President for a Europe Fit for the Digital Age,
Margrethe Vestager



2 Synthesis of Key Dimensions and Most Important Scores

This chapter summarises the results of the eGovernment Benchmark on the four key dimensions of *User Centricity*, *Transparency*, *Key Enablers* and *Cross-border Services*. The first section describes the overall maturity of eGovernment in Europe. The subsequent sections address each of the key dimensions.

2.1 Overall maturity

In this section we will discuss the main results of the eGovernment Benchmark. The overall maturity score is composed of the four key dimensions *User Centricity*, *Transparency*, *Key Enablers* and *Cross-border Services*. Figure 2.1 shows the digital maturity of all participating countries. **Malta has the most mature digital government at 96%**, followed by Estonia at 90%. After Estonia, there's a cluster of six top performing countries, namely: Luxembourg (87%), Iceland (86%), the Netherlands (85%), Finland (85%), Denmark (84%) and Lithuania (83%).

Figure 2.2 shows the scores per key dimension for each life event and the biennial average. *User Centricity* is the most advanced key dimension at 88%, showing that European countries strive to make services available for their citizens and

businesses. *Key Enablers* scores 69%. Although countries increasingly provide eIDs and use authentic sources to pre-fill personal information, this is not yet the norm. The key dimension of *Transparency* scores 60%, which implies that countries could provide more insights to citizens about how they design and deliver services and in what ways they use users' data. Lastly, *Cross-border Services* lags behind (54%). Although the European Commission spearheads multiple initiatives (such as eIDAS) to improve cross-border service delivery, European countries have a hard time providing the same level of service delivery to cross-border users as they do to nationals.

Entrepreneurs enjoy substantially more mature digital services than citizens. Services in the business life events (*Business Start-up* and *Regular Business Operations*) are more user-centric, more transparent and more international than the services for citizens.

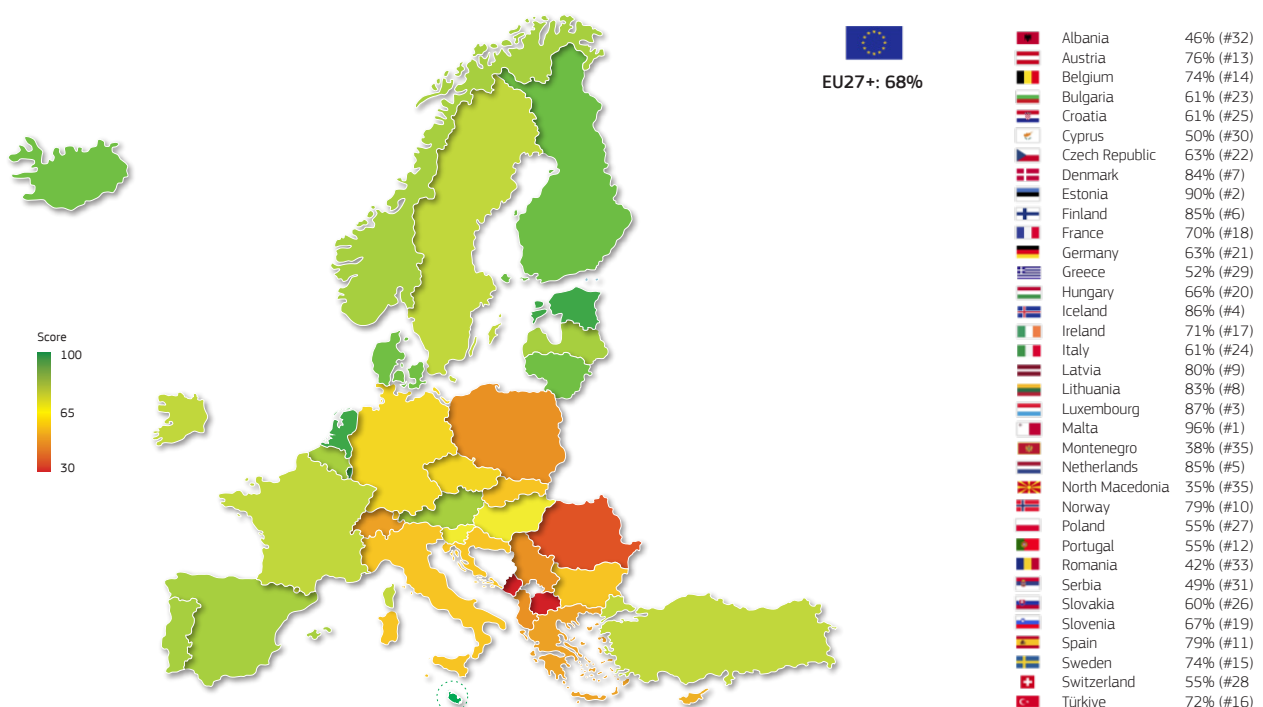


Figure 2.1. Overall eGovernment maturity of European countries, biennial average*

* The method update of 2020 has led to a break in the series, which makes one-to-one comparisons with earlier reports impossible.

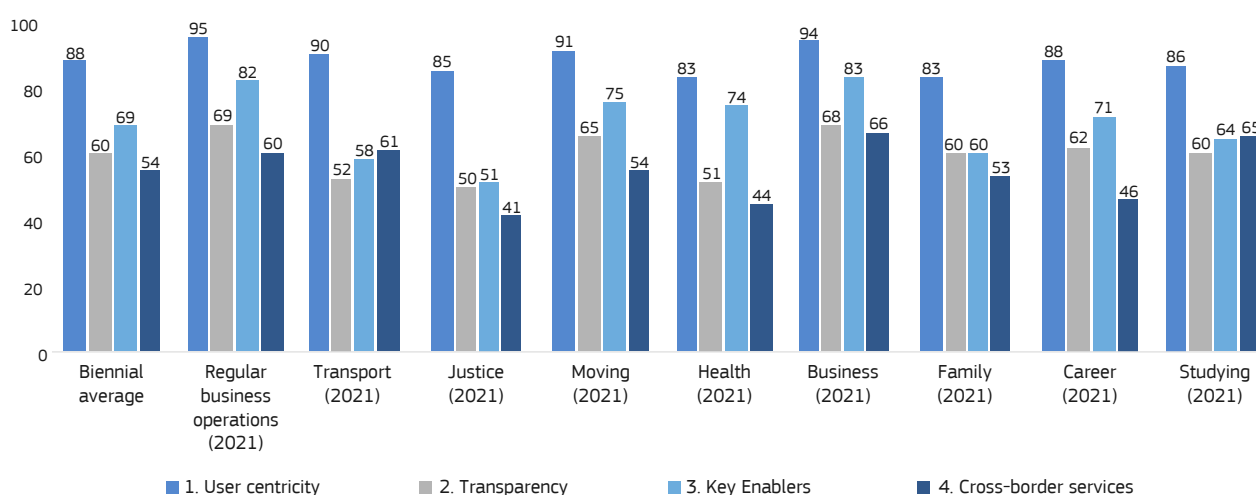


Figure 2.2. Overview of life events under assessment in 2021 and 2020

Moreover, key enablers such as eID authentication are, for many services, already in place for entrepreneurs.

Large differences exist between the citizen life events. For *User Centricity*, services related to *Moving* are the most developed for citizens, followed by the *Transport* life event. Citizens that, for instance, move to another city or need to pay their road taxes are facilitated by their governments online. When it comes to *Transparency*, again the *Moving* life event (65%) is the best performing for citizens, this time followed by the *Career* life event (62%). Although a score of 62% leaves room for improvement, it still shows that countries want to be transparent to citizens who have lost their job and are looking for a new place to work. For *Key Enablers* we find that services for citizens moving places, or for citizens who require healthcare are the most advanced. For many health- and moving-related services, users can authenticate with their eIDs. For *Cross-border Services* the *Studying* life event stands out. Students who want to study in another European country can often enrol and apply for grants online.

The *Small Claims Procedure* life event needs most improvement, followed by the *Family* life event. In these domains, with services such as starting a small claims procedure or obtaining a birth certificate, many citizens still need to physically visit their local authorities.

Lastly, the 2021 data collection was the first instance where the *Health* life event was assessed. eHealth services are delivered on a similar level as other digital services for citizens.

2.2 User Centricity

User Centricity assesses the extent to which governments deliver and design services with the user needs in mind. The key dimension consists of three underlying indicators, namely *Online Availability*, *Mobile Friendliness* and *User Support*. The first, *Online Availability*, measures the extent to which services are online. *Mobile Friendliness* assesses whether government websites are compatible with mobile devices and lastly, *User Support*, assesses whether web portals provide sufficient help to users.

Figure 2.3 shows the EU27+ averages for each of the *User Centricity* indicators. All indicators score close to, or above, 90%, showing that European governments understand the importance of user-centric digital services. *Mobile Friendliness* is the most mature indicator, at 92%, which means that more than nine out of ten European government websites adapt to mobile devices. *User Support* and *Online Availability* also obtain excellent EU-wide scores with 91% and 87% respectively.

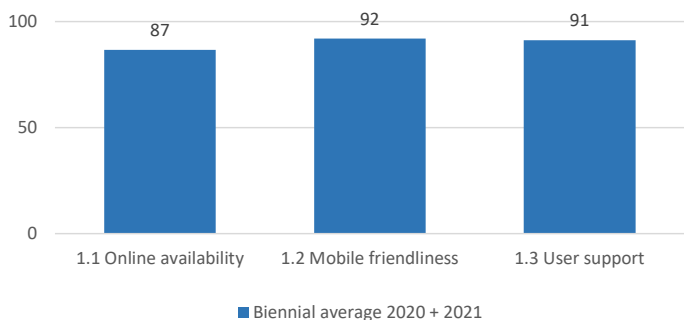


Figure 2.3. Biennial averages of User Centricity indicators

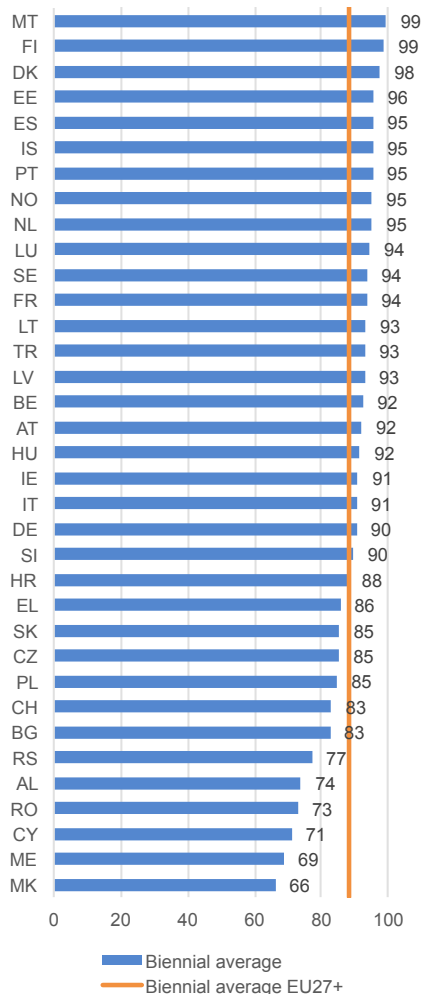


Figure 2.4. Country scores for the key dimension of User Centricity

Malta has the most user-centric eGovernment, scoring 99% for this dimension. Figure 2.4 also highlights that more than half of the countries score over 90% for this key dimension and eight countries score over 95% (Malta, Finland, Denmark, Estonia, Spain, Iceland, Portugal, Norway and the Netherlands).

Online Availability

The Online Availability indicator evaluates how services are made available online to citizens and businesses. This study looks into three levels of online availability:

- Information about the service is not available online and the service cannot be completed online;
- Information about the service is available online, but the service cannot be completed online;
- The service can be completed online.

Figure 2.5 shows how services are made available across Europe. **Currently eight out of ten services can be completed online (81%).** Furthermore, for 98% of the services, governments offer information online. So, in most cases when a service cannot be completed online, users can at least find information on how to obtain the service via traditional channels. Users can find no information for just 2% of all services.

The number of services that are available online differs greatly between countries. Malta currently has 99% of the services digitalised. Other vanguards are Denmark and Finland, where respectively 98% and 97% of the services are available online. Four countries have fewer than six out of each ten services online.

The next step for digital governments is to deliver services proactively, meaning that the user does not have to apply for the service, but obtains it automatically. By intelligently sharing and reusing personal data, governments can deliver services before the user asks for them. Consider, for instance, child allowance, which in many countries is given proactively to young parents that recently had a baby. As it stands, 6% of the services evaluated are delivered proactively.

The Benchmark assesses websites from central, regional (e.g., provinces, universities, hospitals) and local governments (cities). Figure 2.6 shows that large differences in *Online Availability* exist between these government levels. 84% of the services delivered by central governments are online, compared to 71% by regional governments and only 60% for local governments. Moreover, services delivered by regional and central governments are often delivered via government portals, whereas services delivered by local governments are less easy to find online.

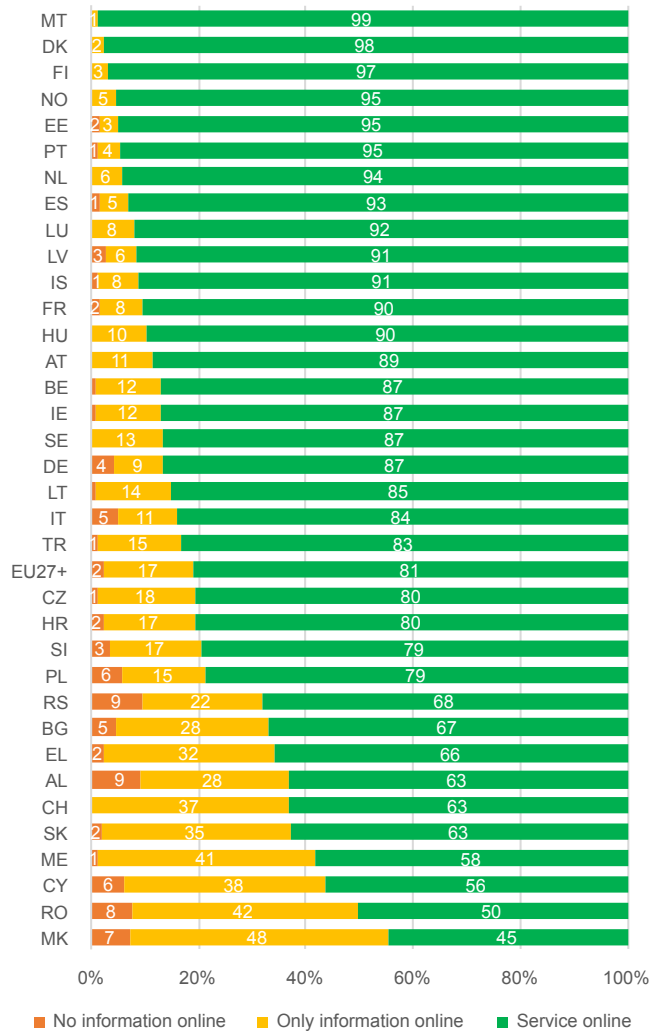


Figure 2.5. Online Availability of Services across Europe

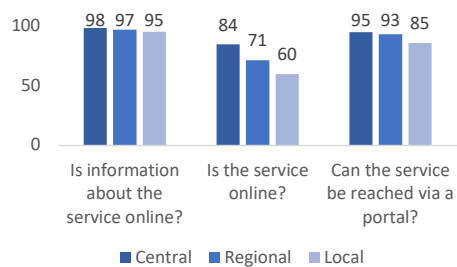


Figure 2.6. Online Availability of services, per government level

Pilot: Usability of eGovernment Services

As user demands rise, governments continue to improve their usability levels. The eGovernment Benchmark measures various usability aspects under the user centricity dimension. To keep track of the latest developments, a pilot study carried out in the Czech Republic, Denmark and Italy tested various new indicators related to “clear language”, “consistency and ease of use”, “speed and performance” and “help and support”. Countries showed a particular interest in navigational aspects (e.g. whether a service has loading bars, breadcrumbs and other visual cues) and process transparency (e.g. whether a service shows the necessary steps to be executed through to completion). Based on workshop discussions and a follow-up survey for country representatives, further priorities will be made. More information can be found [on the Usability Pilot page of the European Commission](#).

User Support

User Centricity is not just about digitalising services. It also requires the digitalisation of support functionalities. Previously users could ask for help physically at their local government office and now they should be able to ask for help online. The *User Support* indicator assesses the maturity of help functionalities on government portals. Seven features related to *User Support* were assessed for each government portal. The biennial average for each of the features is presented in Figure 2.7.

European government portals provide high quality user support across all evaluated features. Still, a couple of things stand out. All portals (100%) provide information about other channels through which to obtain government services and almost all portals (98%) provide users with contact details for the responsible department. Moreover, 95% of the

government portals currently have a Frequently-Asked-Questions (FAQs) section, where users can find the answers to questions that come up often. Complaint procedures are available on 83% of the portals, indicating that governments can improve ways for citizens to voice their dissatisfaction with government services.

Pilot: Portal Findability

eGovernment user journeys may start directly on a government portal or via search engines such as Google, Bing or Yahoo!. Search Engine Optimisation (SEO) activities help users to quickly find the website and service they need. The SEO status of government portals was assessed based on the [Moz Domain Authority Tool](#). Promisingly, 60% of the government portals in Europe qualify as ‘good’ or ‘excellent’, 20% as ‘moderate’ and only 20% as ‘below moderate’. The most visible and easy-to-find portals can be found in France and Italy, where all evaluated portals qualify as ‘good’ or ‘excellent’. In the Netherlands, Luxembourg and Portugal, all portals in eight out of nine life events obtained this score, helping users to find government portals via search engines to start their user journey. *Findability* is not part of the final score, because it is a pilot indicator.

Pilot: Web Accessibility Foundations

Ensuring that all users can benefit from digital government solutions is at the heart of public administrations nowadays. Next to user support, this entails making websites web accessible. Currently, the *Web Accessibility* indicator is still a pilot, meaning that it is not included in the scoring of the current Benchmark.

Using the [axe browser extension](#), all 14,000 eGovernment websites of 2021 and 2020 were

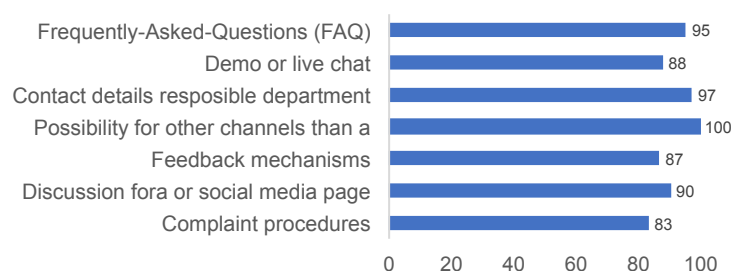


Figure 2.7. User Support indicator, scores per question

assessed on 8 of the 50 Web Content Accessibility Guidelines (WCAG) 2.1 success criteria. Selected criteria give a first impression to what extent websites are:

- **perceivable**, measured by: alternative text (WCAG: 1.1.1), colour contrast (WCAG: 1.4.3);
- **operable**, measured by: page/document title (WCAG: 2.4.2), link name (WCAG: 2.4.4);

- **understandable**, measured by: language attribute (WCAG: 3.1.1), valid language code (WCAG: 3.1.2);

- **robust**, measured by: unique IDs (WCAG: 4.1.1), aria hidden (WCAG: 4.1.2)

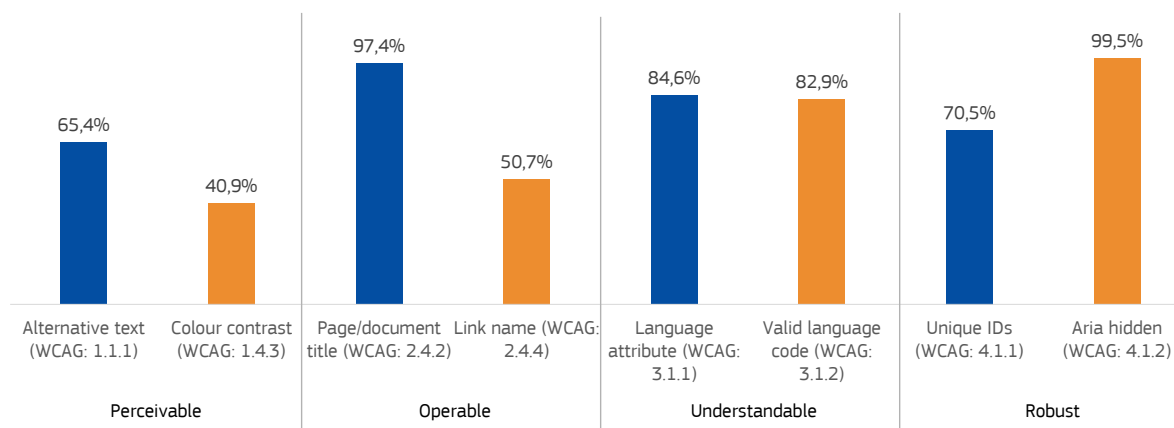


Figure 2.8. Percentage of websites that meet all 8 assessed WCAG criteria (EU27+ countries, 2021-2020)

Disappointingly, a vast majority (84%) of public sector websites are not compliant and violate one or more WCAG criteria. Only 16% of the websites pass all eight criteria and at least comply with part of the 50 criteria. For those websites additional manual evaluations are needed to verify full compliance.

Websites often only achieve limited compliance with the perceivable criterion because alternative texts for pictures are missing and colours lack contrast. This harms all users, especially those with visual disabilities and, for example, mobile phone users who might struggle to see their screen in bright sunlight. The websites are more

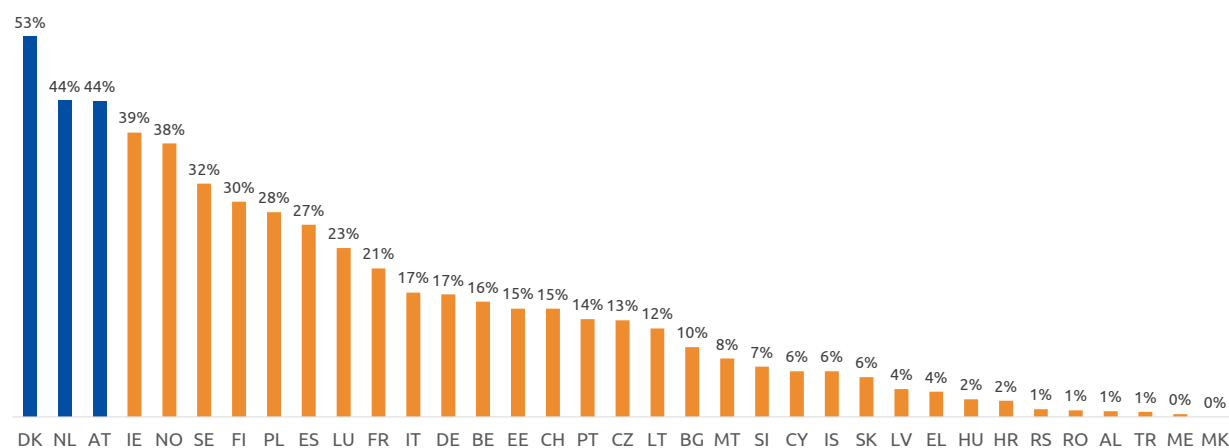


Figure 2.9. Percentage of websites that meet all eight assessed WCAG criteria (EU27+ countries, 2021-2020)

operable, understandable and robust than they are perceivable. Almost all tested websites apply page and document titles to operate and navigate the website more effectively. Content that is unrightfully hidden for people with disabilities (e.g. text that is not picked up by a screen reader) is widely avoided, making websites more robust and allowing assistive technology, to interpret the content as it should be.

The compliance levels are relatively similar across the nine life events as well as across central, regional and local government levels. Country differences do exist, for example about half of the websites in Denmark (53%), the Netherlands

(44%) and Austria (44%) meet all eight criteria. These countries show that progress can be made with ongoing efforts. A ripple effect is needed to improve web accessibility throughout Europe and make digital government available for all.

Mobile Friendliness

The previous paragraphs showed that users can easily find information about government services online on their laptops and desktops. However, focusing only on computer users does not paint a complete picture of eGovernment website users. Increasingly, people use their smartphones to find information and obtain services. The *Mobile Friendliness* indicator measures whether government websites are adaptive to mobile devices (e.g. that text remains readable, buttons become larger, etc.). Figure 2.10 shows that **more than nine out of ten government websites are mobile friendly**.

Mobile-friendly websites are quickly becoming the norm across Europe. For over half of the countries, more than 95% of the websites are adaptive to mobile phones and just seven countries score below 85%. Impressively, all Swedish and Finnish government websites under evaluation are mobile friendly.

Pilot: Mobile Service Delivery

Beyond reading information, some users prefer using their mobile devices to complete online applications and access other government services. Are mobile apps and mobile services as functional as online services completed via a desktop device?

18 services from the nine life events were piloted on a mobile device to assess mobile service delivery and compare this to the performance of the same services on computers. The *Mobile Service Delivery* indicator is currently still a pilot, meaning that its results do not count towards the total score.

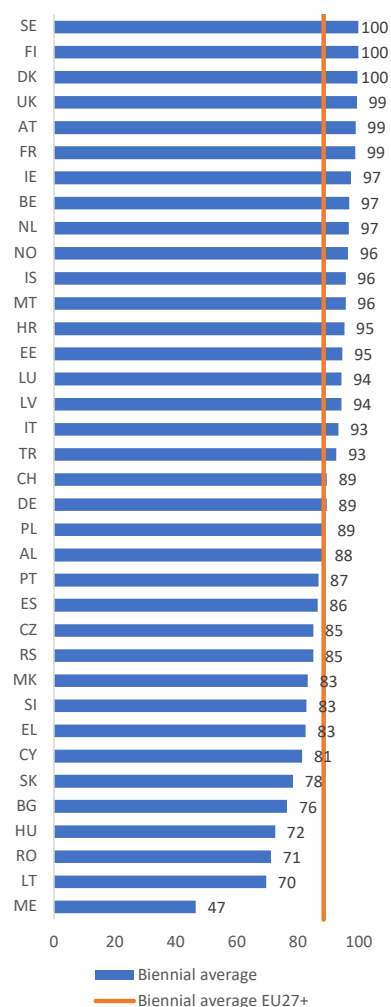


Figure 2.10. Mobile Friendliness indicator, biennial averages per country

Information is often readable on mobile devices as government websites adapt static content to smartphones and tablets. However, underlying dynamic service modules and native mobile applications do not offer the same desktop functionalities.

Across Europe, only 62% of the services can be fully completed on a mobile device, compared to 77% for computer users accessing the same selection of 18 services. The mobile journey is hindered due to lower eID integration (60% on mobile devices versus 66% on computers), fewer eDocuments that can be uploaded and obtained (69% versus 75% on computers) and fewer online application forms containing pre-filled personal data, even though repeatedly entering information on a small touchscreen is inconvenient (57% versus 64%).

Six European countries show a particularly strong orientation towards mobile users. The highest number of mobile services, including mobile identification, mobile documentation features and mobile pre-filled forms, can be found in: Estonia, Latvia, Malta, Austria, Finland and Slovenia. They anticipate a rise in mobile users who want to obtain eGovernment services anytime and anywhere they like.

Iceland | Island.is App

Relevant Key Dimension(s): User Centricity, Transparency, Key enablers
Life Events: Transport, Family

1. Good practice description

Ísland.is has released an app to bring better public service delivery in Iceland. The first version of the app gives direct access to a digital mailbox and public certificates, such as drivers' licences. All institutions in Iceland must share data through the digital mailbox by the year 2025 and the app simplifies communication with the public. The app shows the status of applications with institutions using the new application system at Ísland.is, bringing more transparency for applicants. The driver's licence overview gives the user access to the details of their driver's licence. It is a quick, convenient way to obtain an official digital driver's licence that can be stored and displayed in a mobile phone wallet app. A certification scanner is also available in the app, giving users the possibility of verifying credentials by scanning, for example, a driver's licence.

2. Benefits

- Easy access to private documents and data sent by institutions
- Easy access to public certificates and licences
- Transparency on the status of applications
- Simple verification of credentials via scanner

3. Key success factors

- Scanner for simple identification check
- User friendly for all smartphones, giving easier access for all
- Pocket version for all personal gov data

4. More information

More information can be found at: <https://island.is/en/app>



		
Is information about the service available online?	98%	87%
Is the actual service available online?	77%	62%
Is it possible to identify oneself online?	79%	75%
Can you use a generic electronic identifier (e.g. a national eID) to identify yourself?	66%	60%
Is it possible for the user to submit or download official documents required for the service?	75%	69%
When applying for this service is personal data pre-filled by the service provider?	64%	57%

Figure 2.11. Mobile eGovernment compared to eGovernment on laptops or desktops

2.3 Transparency

Governmental transparency promotes efficiency, accountability and trust in public sector organisations. To evaluate the transparency of digital governments, the eGovernment Benchmark evaluates three indicators: *Transparency of Service Delivery*, *Transparency of Personal Data* and *Transparency of Service Design*. In eGovernment, transparency is thus about showing users what steps still need to be taken when accessing a service, how their own personal data is being used by the government, and whether users can participate in designing the services they want to use.

Figure 2.12 presents the biennial averages for the *Transparency* indicators per life event. *Transparency of Personal Data* is the most mature indicator, with a biennial average of 69%, followed by *Transparency of Service Design* at 59% and *Transparency of Service Delivery* at 51%. European governments should improve substantially on all *transparency* indicators in the future.

Once more, a gap between businesses and citizen life events can be observed. The transparency indicators for entrepreneurs score better than those for citizens, with only one exception: citizens moving places are actively involved in the service design process, as shown by the relatively high score for *Transparency of Service Design*.

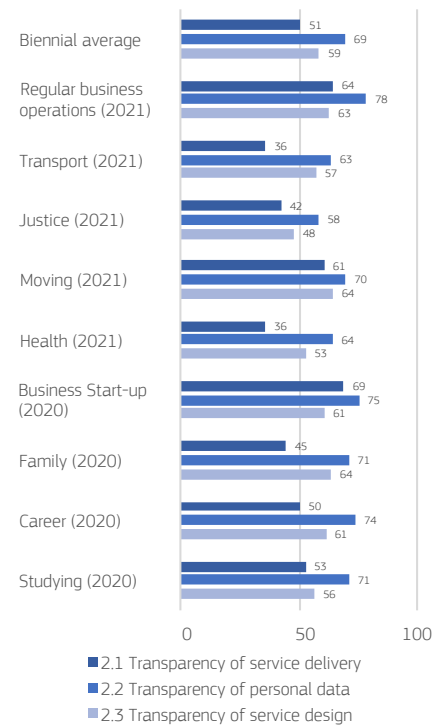


Figure 2.12. Transparency indicators per life event

The *Transparency of Service Delivery* indicator is particularly low for *Health* and *Transport*-related life event services, meaning that citizens often have a hard time understanding how the service will be delivered and what the next steps will be. For *Transparency of Personal Data* and *Transparency of Service Design*, the biggest room for improvement lies in the *Small Claims Procedure* life event.

Figure 2.13 shows that Malta (98%) has the most transparent digital government, followed by Iceland (92%) and Luxembourg (88%). Notably, large differences exist for the transparency key dimension, with eleven countries scoring less than 50%. The EU27+ biennial average for transparency is 60%, showing potential for further development.

Transparency of Service Delivery

Government services can be complex and often comprise multiple steps needing to be completed. For users, this might feel like a maze, therefore improving transparency when obtaining services should be a priority for digital government. *Transparency of Service Delivery* evaluates seven

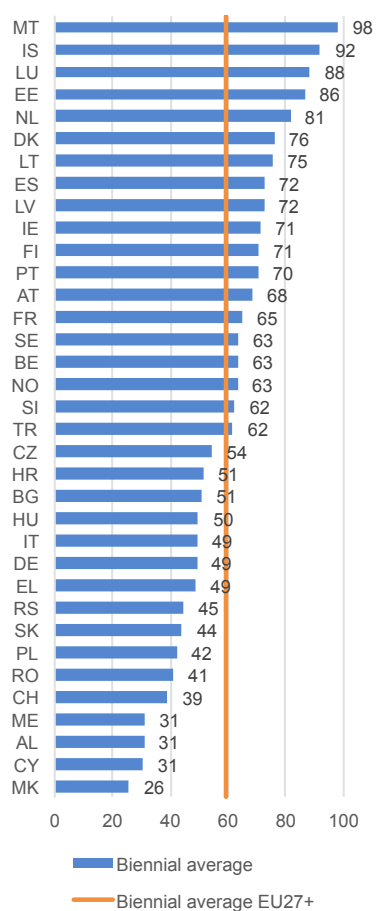


Figure 2.13. Biennial averages for the key dimension of transparency per country

features, as shown in Figure 2.14. A positive finding is that eight out of ten services send users a delivery notice after they have requested a service (81%). Also, in almost six out of ten services, users can track their progress, and delivery timelines are made clear by the government.

The other questions in this indicator paint a less positive picture. Just half of all services provide users with the option to save their work as a draft, and only about half the services have a maximum time limit set within which the administration has to deliver. Even fewer services give an estimation of the duration of the process of requesting the service (43%). Lastly, just one in three services (34%) has information about the performance of the online service available (such as user satisfaction scores).

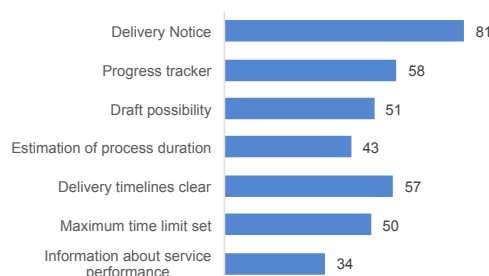


Figure 2.14. Score per question for the Transparency of Service Delivery indicator

Transparency of Personal Data

To deliver services to citizens and entrepreneurs, governments often collect and use personal data from their users. Think for example about your address and date of birth. Subsequently, this data can be stored by the government and used for other services. Citizens and entrepreneurs alike want to be informed about how their government uses this personal data and for which purposes.

The *Transparency of Personal Data* indicator assesses to what extent users can access, modify and monitor their personal data via the most relevant government web portals. shows that users can notify the government of incorrect personal data on 83% of all web portals. Moreover, in three out of four portals (75%), users can modify their own personal data online in the event of errors. Lastly, on almost eight out of ten portals (89%), users can access complaint procedures to inform the government about their discontent with how the government uses their data.

On just 5% of the government portals, users cannot find any information about their personal data at all (Figure 2.16). Furthermore, for another 15%, users cannot access their personal data online, but they are informed on the portal how they can access their data via traditional channels. On almost eight out of ten portals (79%), users can access their personal data online and in one out of three government portals, users are proactively informed about which (new) data is being held about them.

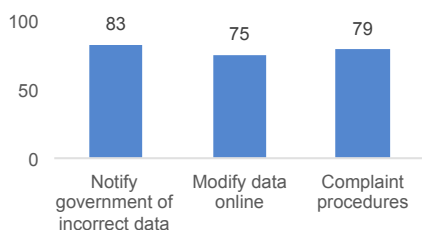


Figure 2.15. Scores per question for Transparency of Personal Data indicator

Differences exist in online access to personal data between citizens and entrepreneurs. Entrepreneurs can access their personal data online on 90% of all portals, whereas citizens can only do this for 79% of all portals.

Users could also be helped with further insight into who consults their data and for which purposes. One in five government portals (18%) do not provide any information on who is entitled to use personal data. Further, 24% of the government portals simply offer a general explanation about who can use personal data but do not inform users about whether their data has actually been used. On 58% of the web portals, users are told whether their data has been consulted, while on 40% users are informed whether and when their data is consulted. On 24% of the portals, users are also informed by whom their data is

Luxembourg | Guichet.lu offers a private eSpace to put users in control of their personal data

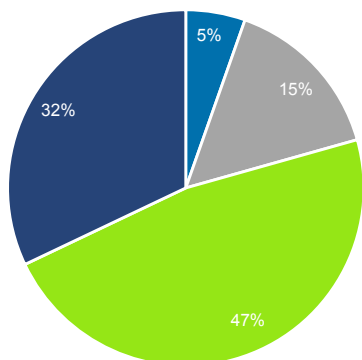
The private eSpace of the guichet.public.lu portal allows users to access their personal data and enter additional data that can be used to auto-fill administrative procedure forms. Specifically, users can:

- view their data;
- file a procedure to have the data amended;
- view a log of data views and updates made over the past 6 months;
- request the reason(s) for viewing their personal data (a letter template can be downloaded from the Help menu).

More information can be found at: <https://guichet.public.lu/en/support/aide/gestion-espace-prive.html>

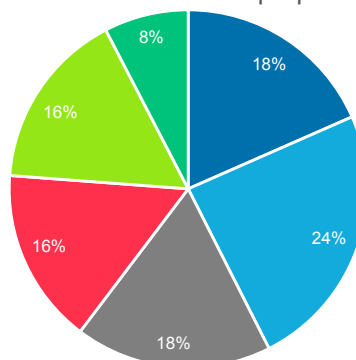
consulted. Lastly, on just 8% of all government portals evaluated, users can find online whether and when their data has been consulted, by whom and for what purpose.

What is the degree of online access for users to their own data?



- No access
- Information is given on how to access own data through offline channels
- Data available on demand
- Is proactively informed by government about which data is being held

Can you monitor who has consulted your personal data and for what purpose?



- No information available
- Who is entitled to use your personal data and for what purpose
- Whether your data has been consulted
- Whether and when your data has been consulted
- Whether and when your data has been consulted and by whom
- Whether and when your data has been consulted, by whom and for what purpose

Figure 2.16. Extent to which users can access and monitor their personal data

Transparency of Service Design

In the EU's Declaration on European Digital Rights and Principles³, Europe highlights participation as one of the seven key pillars for enhancing digital rights in the digital age. Citizens should be able to engage in policy-making processes online and help to design online government services. They are the ones using them, after all.

Since 2020, the eGovernment Benchmark has used the *Transparency of Service Design* indicator to measure how well citizens can participate in the policy-making process and service design processes online. 96% of all government portals provide information on key policy-making processes online, but only slightly more than half (52%) of all government portals provide information on the user's ability to participate in policy-making processes. Users are less informed about service design than about policy-making processes. 54% of all government portals provide information about the process of service design (e.g. with panels, expert groups or consultations) and just 33% let users enrol online for such activities.

Figure 2.17 shows that the biennial average for this indicator is 59%, whereas the Netherlands, Malta, Luxembourg, Iceland and Ireland obtain the maximum score for this indicator. At the same time, nine countries score less than 40%, showing that these countries can and should do more to involve users in policy making and service design.

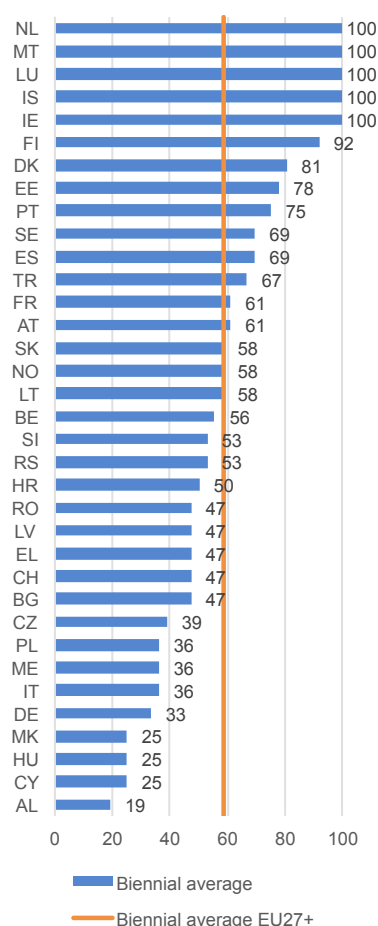


Figure 2.17. Transparency of Service Design, biennial averages per country

³ <https://digital-strategy.ec.europa.eu/en/library/declaration-european-digital-rights-and-principles>

Portugal | Participa.gov

Relevant Key Dimension(s): Transparency of Service Design

Life Events: Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

Participa.gov is a mechanism for participatory democracy. It is a central platform that supports all of the Public Administration's participatory processes, whether open to the general population or restricted to the public sector. The platform gives citizens the power both to make proposals and to vote on them.

The creation of Participa.gov contributes to the consolidation of a national participatory ecosystem that is intended to be increasingly broader and inclusive. It is an integral part of a new paradigm in the relationship between the government and its citizens.

2. Benefits

- Greater efficiency – a central platform that serves all entities reduces the number of participation platforms required;
- Single point of access – one platform for all participatory initiatives ensures consistency and wider public recognition, and fosters greater engagement in all areas of government.

3. Key success factors

- Secure eID mechanisms – by using the national eID schemes, Participa.gov provides security and trust to users registering in the portal to submit proposals;
- Blockchain technology for voting – it ensures the process is not only secure, but also fully transparent and anonymous.

4. More information

More information can be found at: <https://participa.gov.pt/base/home>

2.4 Key Enablers

Key enablers are the building blocks supporting efficient, safe and easily accessible eGovernment services. This study assesses four indicators that together provide the maturity for a country's *Key Enablers*. The four indicators are:

- **eID** (electronic identification) is a government-issued solution for online identification and authentication.
- **eDocuments** (electronic documents) are documents in digital form that the user needs to submit/upload in order to complete an eGovernment service, or that the user obtains as a proof or a result of the service (e.g. certificate, diploma, proof of registration).
- **Authentic Sources** are base registries used by governments to automatically validate or retrieve data relating to citizens and businesses.
- **Digital Post** refers to the option to receive communications digitally only, for example through personal mailboxes or other digital post solutions.

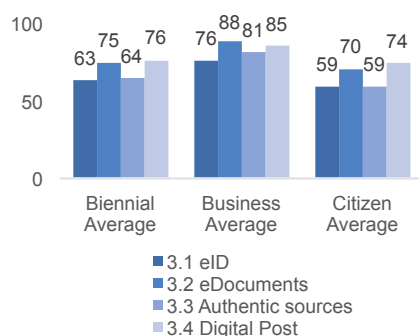


Figure 2.18. Biennial average, business life event average and citizen life event average for Key Enablers indicators

Figure 2.18 shows the biennial averages for the *Key Enablers* indicators and the averages for the citizen and business life events. *eDocuments* and *Digital Post* are the most mature indicators, standing at biennial averages of 75% and 76% respectively. This means that for roughly three out of four services, users can submit or download the required eDocuments online and that three in four government portals provide users with the options to only communicate digitally via a digital mailbox

hosted by the government. The biennial averages for the eID indicator and the Authentic Sources indicators are respectively 63% and 64%.

Service websites and portals for businesses have implemented key enablers more widely than services and portals for citizens. The biggest difference can be observed in the *Authentic Sources* indicator. **Governments prefill personal information in eight out of ten services (81%) for entrepreneurs and in just six out of ten services for citizens (59%)**. The maturity gap is also substantial for the *eID* indicator (17 percentage points) and the eDocuments indicator (18 percentage points). The smallest difference between citizen and business life events is observed for the *Digital Post* indicator: 85% of government portals for entrepreneurs have a digital mailbox, compared with 74% for citizens.

The average of the four indicators delivers the score for the *Key Enablers* dimension. Figure 2.19 shows that seven countries have a score higher than 90% and can be considered frontrunners when it comes to these digital government building blocks. They are Malta, Denmark, Lithuania, Estonia, Iceland, Finland and Norway. The European average is 69%. Lastly, six countries are currently scoring below 50% on this key dimension, giving them room to improve rapidly in the years to come.

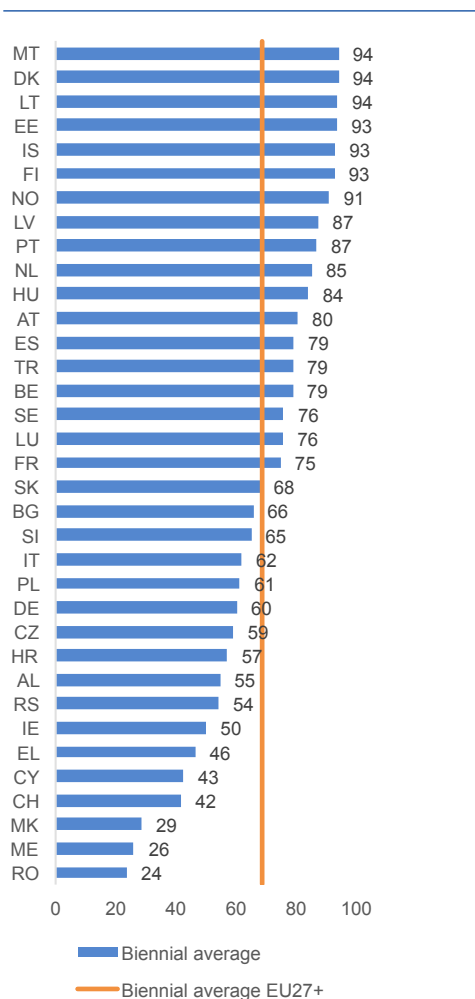


Figure 2.19. Biennial averages per country for the Key Enablers key dimension

Electronic identification (eID)

87% of services across Europe require identification, either offline or online. Electronic identification solutions (referred to as eIDs) are like online passports. People use their eID to prove who they are online. This type of identification is considered more secure than a basic username and password. eIDs ensure safe, fast and easy access to digital government services. With electronic identification, users no longer need to visit government service desks to prove their identity in person, nor wait for documentation to arrive via post.

Out of the services that require identification, one in five (21%) require users to show their

identification card in person and four out of five (79%) allow for online identification. Depending on the country and administration, different types of online identification can be used. Of all services that require identification, users encounter the following options for online identification:

- 67% allow an official national eID;
- 11% allow other online government mechanisms (e.g. organisation-specific account and password, national registration or tax number);
- 1% allow private sector mechanisms (e.g. eBanking token).

When logged in online, less than half of the services (46%) allow a single sign-on. Without it, users often need to re-authenticate when switching between different competent authorities' websites within one life event journey.

Europe's eID frontrunners are Iceland, Denmark, Estonia, Finland, Norway, Malta and Lithuania, where more than 90% of the services can be accessed using the national eID.

Pilot: Website Security

Website security is an increasingly serious concern for citizens and business. When users visit government websites, they must be able to trust that the websites are indeed owned by government authorities. As personal data is often needed for public services, it is essential that citizens and businesses can provide these personal details in a secure environment, without the fear of malicious third parties accessing their sensitive data. Governments are expected to protect the interests of citizens and businesses against data breaches and cybersecurity threats.

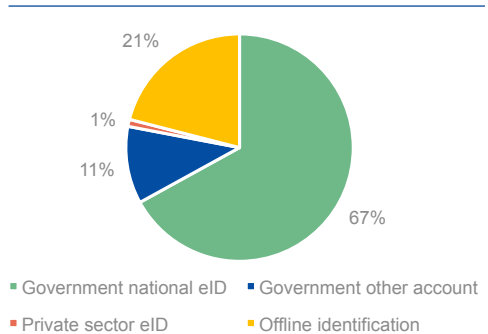


Figure 2.20. Ways to authenticate for a service, when authentication is required

To secure public sector websites, back-end structures need to be robust, while front-end technologies must be up to date. Using the Internet.nl and Mozilla Observatory tools, government websites were assessed on 14 cybersecurity criteria. Both of these openly available security tools are platforms dedicated to increasing website security and reliability. Each tool has its own testing criteria to establish whether these criteria are being met.

All countries have ample room to improve. Yet, Germany, Denmark, the Netherlands, Bulgaria, Norway and Sweden all have government websites that at least meet 12 out of the 14 security and internet standards.

It should be noted that these tests provide an indicative understanding, rather than attempting to conclusively or comprehensively assess cybersecurity.

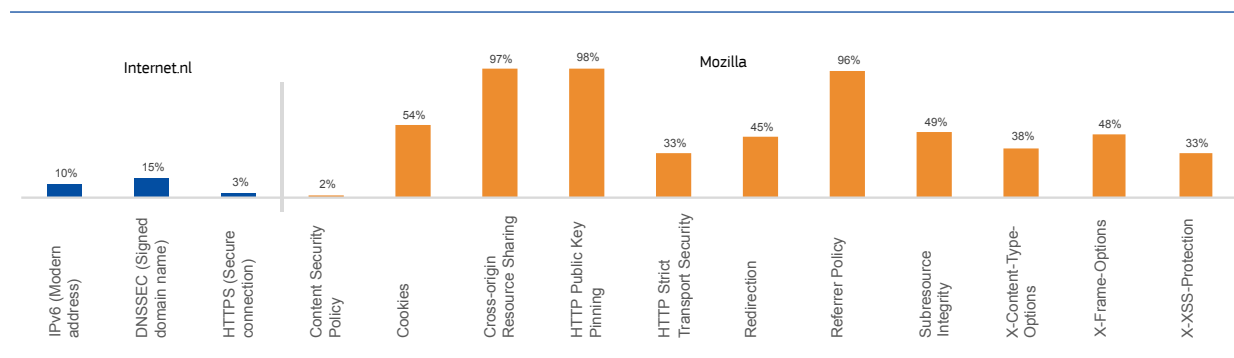


Figure 2.21. Percentage of websites that meet assessed security criteria (EU27+ countries, 2021-2020)

Three assessment items are tested for Internet.nl (IPv6, DNSSEC and HTTPS), and eleven for the Mozilla Observatory (content security policy, cookies, cross-origin resource sharing, HTTP public key pinning, HTTP strict transport security, redirection, referrer policy, subresource integrity, X-content-type-options, X-Frame-options, X-XSS-protection).

Worryingly, less than 1% of the government websites tested pass all 14 security criteria. In particular, only 2% of the websites prevent a wide range of cross-site scripting and clickjacking attacks (content security policy) and only 3% ensure a secure HTTPS connection to prevent third parties from reading or changing content sent between the user and the website.

Fortunately, almost all websites prevent foreign sites from reading the site content and accessing private user information (cross-origin resource sharing), protecting against unauthorised issuance of certificates (HTTP public key pinning) and minimising privacy risks (referrer policy).

Positive results do not guarantee a completely secure website, just as negative results do not necessarily imply that a website is unsafe. False negatives are unlikely, but undetected alternative cybersecurity solutions may have been implemented.

Public administrations across Europe should take advantage of open-source testing tools and implement follow-up measures. These can include securing proper procurement to ensure security by design and prioritising budgets accordingly to invest more heavily in a sophisticated cybersecurity plan.

Greece | Digital document verification & digital certificate of private contract

Relevant Key Dimensions: User Centricity, Transparency, Key enablers

Life Events: Regular Business Operations, Starting a Small Claims Procedure

1. Good practice description

These two new services allow citizens to digitally certify their signature on any kind of document or agreement. The citizen uploads in pdf format the document on which they want to certify their signature. The process is completed once they have filled in the One Time Password (OTP), which is sent to their mobile phone number. Right afterwards, the document is registered in their vault at my.gov.gr and is available for saving, printing or sending to a public body.

2. Benefits

- reducing bureaucratic costs, reducing inconvenience for citizens
- **154,324** digital document verifications (Total – from November 2021)
- **4,118** digital certificates of private contracts (Total – from November 2021)

3. Key success factors

- Citizen's vault (my.gov.gr) infrastructure
- OTP authentication system

4. More information

More information can be found at:

<https://www.gov.gr/ipiresies/polites-kai-kathemerinoteta/psephiaka-eggrapha-gov-gr/ekdose-exousiodoteses>

<https://www.gov.gr/ipiresies/polites-kai-kathemerinoteta/psephiaka-eggrapha-gov-gr/psephiake-bebaiose-idiotikou-sumphonetikou>

2.5 Cross-border Services

The *Cross-border Services dimension* assesses the availability of services to foreigners and international businesses relative to the national availability. The dimension comprises of four indicators: *Cross-border Online Availability*, *Cross-border User Support*, *Cross-border eID* and *Cross-border eDocuments*. *Online Availability* measures whether the service can be found and/or performed online, *User Support* assesses to what extent cross-border users have access to support functionalities, *Cross-border eID* checks whether cross-border users can use their national eID for authentications and *Cross-border eDocuments* evaluates whether eDocuments can be downloaded or submitted.

Figure 2.22 shows the biennial averages for all EU2+ countries on the *Cross-border Services* key dimension. Just three countries score above

80%, namely Malta (94%), Luxembourg (90%) and Estonia (84%). More worryingly, 13 countries score an average of below 50%, meaning that improvements for cross-border users are required for all indicators within this key dimension.

Figure 2.23 compares the questions for cross-border users to the questions for national users. For almost three out of four services (72%), cross-border users can find information online (meaning in a different language than the country's national language). Less than half of all services can be completed online (compared to 81% for national users).

Cross-border User Support

Users that encounter issues online might want to file a complaint. Although many national users can easily voice their discontent online, this is not yet the case for cross-border users. By having

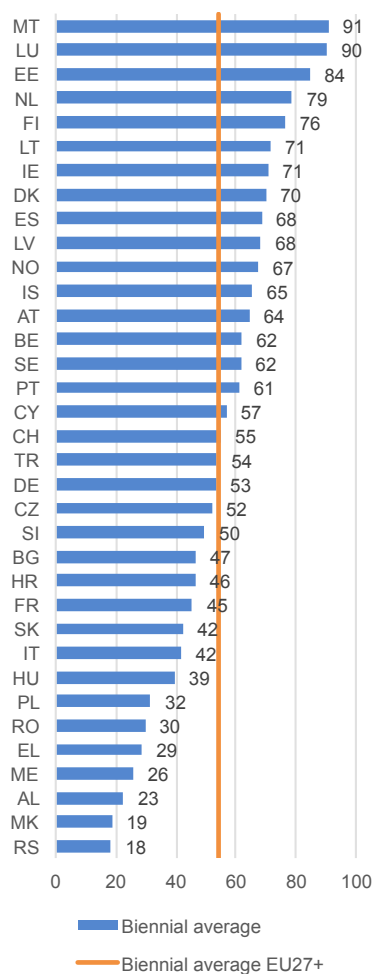


Figure 2.22. The biennial averages for the EU27+ for the top-level benchmark of cross-border services

complaint procedures for cross-border users online, government can pinpoint procedural barriers and improve their services.

Cross-border Online Availability

Cross-border users understandably want to complete services online because it is harder for them to obtain certain services in person. Visiting a municipality office in a city or a country where one does not live can be a burden, especially for relatively common services. Figure 2.24 shows the percentage of each country's services that are online for national users compared to cross-border services. As mentioned, less than half of all cross-border services can be completed online. Moreover, for many countries, the difference

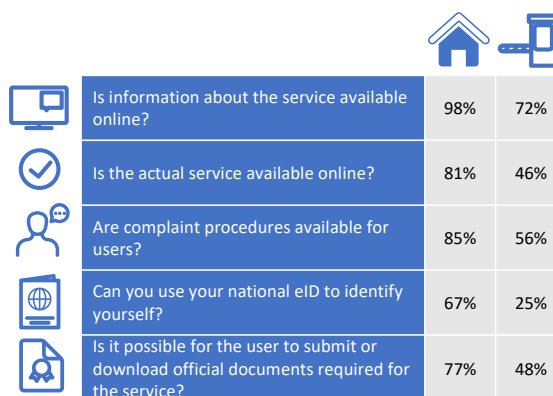


Figure 2.23. Differences in service delivery for cross-border users and national users

between online services for nationals compared to online services for non-nationals is substantial: for just seven countries (Malta, Estonia, Luxembourg, Spain, Ireland, Switzerland, Cyprus) the difference in services online for national users and cross-border users is fewer than 20 percentage points. When cross-border users are not able to complete a service online, the following barriers are named most often:

- Information is not available in multiple languages
- Lack of information for cross-border users
- Non-national eIDs are not accepted

Cross-border eID

Ideally, someone's national eID should not only give access to online services in their own country, but should also provide a means of personal identification for foreign countries, just like a physical passport. The Commission also endorses the idea of a cross-border digital identity that someone can take to other countries as a digital counterpart to a passport. Specifically, the Commission has already launched (in 2014) the eIDAS regulation on electronic identification and trust services for electronic transactions in the [European Single Market](#).

Figure 2.25 presents the adoption of eID in Europe. For all cross-border services where authentication is required, it is only possible to login with an eID from another country for one in four (25%) of the services. It seems that cross-border eID is not yet the norm in Europe. Only Luxembourg provides authentication with cross-border eID for more than

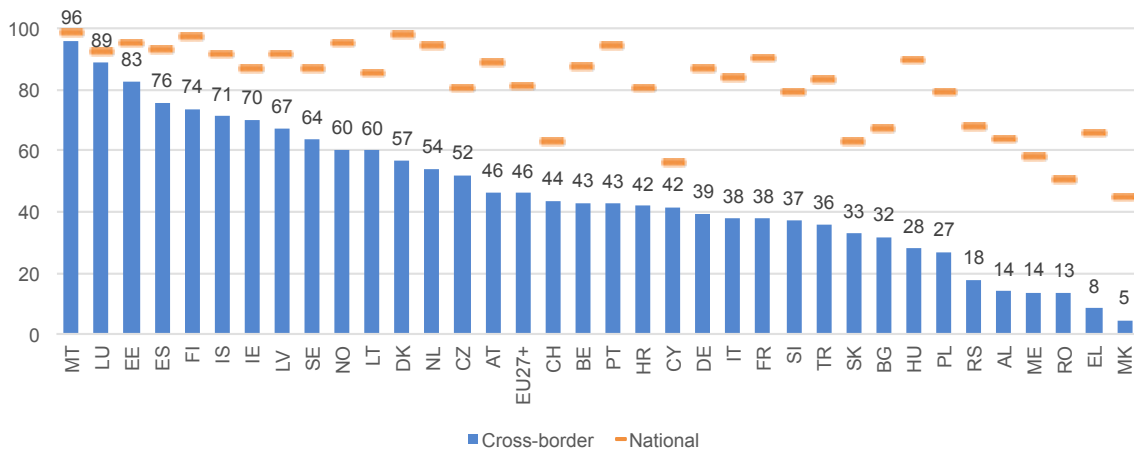


Figure 2.24. Percentage of services that can be completed online for national and cross-border users

three out of four services. As it stands, the eID is not yet the digital passport it ought to become in the future.

Cross-border eDocuments

Lastly, European governments are often able to facilitate submitting or downloading of official documents (eDocuments) for national users. For cross-border users, this opportunity is only available for half of the services (48%), which is way lower than the 77% average for national users.

The services under review in the eGovernment Benchmark have an impact on the daily lives of citizens and entrepreneurs and how they interact with their governments. Therefore, the eGovernment Benchmark results feed into the European Commission's Digital Economy and Society Index (DESI). This composite index is the main tool used by the European Union and its Member States to track digitalisation successes. It consists of four key areas: Human Capital, Connectivity, Integration of Digital Technology and Digital Public Services.

2.6 Conclusions in the Light of the Digital Economy and Society Index (DESI)

Three indicators of the Digital Public Services dimension capture eGovernment Benchmark results: Pre-Filled Forms, Digital Public Services for Citizens and Digital Public Services for Businesses.

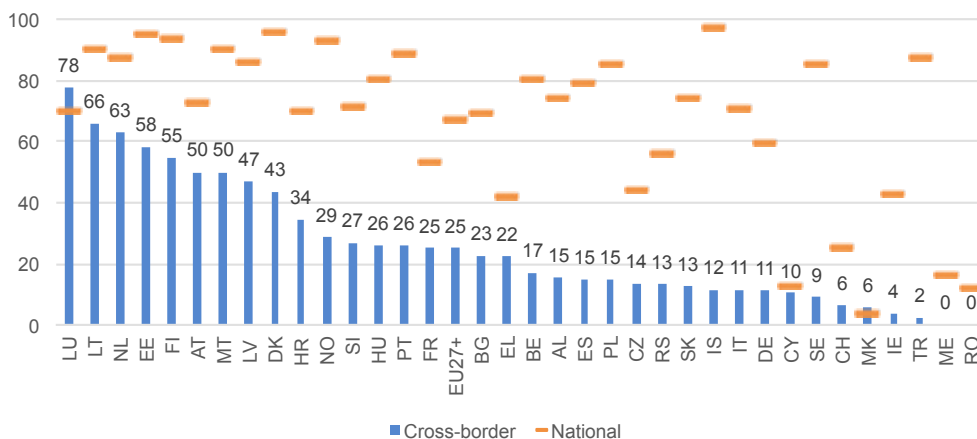


Figure 2.25. Percentage of services where authentication with eID is possible for national and cross-border users

Finland | My Kanta Service – Cross-Border ePrescriptions

Top-level benchmark: User centricity, Cross-border Services

Life event: Health

1. Good practice description

Since 2019, Finnish citizens have been able to retrieve medicine prescribed electronically by their doctor in Finland in three EU member states: Estonia, Portugal and Croatia. The ePrescriptions are visible digitally to participating pharmacists in the receiving country via the new eHealth Digital Service Infrastructure, meaning that the patient does not need to provide a written prescription. The Finnish patient is able to retrieve medicine from participating pharmacies by proving their identity with an official identity document.

2. Benefits

- The total number of Finnish citizens' medicine retrievals in Estonia and Croatia in the period from January 2019 to February 2020 was 8,088. The monthly peak was in July 2019, with a total of 831 retrievals.
- The total numbers of pharmacies capable of retrieving digital patient information, prescription information and logging the medicine retrieval in 2019 was 671 in Q1, 843 in Q2, 927 in Q3 and 830 in Q4.

3. Key success factors

- Cooperation between Finnish public authorities and between EU member states
- National contact points for data

4. More information

More information can be found at Kanta

- **Pre-Filled Forms (DESI indicator 5a2):** this DESI indicator is based on the biennial average from the eGovernment Benchmark indicator *Authentic Sources*, mentioned in the *Key Enablers* sections. The indicator measures to what extent online forms are pre-filled with personal information already known by the government
- **Digital Public Services for Businesses (DESI indicator 5a4):** this DESI indicator is based on the biennial average from the eGovernment Benchmark indicators of Online Availability and Cross-border Online Availability for all business-related life events. The indicator measures to what extent services or information concerning services for businesses are provided online and via a government portal.
- **Digital Public Services for Citizens (DESI indicator 5a3):** this DESI indicator is based on the biennial average from the eGovernment Benchmark indicator Online Availability and Cross-border Online Availability for all citizen-related Life Events. The DESI indicator measures to what extent services or information concerning services for citizens are provided online and via a government portal.
- **Pre-Filled Forms (DESI indicator 5a2)**
Looking at the three indicators of the digital public services dimension in more detail, Figure 2.26 shows the results for the DESI Pre-Filled Forms indicator, with an EU27 average of 64%. This means that over six out of ten online forms that require personal information pre-fill these fields based on data already known by the government. The Netherlands, Lithuania and Finland are leading Europe with more than nine out of ten pre-filled

online forms. Their users can complete forms faster, with less chances of errors.

Digital Public Services for Citizens (DESI indicator 5a3)

Figure 2.27 shows the results for the DESI Digital Public Services for Citizens indicator. The average score for the EU27 is 75%. This means that most services in the area of Career, Studying and Family, as well as Health, Moving, Starting a Small Claims Procedure and Transport, can be fully completed online with sufficient information and can be

reached via main government portals. Malta leads Europe with 100%, followed by Luxembourg, Estonia and Finland exceeding the 90% mark. This means that all, or nearly all, services targeting citizens can be completed online in these countries, allowing users to fulfil government requests digitally.

Digital Public Services for Businesses (DESI indicator 5a4)

Figure 2.28 shows the results for the DESI Digital Public Services for Businesses indicator. The EU27

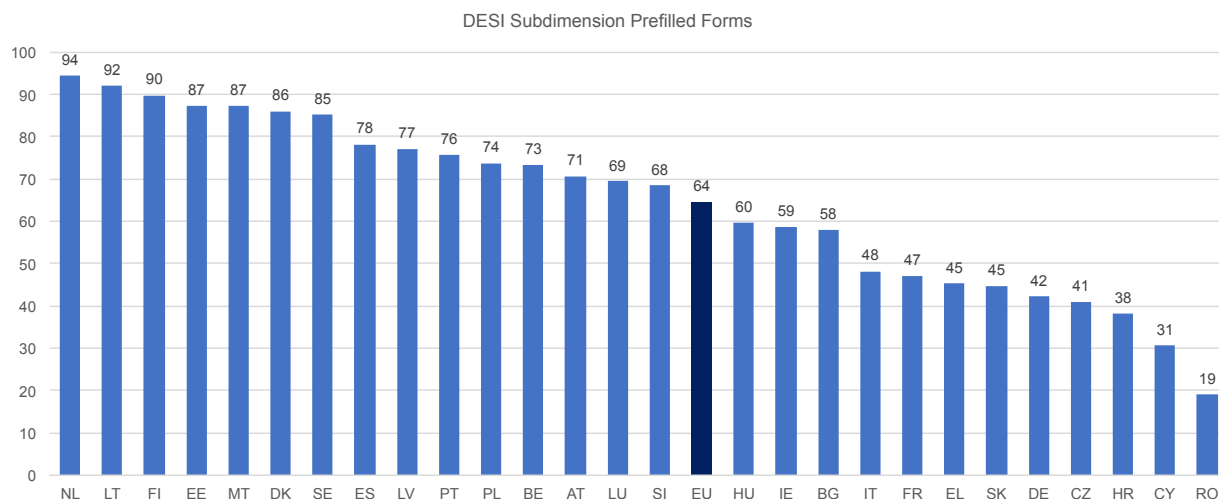


Figure 2.26. Scores per country for DESI subdimension prefilled forms

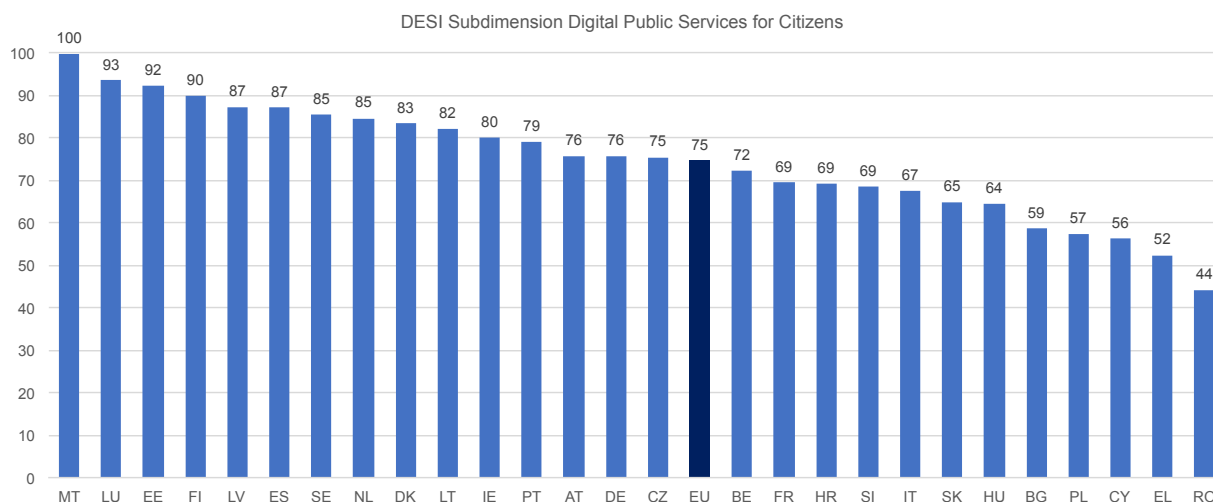


Figure 2.27. Scores per country for DESI subdimension digital public services for citizens

average stands at 82%. This means that most services in the area life events of Business Start-up and Regular Business Operations can be fully completed online with sufficient information and can be reached via main government portals. The top-performing country in this area is Ireland with 100%. Estonia, Malta, Luxembourg, Spain,

Lithuania, Finland and Norway all surpass the 90% mark. Services for entrepreneurs are highly digitalised in these countries.

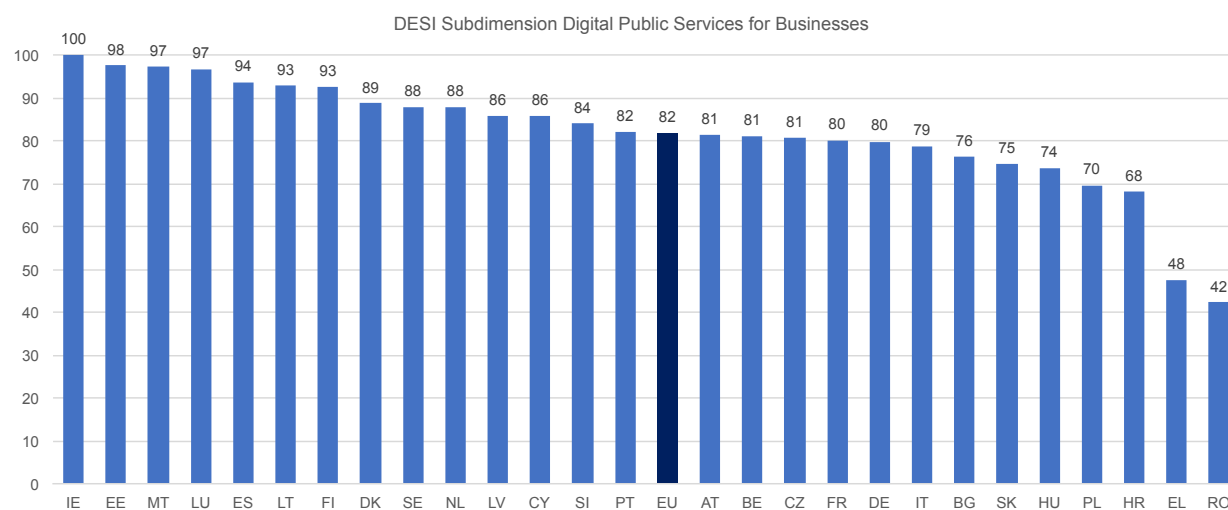


Figure 2.28. Scores per country for DESI subdimension digital public services for businesses

3. Regular Business Operations

*“Europe is a **green technology powerhouse.**”*

Commissioner for Innovation, Research, Culture, Education and Youth,
Mariya Gabriel



3 Business start-up

Businesses are the cornerstone of Europe's economies. Providing digital services lowers the burden of running a business for entrepreneurs and creates the opportunity for them to focus on their core business activities. Online services simplify processes, such as information collection. They are an opportunity for government to facilitate entrepreneurs' business activities. The *Regular Business Operations* life event therefore assesses the extent to which entrepreneurs are facilitated in their government-related business activities.

Each year a business-related life event is included in the eGovernment Benchmark. In the odd years (2017, 2019, 2021) the data for the *Business Start-up life* event was included. In the even years (2018, 2020, 2022) the data for the *Regular Business Operations* life event was collected and is further discussed in this chapter.

Figure 3.1 shows each country's scores for the *Regular Business Operations* life event. The EU27+ average is 76%, displaying that most European countries facilitate businesses well online. The most mature country in this life event is Estonia (97%), followed by Malta (95%) and Luxembourg (94%)

Persona — Regular Business Operations

Margo, female, 51 years old, has her own household goods transportation company. She has to declare corporation tax, send in VAT declarations and submit both financial reports to the business registration office and company data to the national statistical offices. Margo has 4 employees, for which she needs to pay social contributions. If one of her employees takes sick leave, she reports it and might request government compensation (e.g. financial compensation, tax benefit) for the ill employee.

Margo has successfully run the transportation company for more than 10 years and wants to set up an office in another EU country. She thus starts to gather information about how to set up an office abroad. After having obtained sufficient information, Margo decides to move ahead with her plans and registers the new office at the relevant overseas authorities.

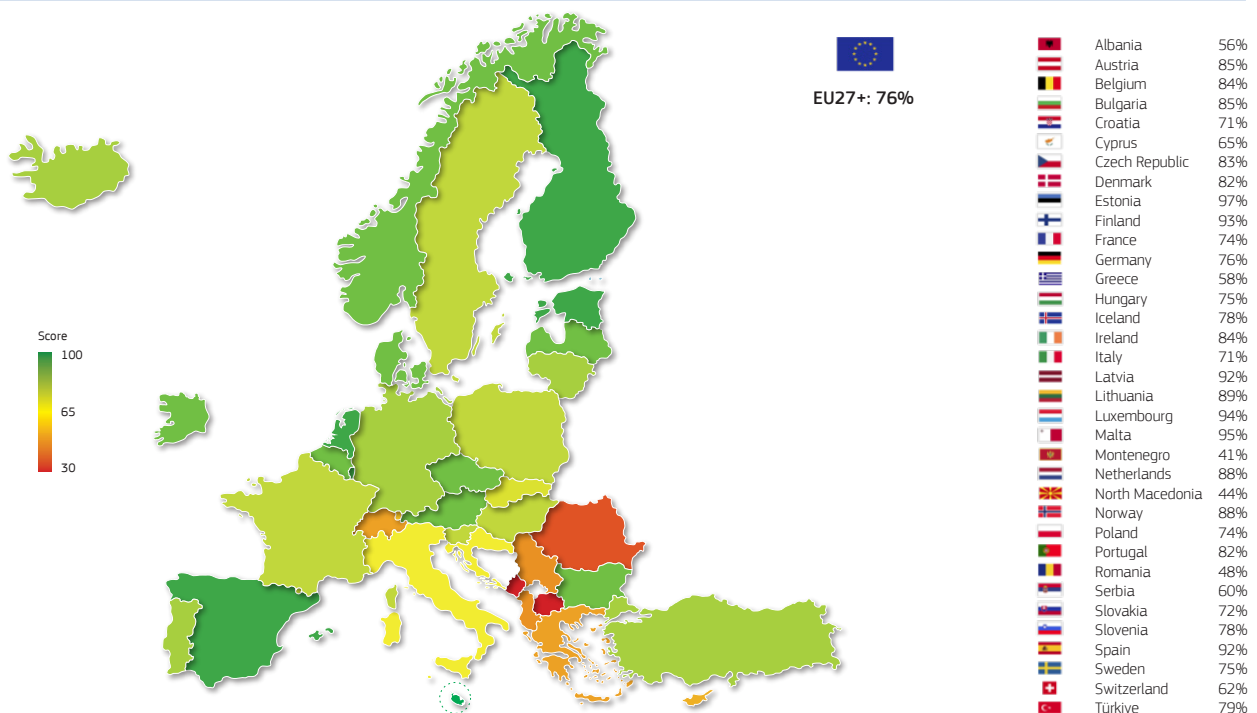


Figure 3.1. The overall maturity of the Regular Business Operations life event, per country

(94%). Three other countries, Spain, Latvia, and Finland also score above 90%, further highlighting the fact that numerous countries provide excellent online services for their entrepreneurs.

3.1 User Centricity

The *User Centricity* key dimension focuses on the *Online Availability*, *Mobile Friendliness* and *User Support* of the services. *User centricity* in service delivery enables citizens and businesses to have an optimal experience when dealing with public administrations. This section describes in detail the results for *Online Availability*, *Mobile Friendliness* and *User Support* for the *Regular Business Operations* life event.

Online Availability

Figure 3.2 shows that many public services are available online under the *Regular Business Operations* life event. Indeed, out of the ten available services in this life event, more than nine can be performed online (91%). For the remaining services, users can at least find information online concerning how they should obtain the service via traditional means.

Taking a deeper look into the specific services offered, both *Declare corporate tax* and *Declare VAT* have a perfect score, meaning that these services are online in all countries. Other services still require improvements: appealing against a VAT decision, for example, can be achieved in just six out of ten countries, while registering the illness of an employee also sometimes requires a telephone call or a physical visit.

Mobile Friendliness

The ubiquity of phones and tablets in getting work done today means that it is important for digital services to be similarly enabled via mobile channels, increasing the overall ease of use. This research finds that 92% of the websites in this life event are optimised for smartphone users. This is especially useful when European entrepreneurs need to register the illness of their employees via a smartphone.

User Support

The average score for *User Support* on government portals under the *Regular Business Operations* life event is 97%. Notable is that 94% of the portals in this domain have feedback mechanisms, which is the highest feedback availability of all life events.

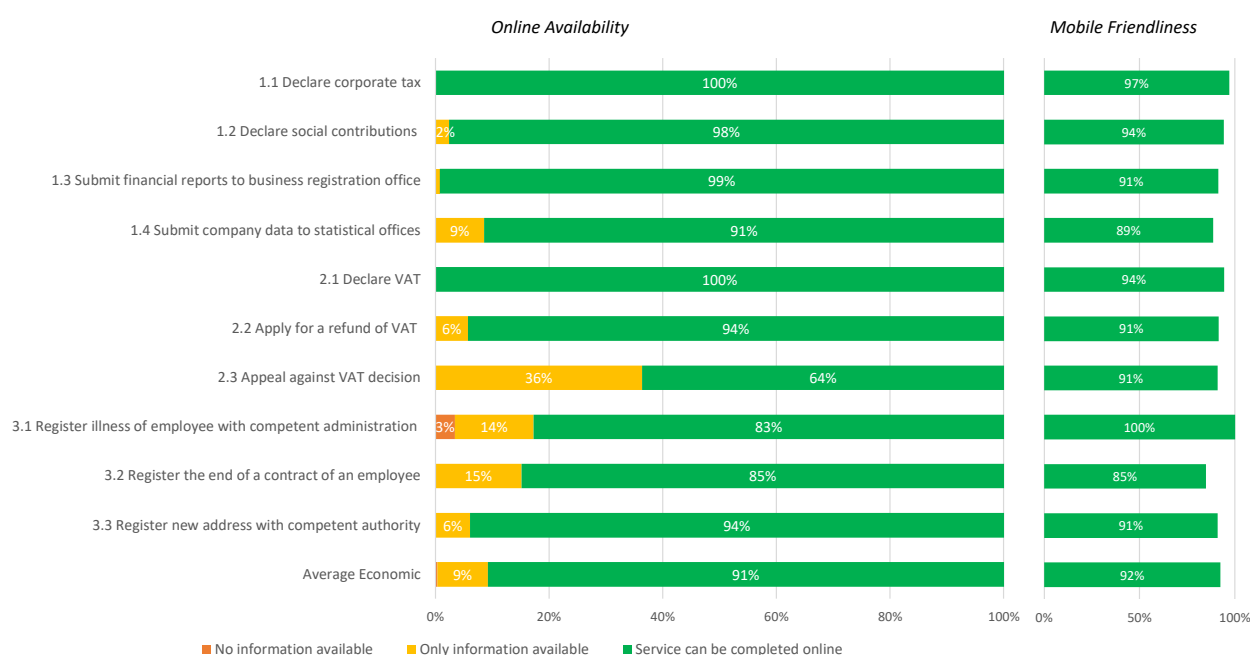


Figure 3.2. Availability of online services and Mobile Friendliness in the Regular Business Operations life event

3.2 Transparency

Transparency comprises the following indicators: *Transparency of Service Delivery*, *Transparency of Service Design* and *Transparency of Personal Data*. *Transparency of Service Delivery* measures whether public services provide clear, openly communicated information about how the service is delivered. *Transparency of Service Design* assesses whether users can participate in policy and service design. *Transparency of Personal Data* evaluates to what extent users are in control of their personal data.

Transparency of Service Delivery

Transparency of Service Delivery assesses seven features: delivery notice, progress tracker, draft possibility, estimation of process duration, clear delivery timeline, maximum time limit set and information about service performance. Figure 3.3. shows that users often obtain a delivery notice after requesting the service, averaging at 85%. On the other hand, the estimation on process duration has an average score of just 47%. This leaves entrepreneurs in the dark about how long a service process will take, for example when they want to register a new address or the illness of an employee.

In general, the services *Declare Corporate Tax* and *Declare VAT* are delivered in a transparent

manner. For instance, entrepreneurs doing their corporate taxes are informed about the delivery timelines of the service nine out of ten times. When entrepreneurs declare their VAT, in eight out of ten times the government informs them in advance of the maximum time limits and before processing their application.

Transparency of Personal Data

The *Regular Business Operations* portals score 78% for the *Transparency of Personal Data* indicator. More specifically, entrepreneurs can access their data in more than nine out of ten portals (91%) and modify their personal data online in 86% of the portals, showing that governments often enable users to be in control of their personal information.

Transparency of Service Design

The average score for *Transparency of Service Design* on government portals is 63%. This is higher than in other life events, but still requires additional initiatives to become open about policy-making and digital services design processes, as well as to allow users to participate in these processes.

Services	Delivery Notice	Progress tracker	Draft possibility	Estimation of process duration	Delivery timelines clear	Maximum time limit set	Information about service performance
1.1 Declare corporate tax	99	92	87	60	88	74	57
1.2 Declare social contributions	91	88	73	65	85	65	53
1.3 Submit financial reports to business registration office	96	85	75	54	63	51	60
1.4 Submit company data to statistical offices	91	85	79	53	57	46	63
2.1 Declare VAT	97	94	85	71	86	80	57
2.2 Apply for a refund of VAT	94	85	85	60	77	77	63
2.3 Appeal against VAT decision	53	47	42	27	64	67	42
3.1 Register illness of employee with competent administration	82	74	74	41	48	41	48
3.2 Register the end of a contract of an employee	62	50	43	21	39	36	24
3.3 Register new address with competent authority	87	71	55	21	45	30	27
Average Economic	85	77	70	47	65	57	50
Highest score	Lowest score						

Figure 3.3. Average transparency score per service in the Regular Business Operations life event

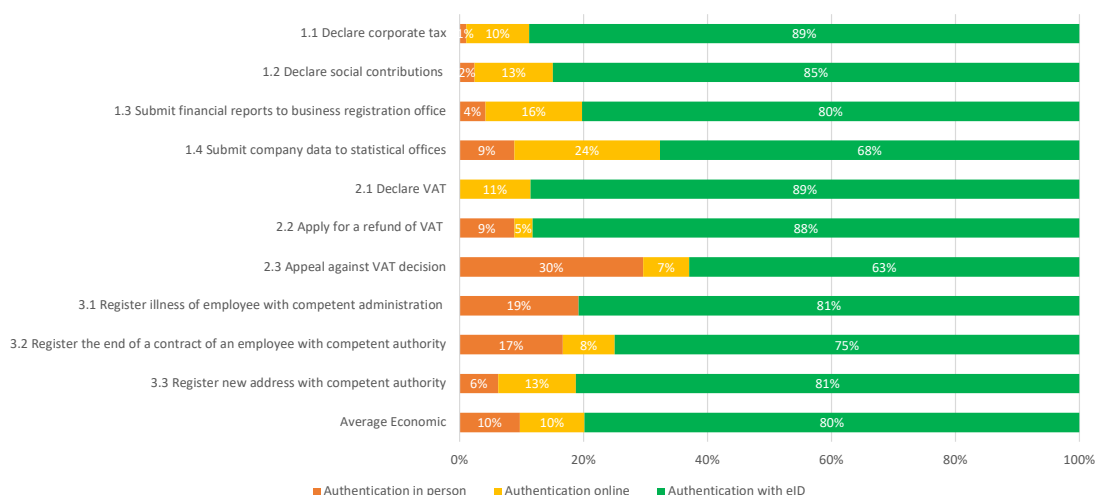


Figure 3.4. Availability of different levels of online authentication for the Regular Business Operations life event

3.3 Key Enablers

The Key Enablers dimension comprises four sub indicators: eID, eDocuments, Authentic Sources and Digital Post solutions. A national eID provides users with the possibility of secure authentication online, eDocuments help users send and receive verified files with the government, Authentic Sources measures whether users only have to enter their data once, and lastly, Digital Post evaluates whether it is possible to communicate with the responsible authorities solely through digital.

eID

Figure 3.4 shows that entrepreneurs can use their eID for authentication in 8 out of 10 services. When authentication with eID is not possible, users can still authenticate online via other means (e.g. with a profile connected to an email account) in one out of ten services. Also in one out of ten services in-person authentication is needed. A positive outlier is the *declare VAT* service where entrepreneurs can use their eID for 9 out of 10 services. In all other instances online authentication via other means is possible.



Figure 3.5. Possibility to submit and receive eDocuments and prefilling of eForms for the Regular Business Operations life event

When appealing a VAT decision, entrepreneurs would benefit from further eID adoption: in just 63% of the services entrepreneurs can use their eID for authentication.

eDocuments

Figure 3.5 depicts the services within the *Regular Business Operations* life event. The uptake of eDocuments for entrepreneurs is embedded well within the EU27+. Entrepreneurs can upload important documents online for more than nine out of ten (92%) services, meaning that businesses can easily upload the documents needed when using online services. All countries enable uploading or downloading of eDocuments for entrepreneurs when they declare their VAT.

Authentic Sources

Personal information is prefilled from authentic sources for users in 86% of the services, making the service request less time consuming. For example, when declaring social contributions, entrepreneurs can be sure that their data is prefilled.

Digital Post

77% of the government bodies in the business domain offer a digital mailbox solution. This helps entrepreneurs to safely communicate with their governments and find all relevant communication in a single online environment.

3.4 Cross-border Services

Cross-border Services evaluates how easy it is for foreign users to access and use online services provided by public authorities. It is comprised of four indicators: *Cross-border Online Availability*, *Cross-border User Support*, *Cross-border eID* and *Cross-border eDocuments*. These indicators measure if services are available online, whether there is sufficient user support and if key enablers such as eID and eDocuments work for people living or coming from abroad.

Cross-border Online Availability

As Figure 3.6 shows, just over 50% of the services for the *Regular Business Operations* life event can be completed online by cross-border users. In just over 20% of the services, while the information can be found online, the service cannot be utilised without a physical visit. For 25% of the services, the information is not available online, which can be caused by, among others, a lack of information or a lack of translation options. *Applying for a refund on VAT* can be done online most often, in seven out of ten countries. Registering an ill employee is the hardest, with only four out of ten countries enabling cross-border entrepreneurs to complete this task online.

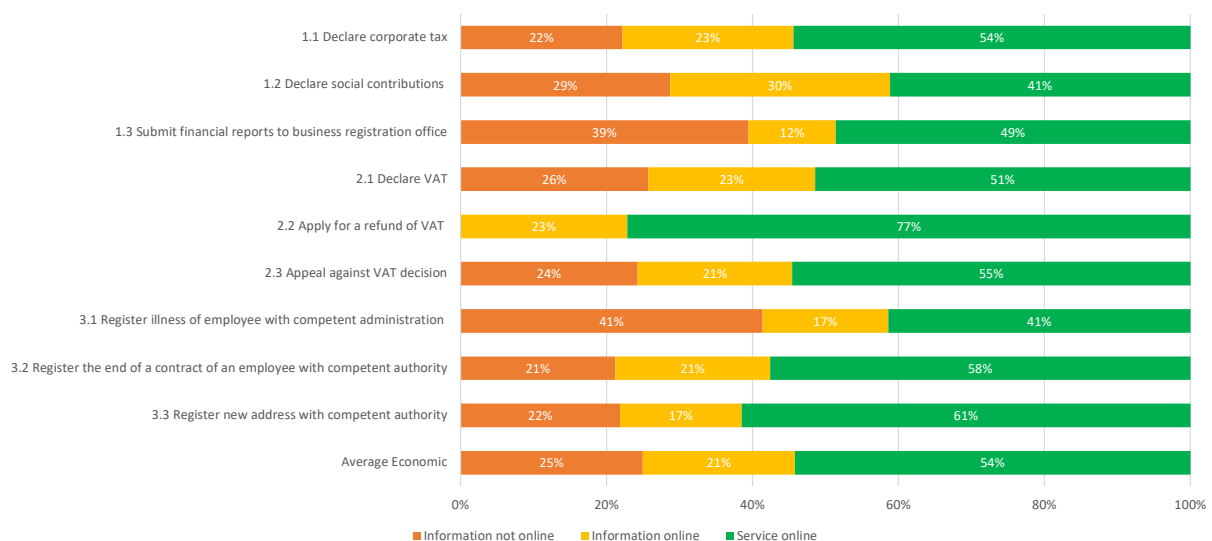


Figure 3.6. Cross-border online availability for the *Regular Business Operations* life event


Authentication with eID per service 		
1.1 Declare corporate tax	89%	28%
1.2 Declare social contributions	85%	30%
1.3 Submit financial reports to business registration office	80%	19%
2.1 Declare VAT	89%	20%
2.2 Apply for a refund of VAT	88%	44%
2.3 Appeal against VAT decision	63%	23%
3.1 Register illness of employee with competent administration	81%	33%
3.2 Register the end of a contract of an employee	75%	22%
3.3 Register new address with competent authority	81%	41%
Average Economic	80%	29%

Figure 3.7. Cross-border eID possibilities for the services in the Regular Business Operations life event

Cross-border User Support

The score for the *Cross-border User Support* indicator is 77%. User support for non-national entrepreneurs is higher than for non-national citizens, enabling entrepreneurs to start and complete their cross-border user journey successfully.

Cross-border Key Enablers

Figure 3.7 depicts the differences between nationals and cross-border users in terms of authentication with eID. On average, we see that nationals can use their eID in eight out of ten (80%) services. For cross-border usage this goes down to just under one third of the services (29%). There is clearly still much to gain in Cross-border eID adoption, especially when submitting financial reports to the business registration office: fewer than one in five countries enable users from other countries to authenticate with their own eID for this service. On a more positive note, for the service *Apply for a refund of VAT*, cross-border is accepted in almost half of the services (44%).

Submitting and downloading eDocuments online makes life a lot easier, especially when working cross-border. In Figure 3.8, we see that technology to download and submit eDocuments is already implemented well for national users (92%), but that possibilities for cross-border users lag behind (39%). Positively, some services already offer *Cross-border eDocuments* usage, with the service to *Register new address with competent authority* scoring the highest rate of adoption at almost three quarters (73%). The service with the most to gain is *Appeal against VAT decision*, where the number is just below one fourth.


Opportunity to submit or download eDocuments, per service 		
1.1 Declare corporate tax	98%	27%
1.2 Declare social contributions	93%	29%
1.3 Submit financial reports to business registration office	98%	37%
2.1 Declare VAT	100%	33%
2.2 Apply for a refund of VAT	97%	44%
2.3 Appeal against VAT decision	69%	24%
3.1 Register illness of employee with competent administration	81%	55%
3.2 Register the end of a contract of an employee	89%	30%
3.3 Register new address with competent authority	95%	73%
Average Economic	92%	39%

Figure 3.8. Cross-border possibility to submit and receive eDocuments for services in the Regular Business Operations life event

Lithuania | digital diagnostic tool for SMEs

Relevant Key Dimensions: User Centricity, Transparency

Life Event: Regular Business Operations, Business Start-Up

1. Good practice description

Digital diagnostic tool for businesses launched by Enterprise Lithuania to provide SMEs the possibility to evaluate management and business practices with a view to improvement and to benchmark business performance against same sector firms. Digital diagnostic tool for businesses require the user – typically an entrepreneur or SME manager – to do a test and to input quantitative information about the business performance or management practices into an online platform and then benchmark performance or assess practices relative to similar businesses. The feedback is intended to enable the entrepreneur to judge whether they are running the business effectively. Also, it is provided some guidance on how entrepreneurs can adjust management practices to improve business performance. The digital business diagnostic tool was developed in collaboration with the Organisation for Economic Co-operation and Development.

2. Benefits

- Free online tool available for each SME
- Universal methodology for assessing the business performance
- Comprehensive report and recommendations for business improvement
- Integrated into broader business development services, with a strong link to in-person follow-up services

3. Key success factors

- Fast “health check” for businesses
- There are no analogous tools available on the market

4. More information

More information can be found at: <https://verslodiagnostika.verslilietuva.lt/>

4. Health

*“The pandemic has clearly demonstrated the importance of **digital health**.”*

Commissioner for Health and Food Safety, Stella Kyriakides



4 Health

The *Health life* event is new to the eGovernment Benchmark report. eHealth is one of the key digital policy priority areas for Europe. Moreover, with coronavirus impacting our daily lives and steering our health organisations to move more and more online, the importance of online digital services is further emphasised.

Figure 4.1 shows the overall maturity of the *Health life* event per country. The overall maturity of the Health The average for EU27+ is 63%, showing that online options for people in need of healthcare have room to improve. In total, just three countries obtain a maturity score higher than 90%: Luxembourg (97%), Estonia (93%) and Malta (91%). Citizens in these three countries are well supported by digital government services when they get sick. There are also eight countries with a maturity score below 50%, meaning that citizens in these countries still need to refer to non-digital means.

Persona — Health

Juan has just turned 18 and is a passionate skateboarder. During one of his tricks, his skateboard slips away and he falls on his wrist. It hurts when he tries to move his hand and he starts browsing online to see which healthcare provider might best help him. He decides to visit his general practitioner.

His GP believes Juan's wrist could be broken and he sends Juan to the hospital to see a medical specialist. Luckily, the imaging tests show Juan's wrist is suffering only a minor fracture, rather than a more serious break. He can see the scans in his electronic health portal. With some rest he should be fine.

During the next winter season, Juan feels sufficiently recovered. He swaps his skateboard for a snowboard and goes on a vacation. At the last day of his stay aboard, he loses control and falls on his wrist again. Juan tries to get cross-border medical assistance.

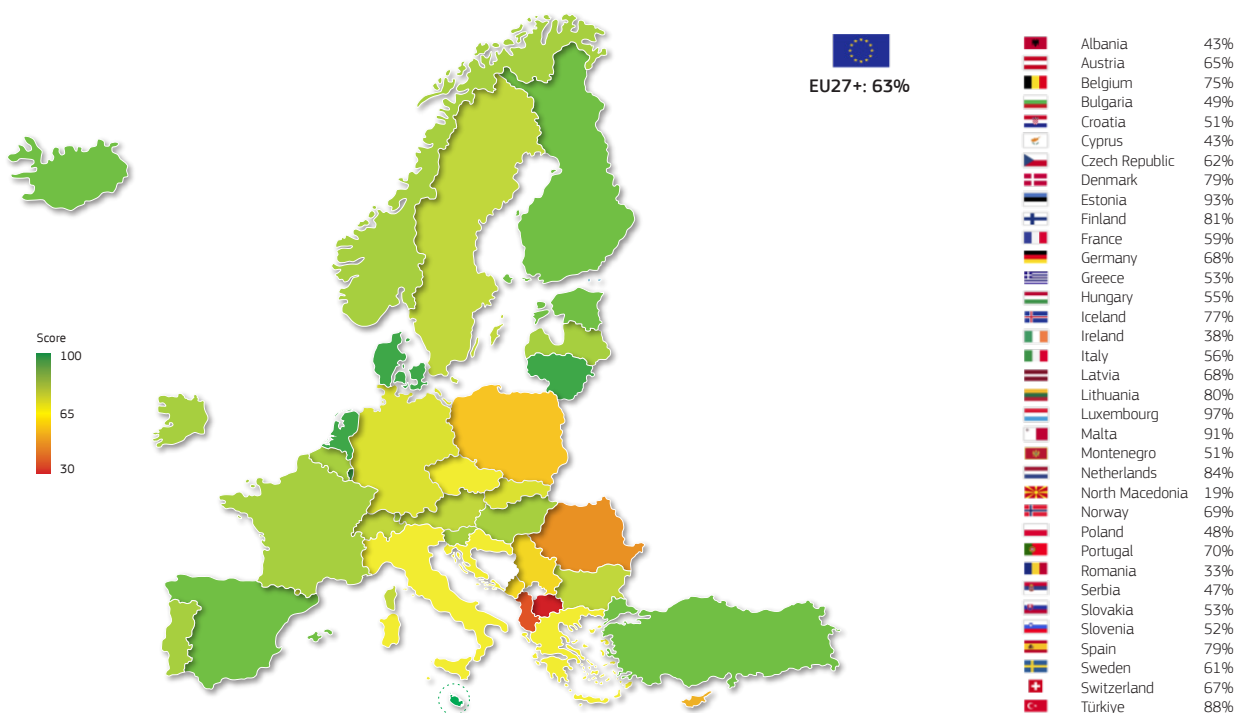


Figure 4.1. The overall maturity of the *Health life* event, per country

4.1 User centricity

The user centricity key dimension focuses on the Online Availability, Mobile Friendliness and User Support of services. User centricity in service delivery gives citizens and businesses an optimal experience when dealing with public administrations. This section describes in detail the results for this aspect of the Health life event.

Online Availability

Figure 4.2 presents the results for Online Availability and Mobile Friendliness. More than three out of four health-related services can be completed online. In one out of ten services, the service can be neither found nor performed online. When taking a deep dive into the specific services, we see that Monitor online information on doctor's registration and Obtain a European Health Insurance Card both do well, as in nine out of ten times these services can be completed online. The Apply for e-consultation with a hospital doctor (tele-consult) service is online in just three out of ten countries, with 39% of countries not even offering information about the service online.

Mobile Friendliness

Health-related government websites are often accessible via tablets and smartphones, with 93% of all evaluated websites being mobile friendly. Distinguishing between individual services gives

us a clearer picture. Websites where users can obtain e-prescriptions are almost always mobile friendly (99%), which is to be expected given that users like to access their e-prescriptions on their mobile devices. From the seven health-related services available, six scored higher than 90%. Monitor online information on doctor's registration, speciality and necessary licences etc. is the only service below 90%, though quite close with 88%.

User Support

The average score for User Support on the government portals evaluated for the Health life event is 84%. Notable is that only 83% of the portals in this domain have feedback mechanisms available. This score is lower than in other life events.

4.2 Transparency

Transparency comprises the following indicators: Transparency of Service Delivery, Transparency of Service Design and Transparency of Personal Data. Transparency of Service Delivery measures whether public services provide clear, openly communicated information about how the service is delivered. Transparency of Service Design assesses whether users can participate in policy and service design. Transparency of Personal Data evaluates to what extent users are in control of their personal data.

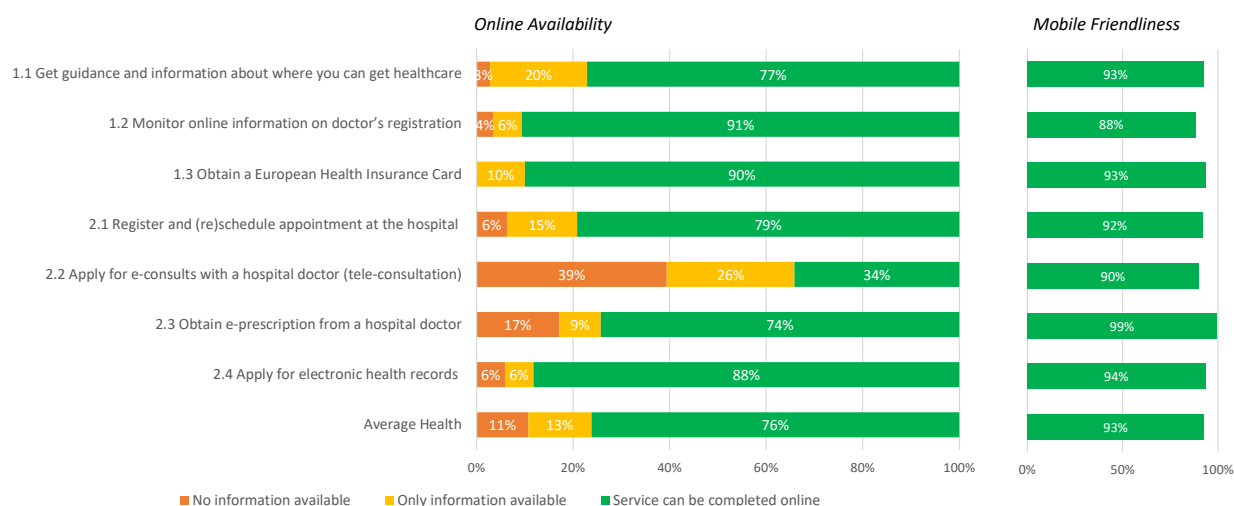


Figure 4.2. Online Availability and Mobile Friendliness of services in the Health life event

Transparency of Service Delivery

Figure 4.3 shows that there is much to gain when it comes to transparency during the service delivery process. In two out of three services in the *Health* life event, users receive a delivery notice after requesting the service. All other features evaluated are unavailable substantially more often. In less than 30% of the services, users have the possibility to save work as a draft and to be informed on the service performance.

The service Obtain a *European Health Insurance Card* has, on average, the most transparent service process, although there's still room for improvement. *Applying for an e-consultation* is the least transparent, with none of the evaluated Benchmark transparency measures for this service present in more than 30% of the countries and several not even achieving 10%.

Transparency of Personal Data

The *Health* portals score 64% for the *Transparency of Personal Data* indicator. More specifically, patients have access to their personal data online for 77% of the portals and can modify their personal data online in 69% of the portals. This shows that governments generally enable users to be in control of their personal information.

Transparency of Service Design

The average score for *Transparency of Service Design* on government portals is 53%. This is lower than in other life events and requires additional initiatives to enhance policy-making

and digital services design processes, as well as to allow users to participate in these processes.

4.3 Key Enablers

The *Key Enablers* dimension comprises four subindicators: *eID*, *eDocuments*, *Authentic Sources* and *Digital Post*. A national *eID* provides users with the possibility of secure authentication online, *eDocuments* help users send and receive verified files with the government, *Authentic Sources* measures whether users only have to enter their data once, and lastly, *Digital Post* evaluates whether it is possible to communicate with the responsible authorities solely through digital channels.

eID

In the *Health* life event, being able to use *eID* eases the overall customer journey for Europeans. Figure 4.4 shows that, on average, over three quarters (76%) of services include the ability to authenticate with the use of an *eID*. In one out of ten services, it is still possible to authenticate online, although without *eID*. There remains a need to authenticate in person for just over one in ten services.

Looking at the services more closely, it is noticeable that the overall score for the *Apply for electronic health records* service is high, with the possibility to authenticate more than nine in ten services online or with an *eID*. The *eID* options for the *Apply for e-consultations with a hospital doctor* service are least developed, with only six in ten countries making this possible, and in 20%

Services	Delivery Notice	Progress tracker	Draft possibility	Estimation of process duration	Delivery timelines clear	Maximum time limit set	Information about service performance
1.3 Obtain a European Health Insurance Card	93	58	54	63	83	70	33
2.1 Register and (re)schedule appointment at the hospital	66	12	5	21	47	27	10
2.2 Apply for e-consults with a hospital doctor (tele-consultation)	30	4	3	12	18	13	5
2.3 Obtain e-prescription from a hospital doctor	74	52	48	43	45	34	26
2.4 Apply for electronic health records	73	52	34	31	36	27	12
Average Health	67	36	29	34	46	34	17
Highest score	Lowest score						

Figure 4.3. Average transparency score per service in the *Health* life event

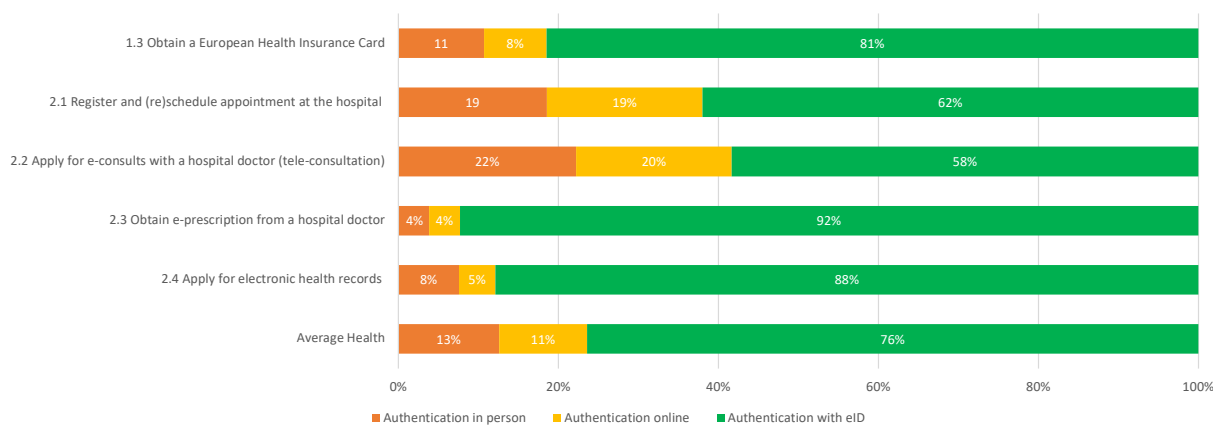


Figure 4.4 Availability of different levels of online authentication for the Health life event

of the countries, authentication is provided only offline and in person.

eDocuments

Figure 4.5 shows the results for *eDocuments* and authentic sources for the *Health life* event. *eDocuments* can be downloaded or submitted in almost nine out of ten services. Impressively, all countries facilitate the use of *eDocuments* for users that are obtaining an e-prescription or applying for their electronic health record.

Authentic Sources

In more than three out of four services, government organisations (sometimes hospitals for this life event) prefill personal information for users. In particular, when dealing with personal medical data, it seems wise to use backend

data to help the user. Personal information is most often prefilled for the services *Obtain e-prescription from hospital doctor* and *apply for electronic health records* (prefilled in 93% of the countries for both services). When people need to reschedule an appointment, or want to apply for an e-consultation, they still need to enter all their personal information in around half of the countries.

Digital Post

71% of the government bodies in the *Health* domain offer a digital mailbox solution. This helps patients to safely communicate with their governments and find all relevant communication in a single online environment.

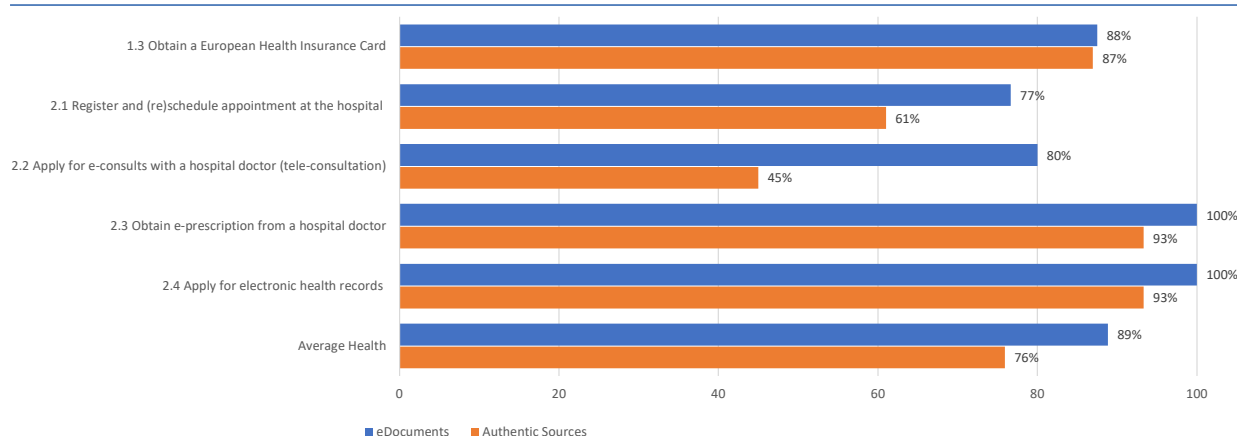


Figure 4.5. Possibility to submit and receive eDocuments and prefilling of eForms for the Health life event

4.4 Cross-border services

Cross-border Services evaluates how easy it is for foreign users to access and use online services provided by public authorities. It is comprised of four indicators: Cross-border Online Availability, Cross-border User Support, Cross-border eID and Cross-border eDocuments. These indicators measure if services are available online, whether there is sufficient user support and if key enablers such as eID and eDocuments work for people living or coming from abroad.

Cross-border Online Availability

Figure 4.6 shows how often health-related services are available online for cross-border users. Currently, a little more than four in ten services are entirely available online, while cross-border users can find information about only 14% of the services in a language other than the national language of the respective country. Further, for over 40% of health-related services, users do not know how to obtain the service nor can they find any information about the service online.

Guidance and information about where to obtain healthcare can be found online in six out of ten countries. Cross-border citizens who want to obtain a European Health Insurance Card can, at least, find information online in 87% of the

countries. Completing this service is possible in 47% of the countries.

The Apply for e-consultation with a hospital doctor service requires hospitals to provide more information for cross-border citizens, as users in 65% of the countries could not find information about this service online.

Cross-border User Support

The score for the *Cross-border User Support* indicator is 50%. User support for non-national patients is lower than for cross-border users in other life events. Additional user support channels would help patients to start and complete their user journey successfully.

Cross-border eID

By looking at the eID possibilities for cross-border users in Figure 4.7, it becomes evident that there are large discrepancies between eID authentication for national users compared to cross-border users: whereas national citizens can use their eID for 76% of the services, this number is only 34% for cross-border users.

Cross-border citizens who want to *Obtain a European Health Insurance Card* can use their eID in 48% of the countries. For digital services that are delivered by hospitals – *Registering an appointment at the hospital* and *Apply for e-Consultation* – cross-border eID functionalities

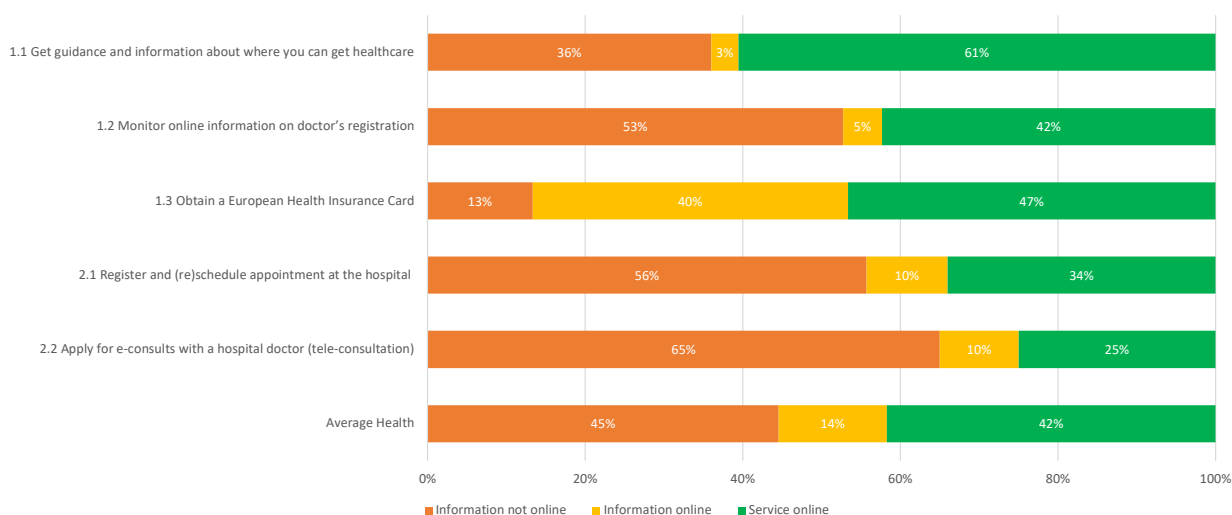


Figure 4.6. Cross-border Online Availability for the Health life event


Authentication with eID per service 		
1.3 Obtain a European Health Insurance Card	81%	48%
2.1 Register and (re)schedule appointment at the hospital	62%	23%
2.2 Apply for e-consults with a hospital doctor (tele-consultation)	58%	29%
Average Health	76%	34%

Figure 4.7. Cross-border eID authentication per service in the Health life event

are still limited. In less than 30% of the countries, cross-border citizens can use their own eID to authenticate online.

Cross-border eDocuments

Figure 4.8 shows that 44% of the services enable cross-border users to download or submit eDocuments, which is substantially lower than for national users at 89%. Doing *particularly well* is the *Obtain a European Health Insurance Card* service where, in almost seven out of ten

countries, eDocuments can be submitted or downloaded by cross-border users. The services delivered by hospitals are underperforming substantially.


Opportunity to submit or download eDocuments, per service 		
1.3 Obtain a European Health Insurance Card	88%	69%
2.1 Register and (re)schedule appointment at the hospital	77%	30%
2.2 Apply for e-consults with a hospital doctor (tele-consultation)	80%	33%
Average Health	89%	44%

Figure 4.8. Cross-border possibility to submit and receive eDocuments the Health life event

Denmark | Digital ready legislation for a quick COVID-19 response

Relevant Key Dimensions: User Centricity, Transparency, Key Enablers, Cross-Border Services
Life Event: Health (as well as Regular Business Operations, Moving, Transport, Starting a Small Claims Procedure, Business Start-Up, Studying, Family and Career)

1. Good practice description

Danish eGovernment has shown its worth during the COVID-19-pandemic, in which the initiative of digital-ready legislation is recommended by Denmark as an essential tool supporting eGovernment. Denmark has solved a number of the challenges related to the pandemic through digital solutions. Enablers, such as digital infrastructure, political collaboration, trust in public administration, and strong digital skills, have supported the solutions. Digital-ready legislation is a specific initiative that supports these enablers. Moreover, the government has launched a range of new initiatives to cope with COVID-19, including a contact-tracing app, digital booking of tests and vaccinations, compensation schemes for companies and more.

2. Benefits

- Digital-ready legislation is a low risk, high-reward initiative as it is implementable across all sectors of public administration.
- The main function is to create a more coordinated, quick, and seamless public administration by making new legislation easily understandable and digitally compatible.

3. Key success factors

- Secretariat for digital-ready legislation was established in 2018 under the Department of the Ministry of Finance; the secretariat screens the government's legislative programme and provides consultation responses to almost every bill submitted to the Parliament.
- Provide the prerequisites for ensuring that digital-ready legislation is included as early as possible in the political decision-making process.

4. More information

More information can be found at: <https://en.digst.dk/policy-and-strategy/digital-ready-legislation/>

5. Starting a Small Claims Procedure

*“Ensure that the consumer **rights of citizens** are effectively protected.”*

Commissioner for Justice, Didier Reynders



5 Starting a Small Claims Procedure

The *Starting a Small Claims Procedure* life event evaluates to what extent Europeans can start a small claims procedure online. The procedure is designed to simplify and speed up cross-border claims of up to EUR 5 000 and is applicable in all EU member states. All non-EU member states have similar procedures, which makes this life event suitable for comparison. Furthermore, the ability to start procedures across borders (or as

a foreigner living in another country) enables European citizens to fully participate in foreign judicial systems.

Figure 5.1 shows the overall maturity per country for this life event. The average maturity for the EU27+ is 56%, which makes the *Starting a Small Claims Procedure* life event the **least digital government domain** evaluated. People who want

Persona — Small Claims Procedure

George, 25 years old, likes photography and recently bought a new camera via an e-commerce platform in another European country. On opening his purchase, he sees that one accessory lens is broken. He contacts the supplier and requests a new lens or compensation. The store owner replies that there is no obligation for them to do this. George is disappointed and decides to start a European Small Claims Procedure.

To do so, George first needs to obtain relevant information on how to file a claim and what his rights as claimant and consumer are. Once he knows where and how to file a claim, he starts the procedure at the relevant authority and defends his case. During the handling of the claim, he actively keeps track of the proceedings (e.g. time to verdict, steps to be taken, dates, case-handling judge). After some time, he receives the judgement. Unfortunately, George has lost his case but he decides to appeal against the court decision. This time George wins and receives compensation for the costs he has incurred.

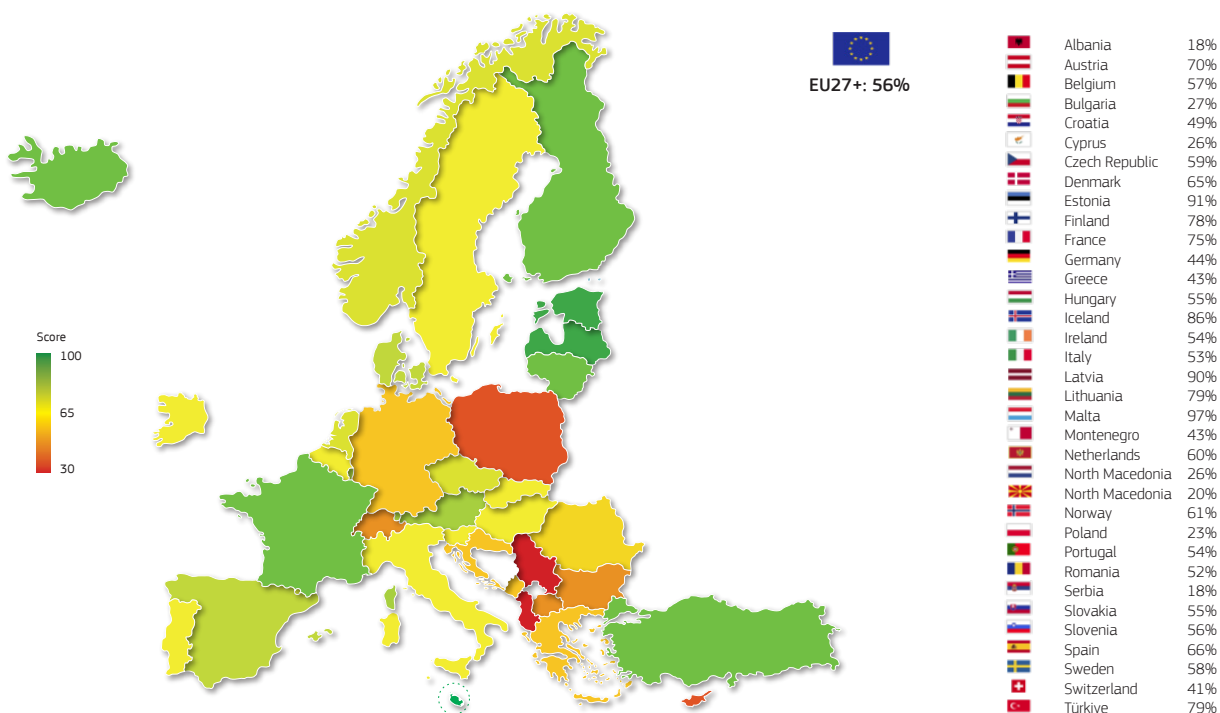


Figure 5.1. Overall maturity per country for the *Starting a Small Claims Procedure* life event

to start a court procedure are still left with non-digital options .

Currently, Malta, Estonia, and Latvia are the only countries with an overall maturity over 90%. Strikingly, ten countries have an overall score below 50% for this life event, which clearly indicates that there is growth to be gained over the coming years.

5.1 User Centricity

The user centricity key dimension focuses on the Online Availability, Mobile Friendliness and User Support of the services. User centricity in service delivery enables citizens and businesses to receive an optimal experience when dealing with public administrations. This section describes in detail the results for Online Availability, Mobile Friendliness and User Support for the Small Claims Procedure life event.

Online Availability

User Centricity scores rather well in this life event, as can be seen in Figure 5.2. On average, eight out of ten services in the *Starting a Small Claims Procedure* life event can be completed online. For just 3% of the services, users could find no information online. In most countries citizens can check the procedural steps to start a small claims

procedure online. They can find information on how to defend their case in most of the government websites. Starting a small claims procedure is possible in 71% of the countries. The *Appeal against court decision* service is the lowest performing, with only six in ten countries making it possible for this to be completed online.

Mobile Friendliness

Many of the websites evaluated are mobile friendly. On average, almost nine in ten websites are adaptive to mobile devices. Nevertheless, *monitor the status of a case*, which is a service that you might expect to be used by mobile device users, is the least mobile friendly.

User Support

The average score for *User Support* on government portals evaluated for the *Starting a Small Claims Procedure* life event is 85%. Notable is that only 71% of the portals in this domain have feedback mechanisms available, which is lower than in other life events.

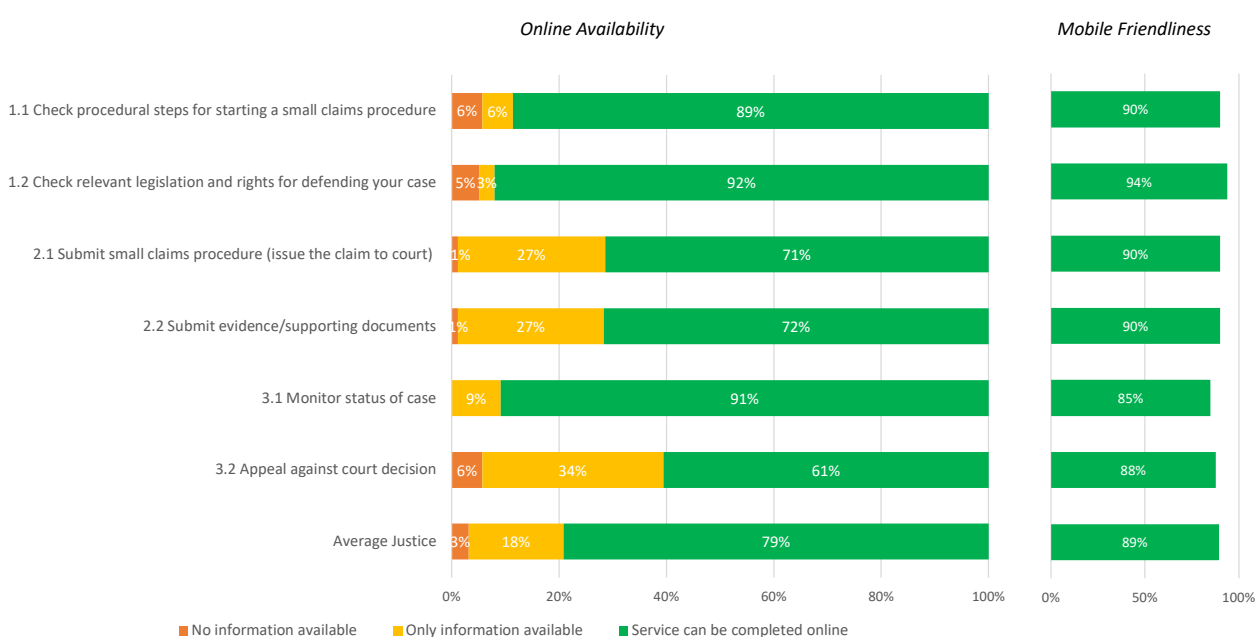


Figure 5.2. Online Availability and Mobile Friendliness of services for the Small Claims Procedure life event

5.2 Transparency

Transparency comprises the following indicators: Transparency of Service Delivery, Transparency of Service Design and Transparency of Personal Data. Transparency of Service Delivery measures whether public services provide clear, openly communicated information about how the service is delivered. Transparency of Service Design assesses whether users can participate in policy and service design. Transparency of Personal Data evaluates to what extent users are in control of their personal data.

Transparency of Service Delivery

The EU27+ average of the *Transparency of Service Delivery* indicator for the *Small Claims Procedure* life event is 42%. Figure 5.3 shows the scores per question for this indicator. Users receive a delivery notice after completion for six out of ten services, and can track their progress while requesting the service for almost half of the services (47%). Moreover, delivery timelines for almost for half of the services (49%) are clear.

When zooming in on the services for this life event, it becomes clear that submitting the small claims procedure (i.e. issuing the claim to the court) is the most transparent service. Appealing a decision has a more opaque service process: five out of seven feature measures for the *Transparency of Service Delivery* indicator are present in less than 40% of the countries.

Transparency of Personal Data

The *Starting a Small Claims Procedure* portals score 58% for the *Transparency of Personal Data*

indicator. More specifically, consumers who start a legal procedure can access their personal data online for 66% of the countries and modify their personal data online in 57% of the countries. This shows that governments enable users to be in control of their personal information to a limited extend.

Transparency of Service Design

The average score for *Transparency of Service Design* on government portals is 48%. This is lower than in other life events and still requires additional initiatives to become open about policy-making and digital services design processes as well as allowing users to participate in these processes.

5.3 Key Enablers

The Key Enablers dimension comprises four sub indicators: eID, eDocuments, Authentic Sources and Digital Post. A national eID provides users with the possibility of secure authentication online, eDocuments help users send and receive verified files with the government, Authentic Sources measures whether users only have to enter their data once and, lastly, Digital Post evaluates whether it is possible to communicate with the responsible authorities solely through digital channels.

eID

Figure 5.4 shows that authentication with eID is possible for almost half of the services in the *Small Claims Procedure* life event. Furthermore, online authentication but without an eID solution is possible for 15% of the services.

Services	Delivery Notice	Progress tracker	Draft possibility	Estimation of process duration	Delivery timelines clear	Maximum time limit set	Information about service performance
2.1 Submit small claims procedure (issue the claim to court)	70	57	59	43	51	43	34
2.2 Submit evidence/supporting documents	60	50	45	40	51	37	29
3.2 Appeal against court decision	52	36	34	34	46	31	29
<i>Average Justice</i>	61	47	46	39	49	37	30

Highest score
Lowest score

Figure 5.3. European averages for features for transparent service delivery for services in the Family Life Event

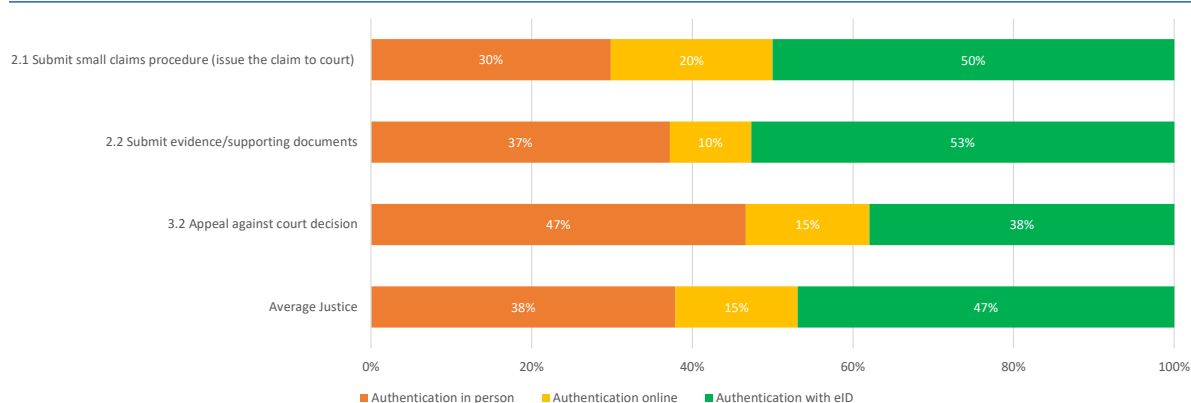


Figure 5.4. Availability of different levels of online authentication for the Small Claims Procedure life event

When submitting the small claims procedure, users can use their national eID in precisely half of the countries. 20% of users can authenticate online for this service, but not with an eID, and in 30% of countries, users need to authenticate via traditional measures (e.g. physical presence). The *appeal against court decision* service is a little behind compared to the rest of the services, with just under two in five instances offering the usage of eID to ensure safe and easy authentication.

eDocuments

Figure 5.5 shows how the services in the *Small Claims Procedure* life event scored on the *eDocuments* and the *Authentic Sources* indicators. For two out of three services in this life event, it is possible to share and receive authenticated *eDocuments*, showing that justice portals across Europe often help citizens with handing in important documents digitally.

Authentic Sources

Regarding the use of authentic sources, there is still room for improvement. The data shows that just four out of ten services in this life event make use of pre-filled information.

Digital Post

64% of the government bodies in the justice domain offer a digital mailbox solution. Wider implementation would help citizens to safely communicate with their governments and find all relevant communication in a single online environment.

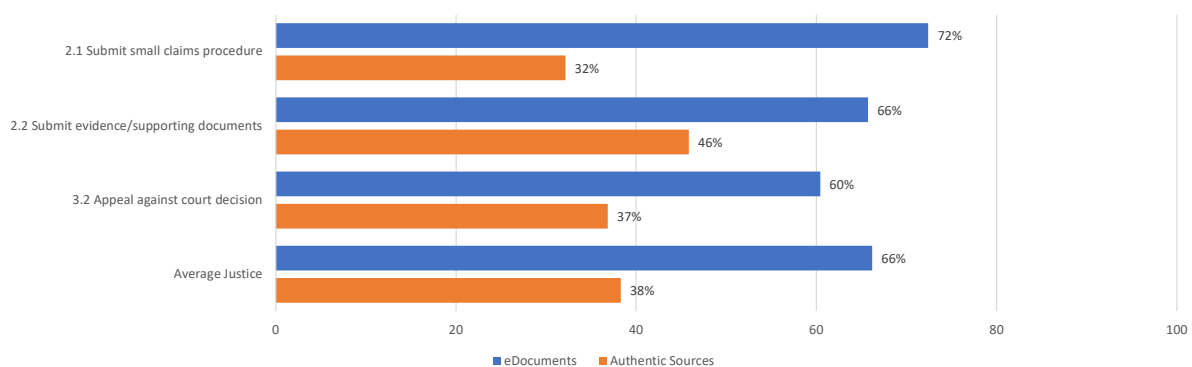


Figure 5.5. Possibility to submit and receive eDocuments and prefilling of eForms for the Small Claims Procedure life event

5.4 Cross-border Services

Cross-border Services evaluates how easy it is for foreign users to access and use online services provided by public authorities. It is comprised of four indicators: Cross-border Online Availability, Cross-border User Support, Cross-border eID and Cross-border eDocuments. These indicators measure if services are available online, whether there is sufficient user support and if key enablers such as eID and eDocuments work for people living or coming from abroad.

Cross-border Online Availability

Figure 5.6 shows that 44% of the services for cross-border users in the *Small Claims Procedure* life event can be completed online, whereas only 23% provide information to non-national citizens. For one third of the services (33%), cross-border citizens can find no information online.

Taking a deep dive into the individual services for *Online Availability*, this research finds that the services for both *Check procedural steps for starting a small claims procedure* and *Check relevant legislation and rights for defending your case* are available online in more than six out of ten countries. The *appeal against court decision* service has the most room for growth: currently 41% of the countries do not have any information about this service online for cross-border users.

Cross-border User Support

The score for the *Cross-border User Support* indicator is 49%. User support for non-national citizens who make a claim against a person, organisation or business, is lower than for users in other life events. Additional user support channels would help citizens to start and complete their user journey successfully.

Cross-border eID

Figure 5.7 shows how often cross-border users can use their eID for authentication and what the differences are between uptake of national and cross-border eID. Just 4% of the services for cross-border users in the *Small Claims Procedure* life event facilitate online authentication with eIDs other than the one from the government delivering the service. Compared to the 50% for national users, the online authentication options for foreign users are lagging substantially.

Cross-border eDocuments

Figure 5.8 shows that cross-border users can submit or download eDocuments in just one out of five services, compared to 66% for national users. Consequently, users wanting to start a small claims procedure in another country must still send many documents by regular mail. For all services in this life event, roughly 20% of the countries facilitate the downloading or submitting of eDocuments.

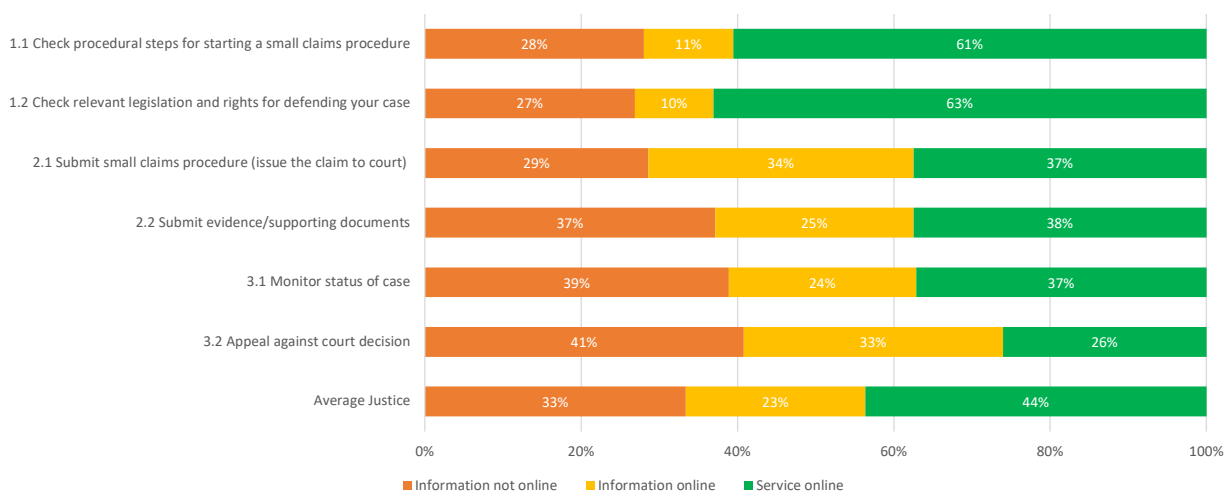


Figure 5.6. Cross-border Online Availability for the *Small Claims Procedure* life event


Authentication with eID per service 		
2.1 Submit small claims procedure (issue the claim to court)	50%	6%
2.2 Submit evidence/supporting documents	53%	3%
3.2 Appeal against court decision	38%	4%
Average Justice	47%	4%

Figure 5.7. Cross-border availability of different levels of online authentication for the Small Claims Procedure life event


Opportunity to submit or download eDocuments, per service 		
2.1 Submit small claims procedure (issue the claim to court)	72%	18%
2.2 Submit evidence/supporting documents	66%	17%
3.2 Appeal against court decision	60%	27%
Average Justice	66%	21%

Figure 5.8. Cross-border possibility to submit and receive eDocuments

Austria | JustizOnline

Relevant Key Dimension: User Centricity, Transparency, Key enablers

Life Events: Starting a Small Claims Procedure, Business Start-Up, Regular Business Operations

1. Good practice description

The idea of JustizOnline is, firstly, that physically going to court will no longer be necessary in many cases and, secondly, that information and answers will be provided quickly. The chatbot “Justitia” guides people in search of information directly to the information and functions that are relevant to them. It can also answer simple justice-related questions.

Searches of the Companies Register and Land Register can now also be carried out simply and directly online. Links and interfaces to other e-government portals, such as the business service portal and oesterreich.gv.at, mean that information about representation and authorisation now only needs to be updated in a single place.

2. Benefits

- Reading files online not only saves time and effort for the parties in the case but also reduces the workload of Ministry of Justice employees.
- Court files can be reproduced in full for cases handled online – including all legal documents, attachments and rulings by the decision-making body. This satisfies people’s strong desire for information about the progress of their case and the current status of court proceedings.
- By the end of January 2021, about 1000 Ministry of Justice employees at 42 offices were working with Justiz 3.0. They have handled over 70,000 cases exclusively online and conducted over 37,000 trials using digital files. That means that, already, 1.5 million documents with 7.5 million pages have not needed to be printed out or stored.

3. Key success factors

- Introduction of the option of managing files entirely online.
- Involvement of all stakeholders in the development of JustizOnline use of the existing infrastructure and structured data (business service portal)
- Process for viewing files electronically was completely revised, improved and tailored to meet the needs of citizens.

4. More information

More information can be found at: JustizOnline - Startseite (<https://justizonline.gv.at/>)

6. Moving

“Migration and mobility spread knowledge, contribute to growth, innovation and social dynamism.”

Commissioner for Promoting our European Way of Life, Margaritis Schinás



6 Moving

The *Moving* life event evaluates the level of online service provision for European citizens when moving houses and places. This could be registering your new address with the government, informing the post office and, at a later point in time, requesting a proof of residence.

The overall maturity for this life event can be found in Figure 6.1. The EU27+ average maturity

for the *Moving* life event stands at 71%, which makes it **the most digital life event for citizens**. It appears that citizens moving places are well supported by digital government services, although improvements are still required. Six countries scored over 90% for this: Denmark (92%), Iceland (91%), Luxembourg (93%), Latvia (94%), Malta (91%), and Türkiye (94%). There are just three countries with a maturity lower than 50%, showing

Persona — Moving

Joyce, 44 years old, married and mother of three children has bought a new family house in another municipality and region within her country of residence.

Before moving she obtains information on the local facilities, e.g. what schools there are for her children, what sports facilities are available and where she can go to a general practitioner. She also makes sure she registers her new address in the municipality register, while all other relevant authorities are notified about her changed address to avoid mail being sent to her previous house. Finally, she signs out at the old municipality and registers herself as the new owner of the house in the land register.

After five years in her house, Joyce gets a new job in another EU country. She and her husband decide to move the family there for at least two years. She again obtains information on the local facilities and required permits to move there. She also obtains information on her rights and obligations when moving abroad. Finally, she registers her new address in the register of the country of destination.

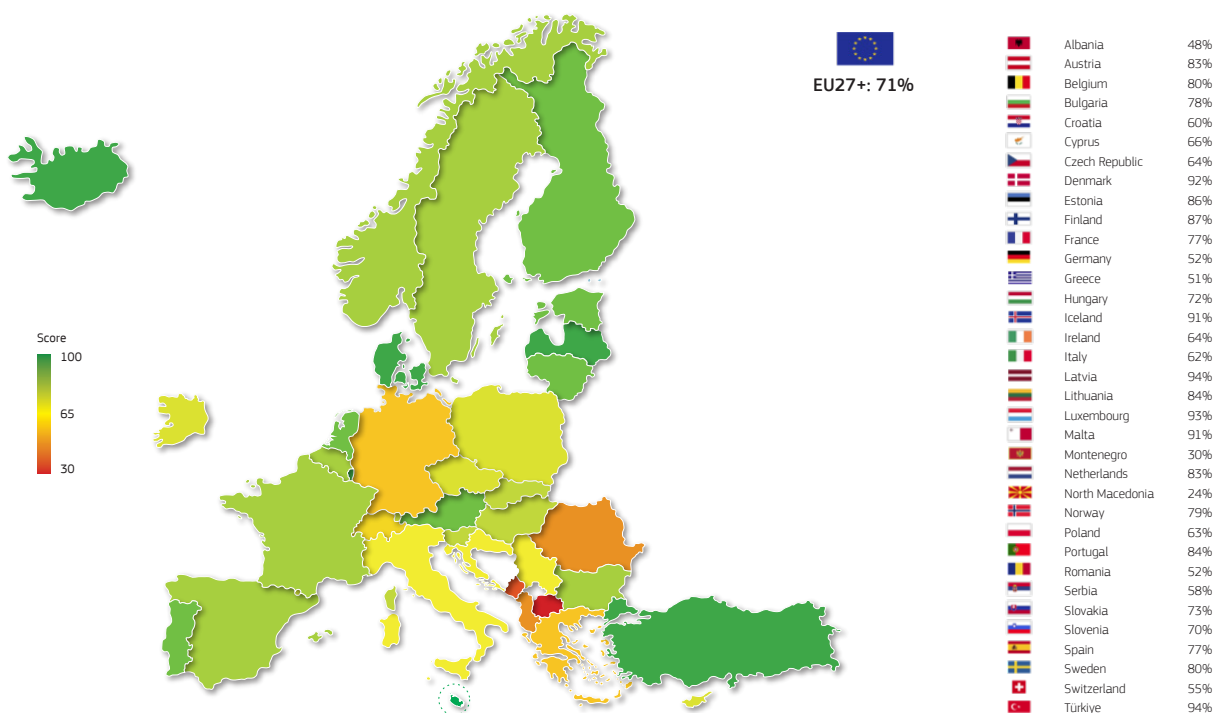


Figure 6.1. Overall maturity of European countries for the Moving life event

that users in almost all European countries can count on their digital government services when changing houses.

6.1 User Centricity

The User Centricity key dimension focuses on the Online Availability, Mobile Friendliness and User Support of the services. User centricity in service delivery enables citizens and businesses to get an optimal experience when dealing with public administrations. This section describes in detail the results for Online Availability, Mobile Friendliness and User Support for the Moving life event.

Online Availability

As presented in Figure 6.2, most services in the *Moving life* event can be completed online (83%). Moreover, in most countries when services cannot be completed online, users can at least find information on how to complete the service (15%). Only a few services can be neither performed online nor found online (2%).

In almost all cities (98%), users can monitor the availability of local facilities online (for the remaining 2% there is only very basic information). Furthermore, in four out of five cities, users can register their new address online in the municipality register. Registering the new address with a different body/organisation (such as tax agencies, health institution, etc.) can be done online

in 93% of all countries. This service is also regularly delivered proactively, meaning that the government automatically updates the new address.

Online functionalities for people with disabilities are not yet on par with the other services in this life event. For example, just 57% of countries make it possible to apply online for a grant to make changes to a home due to a disability (widening doors, access improvements such as lifts, etc.).

Mobile Friendliness

Government websites that citizens can interact with in the *Moving life* event are often mobile friendly. On average, more than nine in ten of the websites evaluated are adaptive to mobile devices (93%). Looking at individual services, this report finds that the service *Register you signing out of your old municipality* is delivered on a mobile friendly website in all countries (100%). The services *Register new address with additional organisations* and *Apply for disabled facilities grant or similar benefit* can be accessed with a mobile device in 95% of the countries. The lowest scoring service is *Obtain proof of residence*, although this is still mobile friendly in almost nine out of ten countries (87%).

User Support

The average score for *User Support* on government portals evaluated for the *Moving life* event is 91%. Notable is that 89% of the portals in this domain

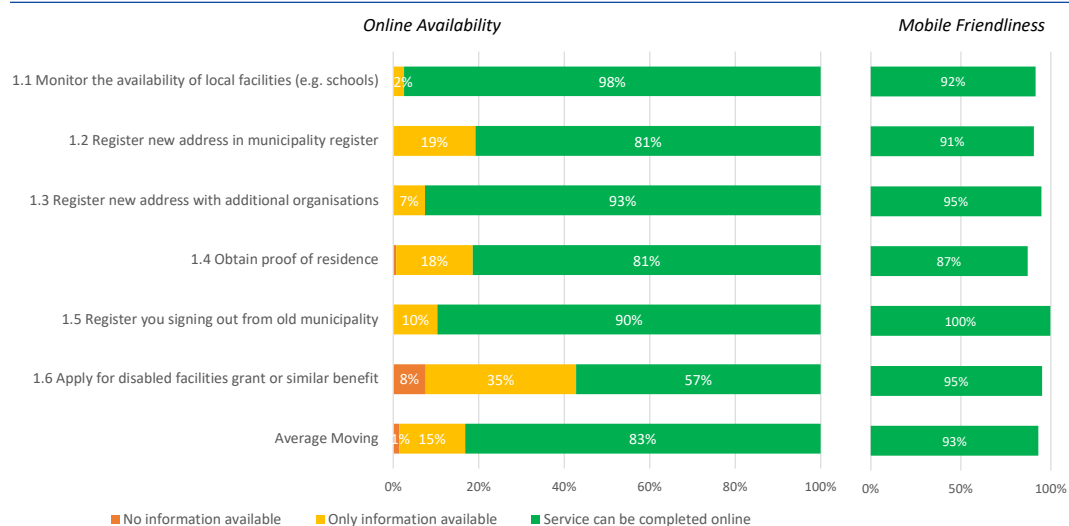


Figure 6.2. Online Availability and Mobile Friendliness of the services in the *Moving life* event

have feedback mechanisms available, which is in line with in other life events.

6.2 Transparency

Transparency comprises the following indicators: Transparency of Service Delivery, Transparency of Service Design and Transparency of Personal Data. Transparency of Service Delivery measures whether public services provide clear, openly communicated information about how the service is delivered. Transparency of Service Design assesses whether users can participate in policy and service design. Transparency of Personal Data evaluates to what extent users are in control of their personal data.

Transparency of Service Delivery

The EU27+ average for the *Transparency of Service Delivery* indicator in the *Moving* life event is 61%. Figure 6.3 shows which of the features that enable transparent service delivery are present in each of this life event's services. In almost eight out of ten services, users receive a delivery notice after service completion. For 65% of the services, citizens are informed about the delivery timelines, so that they know when the service will be completed. Almost half of the services (47%) provide users with information about service performance (e.g. how happy were previous users with the service?).

Zooming in on individual services, it is immediately noticeable that two services stand out in a positive way: when registering a new address with additional organisations (e.g., the tax agency, or your health care provider), or when deregistering

from your old municipality, all *Transparency of Service Delivery* questions score well. This can partly be explained by the fact that these services are delivered proactively by many governments, giving them a 100% score in these countries. However, when applying for a grant to make changes to one's home due to a disability, users are still left in the dark about the service delivery process. For example, in less than one out of four countries, citizens are informed about the process duration and the delivery timelines for the service.

Transparency of Personal Data

The *Moving* portals score 70% for the *Transparency of Personal Data* indicator. More specifically, private persons moving places can modify their personal data online in 77% of the portals, showing that governments generally enable users to be in control of their personal information. Furthermore, on 57% of the portals, users can find who has consulted their data and for what purpose.

Transparency of Service Design

The average score for *Transparency of Service Design* on government portals is 64%. This is higher than in other life events, but still requires additional initiatives in order to be more open about policy-making and digital service design processes, and to allow users to participate in these processes.

Services	Delivery Notice	Progress tracker	Draft possibility	Estimation of process duration	Delivery timelines clear	Maximum time limit set	Information about service performance
1.2 Register new address in municipality register	77	65	41	52	70	58	37
1.3 Register new address with additional organisations	92	87	81	82	87	82	78
1.4 Obtain proof of residence	76	46	23	37	56	40	19
1.5 Register you signing out from old municipality	89	89	87	87	87	87	87
1.6 Apply for disabled facilities grant or similar benefit	62	43	38	23	23	26	11
<i>Average Moving</i>	79	66	54	56	65	59	47
	Highest score	Lowest score					

Figure 6.3. Score per Transparency of Service Delivery question in the Moving life event

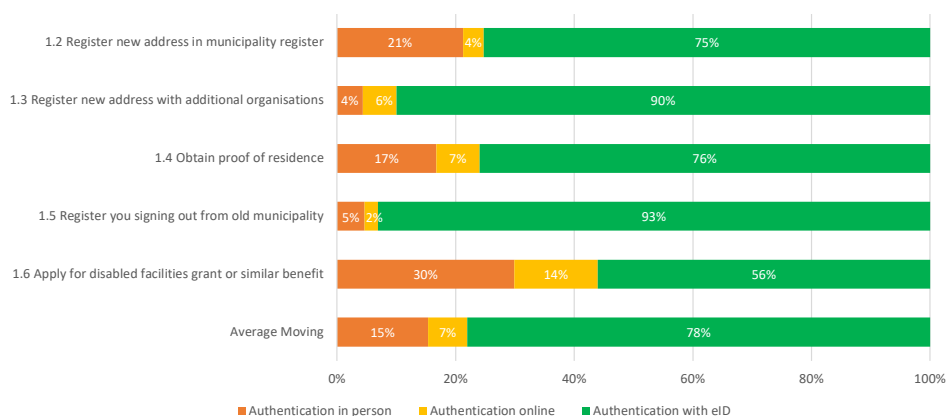


Figure 6.4. Availability of different levels of online authentication for the Moving life event

6.3 Key Enablers

The Key Enablers dimension comprises four sub indicators: eID, eDocuments, Authentic Sources and Digital Post. A national eID provides users with the possibility of secure authentication online, eDocuments help users send and receive verified files with the government, Authentic Sources measures whether users only have to enter their data once and, lastly, Digital Post evaluates whether it is possible to communicate with the responsible authorities solely through digital channels.

eID

Figure 6.4 shows that users can authenticate with an eID in 78% of the services in the Moving life event. For 7% of the services, online authentication is possible but not with an eID. Often, cities require citizens to create an account

specifically for that city to request services. This does enable online authentication, but not with an eID. Lastly, authentication cannot be done online for 15% of the services.

When registering a new address with additional organisations, or when deregistering from your old municipality, citizens can use their eID. Again, this can be partly attributed to the fact that these services are delivered proactively in many countries. When registering in a new municipality, or when requesting a proof of residence, authentication with eID is possible in around three out of four countries.

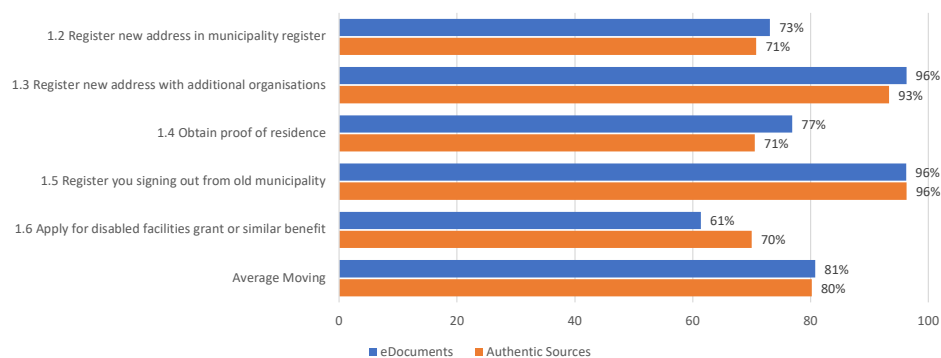


Figure 6.5. Possibility to submit and receive eDocuments and prefilling of eForms for the Moving life event

eDocuments

Figure 6.5 shows the results for the indicators *eDocuments* and *Authentic Sources for the Moving* life event. For eight out of ten services, users can submit or download eDocuments when this is required to obtain the service. The services that are often delivered proactively (registering a new address with additional organisations and deregistering from your old municipality) also score highest on the *eDocuments* indicator.

Authentic Sources

A similar picture arises for the *Authentic Sources* indicator: personal information is prefilled for 80% of the services in this life event. When citizens try to obtain a proof of residence, or register in a new municipality, information is prefilled in around three out of four countries.

Digital Post

67% of the government portals in the *Moving* life event offer a digital mailbox solution where citizens can choose to communicate with the government entirely online. Wider implementation would help citizens to safely communicate with their governments and find all relevant communication in a single online environment.

6.4 Cross-border Services

Cross-border Services evaluates how easy it is for foreign users to access and use online services provided by public authorities. It is comprised of four indicators: *Cross-border Online Availability*, *Cross-border User Support*, *Cross-border eID* and *Cross-border eDocuments*. These indicators measure if services are available online, whether there is sufficient user support and if key enablers such as eID and eDocuments work for people living or coming from abroad.

Cross-border Online Availability

Figure 6.6 shows that almost half of the services for cross-border users can be completed online. For the services that are not available online for cross-border use, citizens can often still find information about the service online in languages other than the main language. For 22% of the cross-border services, users cannot complete the service online nor find information.

Citizens who consider moving abroad can find information about their new home country in most instances. In 86% of the countries, cross-border users are able to find specific information online about living in their new hometown. However, it isn't so easy to register in the new location: obtaining a registration certificate (required for stays within the EU for longer than three months) can be done online in just four out of ten countries and actually registering your address online in the municipality register is possible in 29% of the countries.

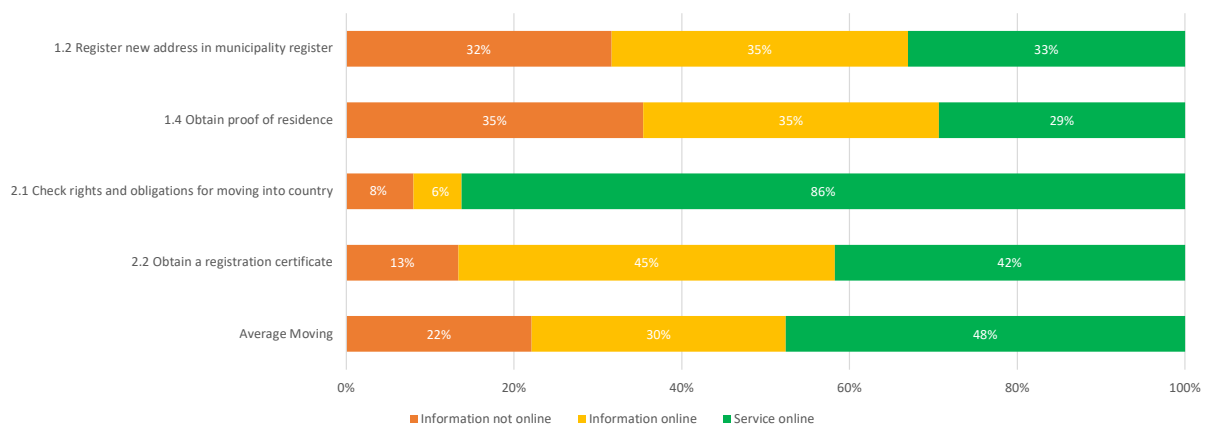


Figure 6.6. Cross-border Online Availability for the Moving life event


Authentication with eID per service 		
1.2 Register new address in municipality register	75%	5%
1.4 Obtain proof of residence	76%	15%
2.2 Obtain a registration certificate	-	9%
Average Moving	78%	10%

Figure 6.7. Cross-border availability of different levels of online authentication for the Moving life event

Cross-border User Support

The score for the Cross-border *User Support* indicator is 71%. User support for non-national citizens is higher than for users in other government domains. This helps citizens moving houses to start and complete their user journey successfully.

Cross-border eID

Figure 6.7 shows whether and how national and cross-border citizens can authenticate their ID online for the services in the *Moving* life event. Cross-border citizens can authenticate their ID online in just one out of ten services, which is in stark contrast to eID authentication for national users, at 78%. Cross-border eIDs are still in

their infancy, particularly for those trying to obtain a registration certificate: cross-border citizens can use their own eID for authentication in this instance in just 5% of the countries.

Cross-border eDocuments

For *Cross-border eDocuments* we see a similar picture as for *Cross-border eID*, although the differences are smaller. Just 37% of cross-border services users can download or submit eDocuments online, which is substantially less than for national services, which offer these functionalities in more than eight out of ten services.


Opportunity to submit or download eDocuments, per service 		
1.2 Register new address in municipality register	73%	27%
1.4 Obtain proof of residence	77%	29%
2.2. Obtain a registration certificate	-	33%
Average Moving	81%	37%

Figure 6.8. Cross-border possibility to submit and receive eDocuments and prefilling of eForms for the Moving life event

Türkiye | My Residence

Relevant Key Dimensions: User Centricity, Transparency, Key Enablers

Life Events: Moving, Health, Family

1. Good practice description

Many services related to the residence address of e-Government users are offered via e-Government Gateway by 7 central government institutions and also municipalities and utility companies. These services are integrated under "My Residence" service with the coordination of Digital Transformation Office. "My Residence" service allows the users to easily access the integrated services that are related with the residence address from a single point rather than accessing each of the service separately. This service was launched on 9th March 2021 at the e-Government Gateway. This integrated service includes the following offerings:

- Changing the residence address
- Local services offered by the district/provincial units located in the address of residence of the user
- Subscription based utility services (e.g. electricity, water, gas)
- Inquiry and change of family doctor
- Student transfer operations (for primary and secondary school students)
- Inquiry of voter registration
- Measurement information of base stations
- Community policing
- Inquiry of emergency assembly area
- Receiving residence documents without visiting the office of the neighbourhood unit and using the documents in all official procedures since they contain barcode.

2. Benefits

- "My Residence" service was used for 14,227,171 times in total in 2021.
- Service providers make savings from the number of personnel who should be in charge of issuing the requested documents and finalize the applications and from other public funding.
- The number of transactions of "notification of change of address" service was about 11 million in 2021. With the delivery of the service through the e-Government Gateway, applicants saved about 949 million TRY from the application cost and 22.3 million hours of time.
- The number of transactions of "receiving barcoded residence document" service was about 55 million in 2021. With the delivery of the service via e-Government Gateway, applicants saved about 4.7 billion TRY from the application cost and 110.1 million hours of time.

3. Key success factors

- Türkiye's population and address registration system infrastructure is widespread and strong even in the smallest administrative units.
- 69% of Türkiye's population (about 84.7 million) are e-Government Gateway users (about 58.6 million).

4. More information

More information can be found at: <https://www.turkiye.gov.tr/adrese-bagli-hizmetler>

7. Transport

*“We want to make **travel in the EU** more efficient – and safer – for drivers, passengers and businesses alike.”*

Commissioner for Transport, Adina Vălean



7 Transport

The *Transport* life event was previously called *Owning and driving a car* in the reports of 2016, 2018 and 2020. It was updated in 2020 (details can be found in the eGovernment Benchmark method paper 2020-2023) to sketch a broader picture of transport in Europe. In the transition to a more sustainable way of living, more and more Europeans will be using public transport and, if they do need the car, they will be using electric vehicles for their daily commutes. The updated life event reflects these changes.

The overall maturity for the *Transport* life event can be found in Figure 7.1. The EU27+ average is 65%, indicating that commuters cannot always count on their digital government to help them. Just four countries have a maturity score higher than 90%: Malta (93%), Denmark (91%), Latvia (90%) and Luxembourg (90%). At the lower end, six countries have a maturity score lower than 50%.

Persona — Transport

Sofia has just reached pension age. She loves her family, with whom she can now spend more time. However, Sofia lives near the border and her family lives on the other side of the country.

She decides to buy a car so she can travel to her (grand)children more often. Sofia cares about the environment (explaining why she did not drive a car for some years) and therefore chooses a (second hand) alternative fuelled vehicle, for which she also benefits from government financial support.

After a while, Sofia's (grand)children move to her city of residence. Public transport becomes much more convenient than driving in the busy streets. On sunny days she want to buy tickets online for herself and her (grand)children to go on family activities together.

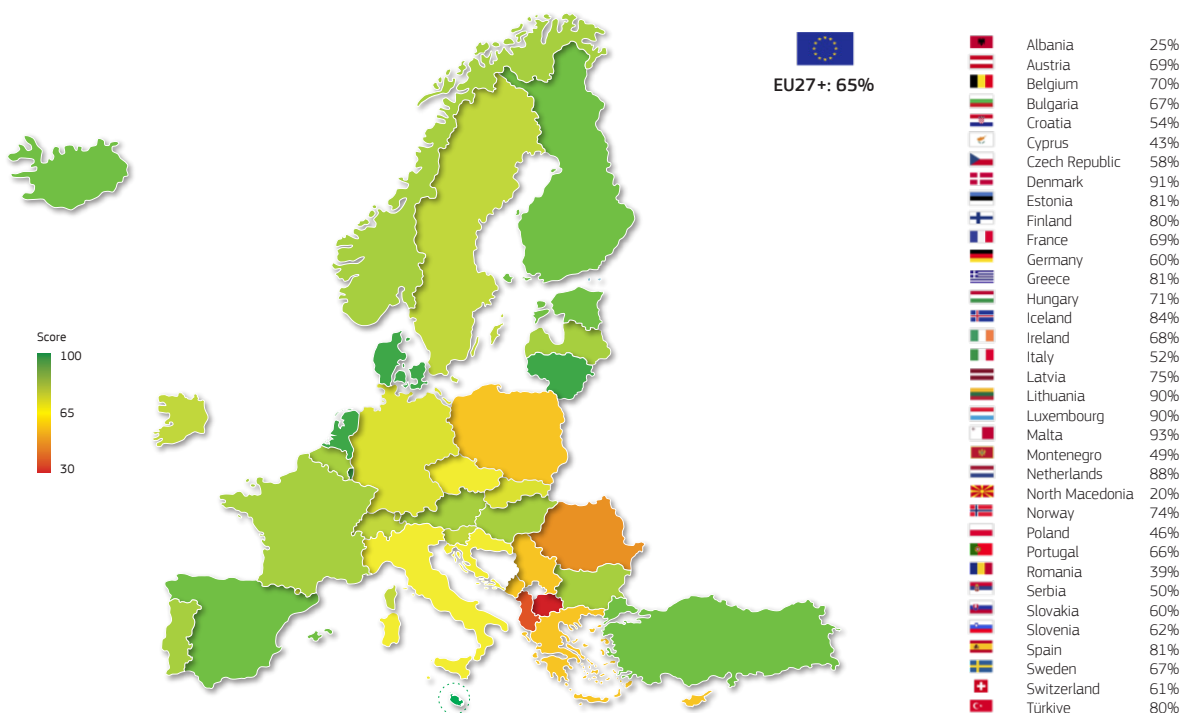


Figure 7.1. Overall maturity for the *Transport* life event

7.1 User Centricity

The *User Centricity* key dimension focuses on the *Online Availability, Mobile Friendliness and User Support* of the services. *User centricity in service delivery enables citizens and businesses to get an optimal experience when dealing with public administrations. This section describes in detail the results for Online Availability, Mobile Friendliness and User Support for the Transport life event.*

Online Availability

Figure 7.2 shows that more than eight out of the ten transport-related services can be completed online. For 15% of the services, users can find information, but need non-digital means to obtain the service. For just 3% of the services, no information is online available.

Car owners are able to declare their road tax online in 94% of the countries. Applying for subsidies for an alternatively fuelled car is also possible online in almost all countries (95%). However, there is still plenty of scope to increase the number of countries where it is possible to obtain emission stickers online: this service cannot currently be completed online in 36% of the countries.

Commuters can plan their journey with public transport online in 97% of the countries and can buy tickets for the trip online in 90% of the countries. Claiming a ticket refund (after long

journey delays, for example) doesn't score as highly, although in three out of four countries, citizens can ask for their money back online.

Mobile Friendliness

94% of all websites in the *Transport* life event are adaptive to mobile devices. Notably, all websites evaluated for people planning a journey with public transport and buying public transport tickets are mobile friendly. This is a positive result, especially knowing that commuters often check the train schedules on their mobile phones. Websites where users can obtain emission stickers are the least mobile friendly. The websites that offer emission stickers are adaptive to a mobile device in just three out of four countries.

User Support

The average score for *User Support* on the government portals evaluated for the *Transport* life event is 92%. Notable is that 89% of the portals in this domain have feedback mechanisms available, which is in line with other life events.

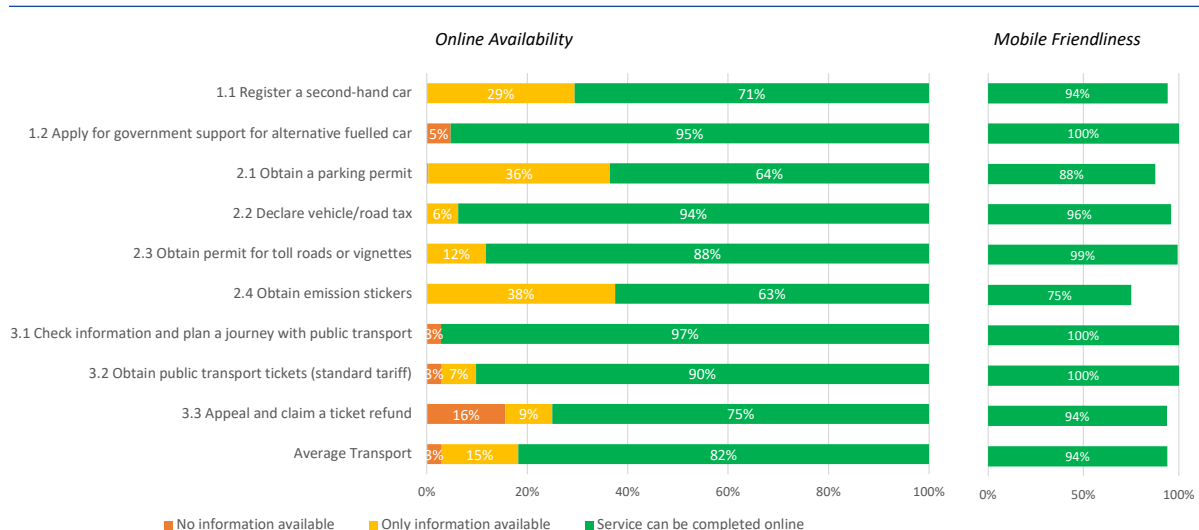


Figure 7.2. Online Availability and Mobile Friendliness of services in the Transport life event

7.2 Transparency

Transparency comprises the following indicators: Transparency of Service Delivery, Transparency of Service Design and Transparency of Personal Data. Transparency of Service Delivery measures whether public services provide clear, openly communicated information about how the service is delivered. Transparency of Service Design assesses whether users can participate in policy and service design. Transparency of Personal Data evaluates to what extent users are in control of their personal data.

Transparency of Service Delivery

The *Transparency of Service Delivery* indicator for the *Transport* life event is 36%, indicating much room for improvement in this domain. Figure 7.3 shows the averages per question for the this indicator.

Users are left in the dark about how much time it takes to request transport-related services. For instance, just four out of ten services in this life event have a progress tracker on the service website and just two out of ten services (22%) provide an estimation of the process duration.

Looking at individual services, this report finds that declaring road tax is the most transparent service in this life event, although improvements are still required. Currently, six out of ten countries provide users declaring their road tax

with clear information about delivery timelines (61%) and define a maximum time limit in which the government body needs to respond to the request (57%). Another positive sign is that citizens who apply for government support for an alternatively fuelled car can save their work as a draft in 61% of the countries.

Transparency of Personal Data

The *Transport* portals score 64% for the *Transparency of Personal Data* indicator. More specifically, car owners and commuters can modify their personal data online in 74% of the portals, showing that governments generally enable users to be in control of their personal information. Users are informed less often about the use of the data, with just 63% of portals enabling people to find who used their data and for what purpose.

Transparency of Service Design

The average score for *Transparency of Service Design* on government portals is 57%. This is in line with other life events, but still requires additional initiatives to be more open about policy-making and digital services design processes, and to allow users to participate in these processes.

Services	Delivery Notice	Progress tracker	Draft possibility	Estimation of process duration	Delivery timelines clear	Maximum time limit set	Information about service performance
1.1 Register a second-hand car	62	44	22	23	31	23	20
1.2 Apply for government support for alternative fuelled car	78	56	61	33	43	33	24
2.1 Obtain a parking permit	52	34	18	26	35	19	12
2.2 Declare vehicle/road tax	87	71	54	51	61	57	47
2.3 Obtain permit for toll roads or vignettes	63	35	21	19	30	10	4
2.4 Obtain emission stickers	43	14	0	0	0	0	0
3.2 Obtain public transport tickets (standard tariff)	83	41	14	6	53	35	15
3.3 Appeal and claim a ticket refund	72	27	7	16	47	19	16
Average Transport	68	40	25	22	38	25	17
	Highest score	Lowest score					

Figure 7.3. Average transparency score per service in the Transport life event

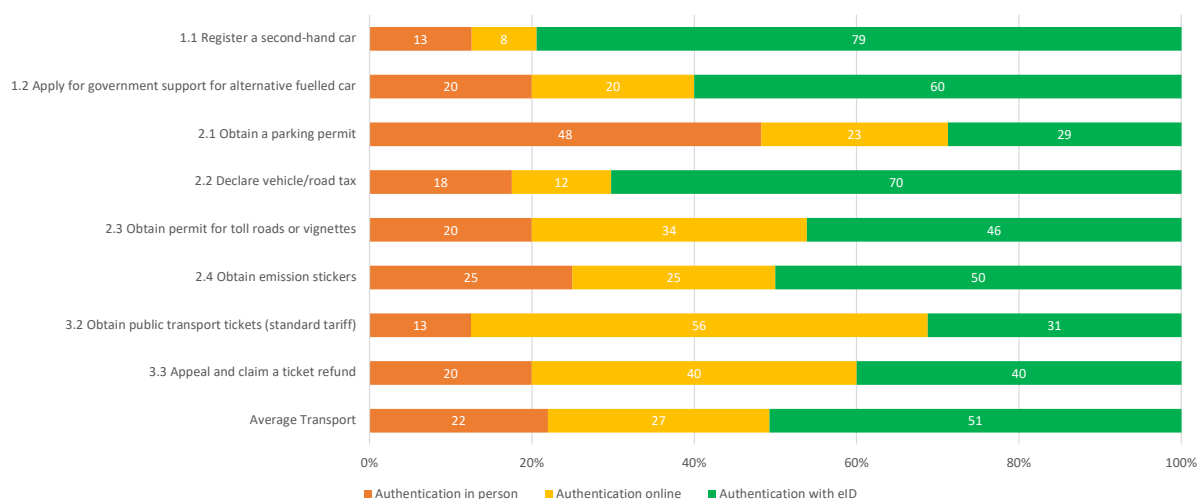


Figure 7.4. Availability of different levels of online authentication for the Transport life event

7.3 Key Enablers

The Key Enablers dimension comprises four sub indicators: eID, eDocuments, Authentic Sources and Digital Post. A national eID provides users with the possibility of secure authentication online, eDocuments help users send and receive verified files with the government, Authentic Sources measures whether users only have to enter their data once and, lastly, Digital Post evaluates whether it is possible to communicate with the responsible authorities solely through digital channels.

eID

Figure 7.4 shows that users can authenticate with their eID for a little over half of the transport-related services (51%). For three out of ten services, authentication with eID is not possible, but users can authenticate online with other means. Online authentication is not yet possible for 22% of the services evaluated for this life event.

In eight out of ten countries, citizens who buy a second-hand car can register the car online and authenticate with their eID. Moreover, when declaring road tax, logging in with an eID is an

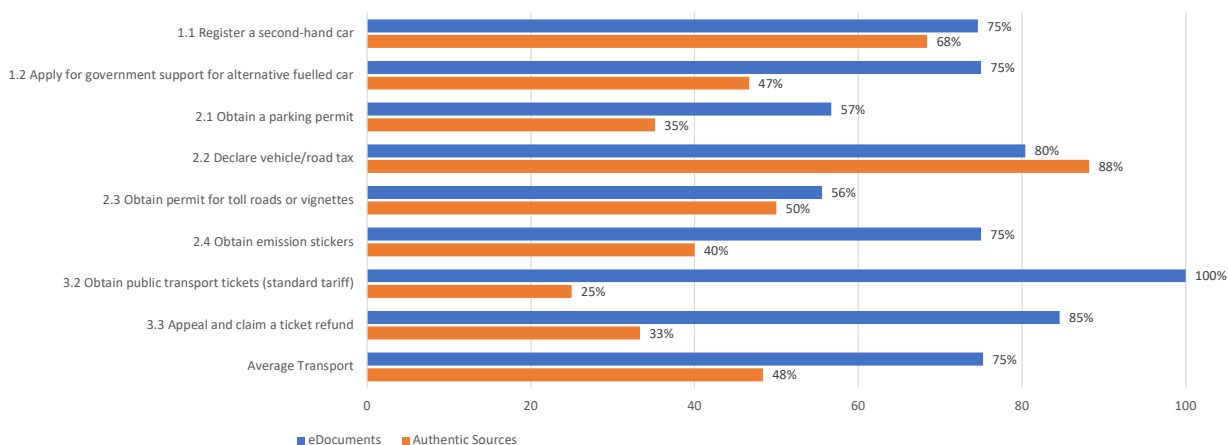


Figure 7.5. Possibility to submit and receive eDocuments and prefilling of eForms for the life event Transport

option in many countries (70%). At a lower level of usage, citizens can use their eID to obtain a parking permit or public transport tickets, at 29% and 31% respectively for these two services. These are also the services most frequently delivered by local government, indicating that eID functionalities in towns and cities are not yet on a par with central government eID functionalities. Interestingly, online authentication to obtain public transport tickets is often possible, but in more than half of the countries, authentication is done with a tool other than the national eID (56%).

eDocuments

Figure 7.5 shows that users can download or submit eDocuments in three out of four services requiring additional documentation. Notably, in all countries, users can download their public transport tickets after buying them.

Authentic Sources

For less than half of the transport-related services (48%), governments prefill personal information for users. However, large differences exist between services for car owners and for commuters. Personal information of car owners who need to register a second-hand car or to declare road tax is pre-filled in 68% and 88% of countries respectively. On the other hand, for buying a public transport ticket, or applying for a refund, information is pre-filled in just 25% and 33% of the countries.

Digital Post

61% of the government bodies in the transport domain offer a digital mailbox solution. Wider implementation would help citizens to safely communicate with their governments and find all relevant communication in a single online environment.

7.4 Cross-border Services

Cross-border Services evaluates how easy it is for foreign users to access and use online services provided by public authorities. It is comprised of four indicators: Cross-border Online Availability, Cross-border User Support, Cross-border eID and Cross-border eDocuments. These indicators measure if services are available online, whether there is sufficient user support and if key enablers such as eID and eDocuments work for people living or coming from abroad.

Cross-border Online Availability

Figure 7.6 shows the cross-border availability for *Transport*, which can be considered high as over four in five services can either be performed online (62%) or found online in terms of information (62%) or found online in terms of information (21%). This makes *Transport* the second best performing life event after *Moving*. The service that does particularly well is *Check information and plan a journey (involving multiple types of transport)* as it can be performed fully online in 86% of instances. While the *service Obtain permit for toll roads or vignettes* does not have the highest

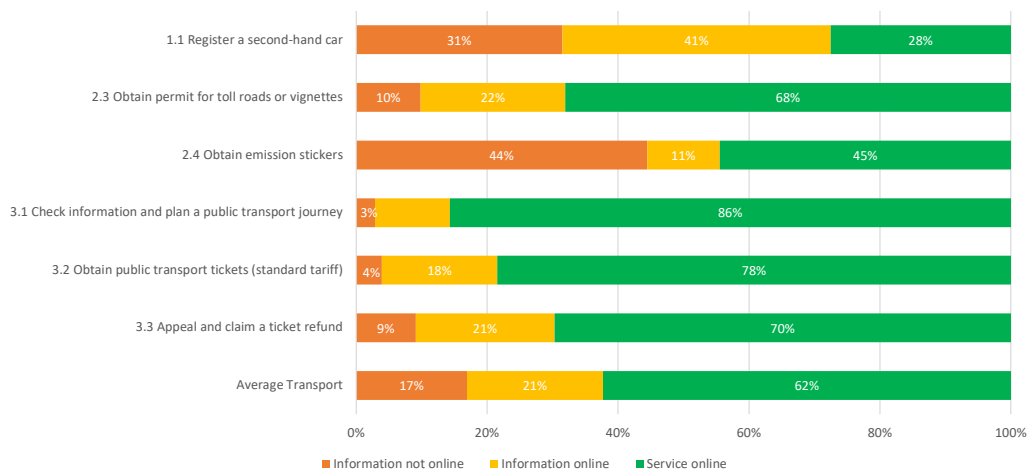


Figure 7.6. Cross-border Online Availability for the Transport life event


Authentication with eID per service 		
1.1 Register a second-hand car	79%	18%
2.3 Obtain permit for toll roads or vignettes	46%	24%
2.4 Obtain emission stickers	50%	0%
3.2 Obtain public transport tickets (standard tariff)	31%	11%
3.3 Appeal and claim a ticket refund	40%	20%
Average Transport	51%	15%

Figure 7.7. Cross-border availability of different levels of online authentication for the Transport life event

online execution (68%), it does have information available online in many of the countries where the service itself is not online (22%). This helps tourists travelling by car to prepare for their journey abroad. *Register a second-hand car* has limited cross-border availability online, being possible in under one third of the cases (28%). In almost a third of cases, this service has to be done offline and in person and online information is not available. For the rest of the countries information is online (41%).

Cross-border User Support

The score for the *Cross-border User Support* indicator is 65%. User support for non-national travellers is in line with users in other government domains. This helps both private and public transport users to start and complete their user journey successfully.

Cross-border eID

As people move and live abroad, being able to take care of your transport dealings with the government with ease is important. Therefore, the difference between national eID and cross-border

eID for the services in the Transport life event was checked and is presented in Figure 7.7. National users can login with their national eID for half of the Transport services. For cross-border eID, this number is just 15%. The biggest discrepancy lies with the *Register a second-hand car* service, where four out of five cases accept national eIDs, but under one in five accept cross-border eIDs.

Cross-border eDocuments

The national and cross-border key enablers divergence is a red thread throughout the *Transport* life event. This also holds for *eDocuments*. As shown in Figure 7.8, car owners and commuters can process online documentation for three quarters of the national services (75%), yet for less than one third (27%) of the cross-border services. The service *Obtain public transport ticket (standard tariff)* is the best performing service here, as in all instances this can be done with eDocuments nationally (100%) and in three out of four cases (75%) for cross-border users. This helps tourists to buy their bus and train tickets online, prior to their visit abroad.


Opportunity to submit or download eDocuments, per service 		
1.1 Register a second-hand car	75%	27%
2.3 Obtain permit for toll roads or vignettes	56%	50%
2.4 Obtain emission stickers	75%	40%
3.2 Obtain public transport tickets (standard tariff)	100%	71%
3.3 Appeal and claim a ticket refund	85%	78%
Average Transport	75%	53%

Figure 7.8. Cross-border possibility to submit and receive eDocuments

Czech Republic | Registry of motor vehicles and the Driver Register made accessible from the Citizen's Portal

**Relevant Key Dimension(s): User Centricity, Key enablers,
Life Event: Transport, Moving**

1. Good practice description

After logging in to the national Citizen's portal, registered citizens can conveniently access their data stored in the car and the driver registries. This data-sharing service makes it possible for citizens to download their extract from the demerit point system and to have an accurate overview of their penalty points. The citizens can also fill an e-request and re-new their driving licence after its expiration date.

2. Benefits

The fact that this service is available from the Citizen's portal, makes it much more convenient for registered users to instantly access information on their driver's licence, the driving violations record and the demerit point situation retrieved in the central driver register. There is no need to visit in person a particular public administration office or pay an administrative fee. Also, the automated notification service informs registered users about the time to renew their driving licence. The license renewal request can be sent online as well, to the relevant administration at the preferred location, where the citizen wishes to pick up his or her new driving licence afterwards. Similarly, from the Citizen's portal, it is now possible to access information on the motor vehicles currently owned by the person, as well as the history of ownership due to interconnection of the portal with the registry of motor vehicles.

3. Key success factors

- A joint effort of two ministries, the Ministry of Interior and the Ministry of Transport, with a single objective to introduce new digital services to citizens;
- The interconnection of the Citizen's portal and two public administration registries – the registry of drivers and the registry of motor vehicles. This technical solution makes it possible to gradually improve already available and to introduce new digital services accessible from the Citizen's portal.

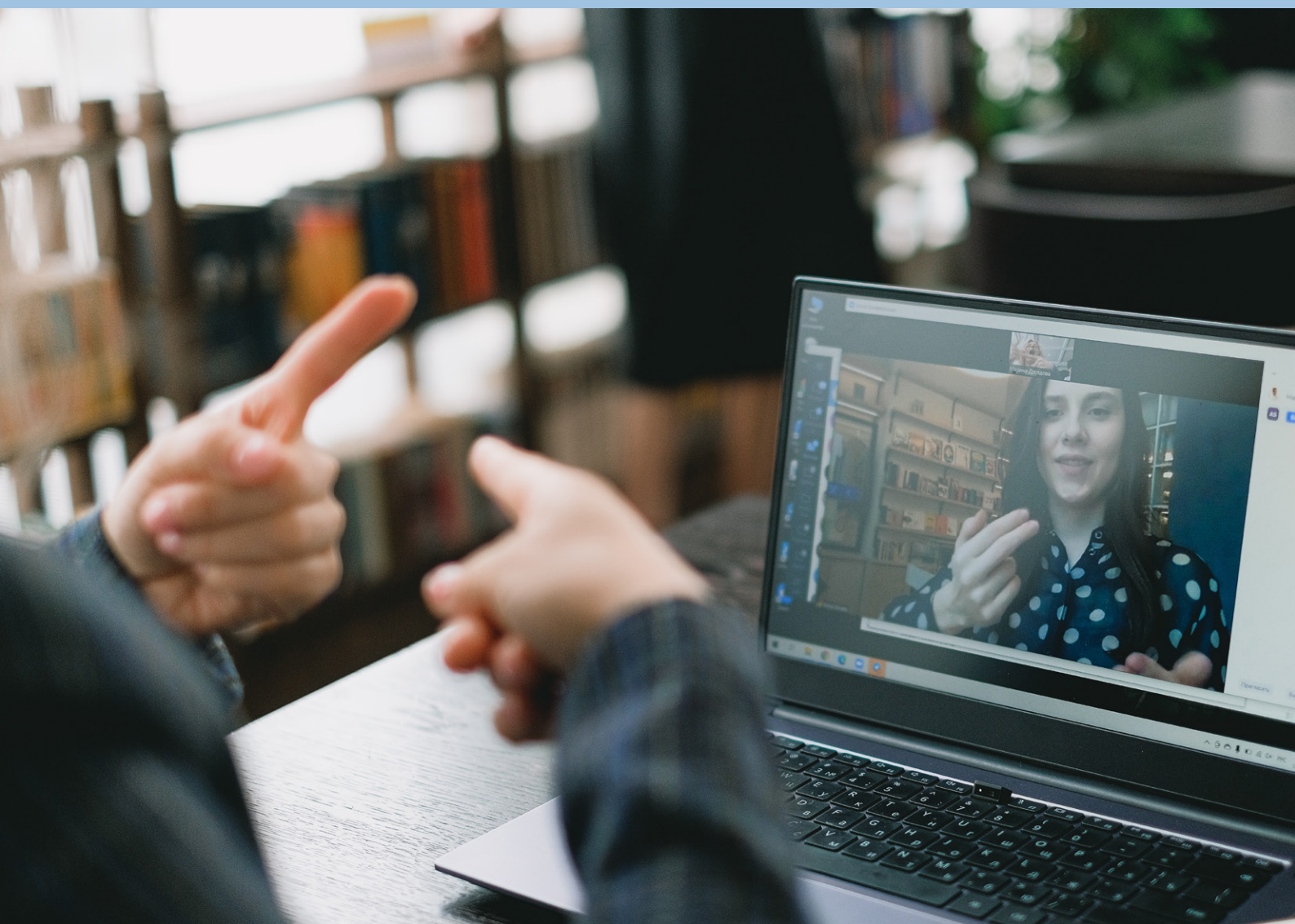
4. More information

More information can be found at:

<https://portal.gov.cz/rozcestniky/prodlouzeni-ridiciskeho-prukazu-na-portalu-obcana-RZC-109>

<https://www.mdcr.cz/digitalizace/e-podani>

8. The Explorative Benchlearning Perspective



8 The Explorative Benchlearning Perspective

8.1 The Benchlearning Approach

Introduction to the benchlearning perspective

The eGovernment benchlearning exercise aims to compare eGovernment performances among countries with similar characteristics, such as key infrastructural features and innovation drivers. It allows us to identify countries with similar contexts that do well and countries that could do better. The benchlearning exercise gives an indication of how country characteristics could influence eGovernment performance, thereby hinting at opportunities to enhance the efficiency of eGovernment policies.

The benchlearning approach was first applied in the 2015 eGovernment Benchmark report. The methodology adopted over the last years⁴ was considered mature and widely consolidated, hence it was preserved for the 2022 report.

The 2022 benchlearning analysis covers the EU Member States (27 out of the 35 countries that participated in the eGovernment Benchmark). The analysis uses the Digital Economy and Society Index (DESI) as one of the main data sources, which is also based on the EU27 countries.

The framework of the explorative benchlearning perspective

The benchlearning exercise consists of two main steps. The first step analyses eGovernment performances of countries. The eGovernment performances reflect citizens' use of eGovernment services and the ability of public administrations to provide efficient and effective procedures and services. It is assessed through two **absolute indicators**: Penetration and Digitalisation.

The second step assesses country factors that define the specific context of individual countries through a series of **relative indicators**.

8.2 Step 1: Measuring country performance through the absolute indicators

Penetration

The Penetration indicator captures the extent to which users use the internet for interaction with public authorities. Although the availability of online services has increased within the EU, it is vital to know whether the use of digital services has increased as well. Digitalising public services is one of the EU priorities. It is necessary to compare the supply of online public services with their use in order to capture eGovernment maturity. To this end, the Penetration indicator⁵ obtained from the

Indicator	Composed variables	Data source
Penetration	eGovernment users: Individuals who used the Internet, in the last 12 months, for interaction with public authorities	Digital Economy and Society Index (DESI)

Figure 8.1: Penetration indicator design

⁴ In 2017 some revisions were implemented: a) clarification of the benchlearning process and analysis; b) removal of the statistical cluster analysis; c) inclusion of the main Digital Economy and Society Index (DESI) dimensions in the indicators; d) specification of the link between the benchlearning exercise and the Mystery Shopping benchmark assessment; and e) establishment of a clearer link between countries' contexts and their eGovernment performances.

⁵ In 2020 eGovernment Benchmark report, the Penetration indicator was obtained as a recalculation based on the DESI data. In order to uniform the methodology of the Benchlearning exercise with the DESI one, since 2021's Penetration indicator is based on the DESI data without any correction or recalculation.

DESI data on eGovernment users⁶ and exhibits the number of individuals that interacted online with public authorities. Figure 8.1 shows the design of the Penetration indicator.

Figure 8.2 shows the Penetration indicator for each country. The 27 countries score 71% on average, which means that two thirds of the individuals submitted an online form to their government in the last 12 months. There is a broad range in scores, with two countries scoring a percentage below 40% (Bulgaria, with 34% and Romania, with 17%). Nine countries reach

a percentage above 80% (Denmark, Estonia, Finland, France, Hungary, Ireland, Latvia, Sweden and the Netherlands).

Options to raise the use of the online channel include the digitalisation of more administrative forms, increasing the ease with which existing services can be used, improving citizen's digital skills and raising awareness about eGovernment services. Data sharing and data integration could be used to simplify and automate administrative procedures, and to improve the usability of existing services.

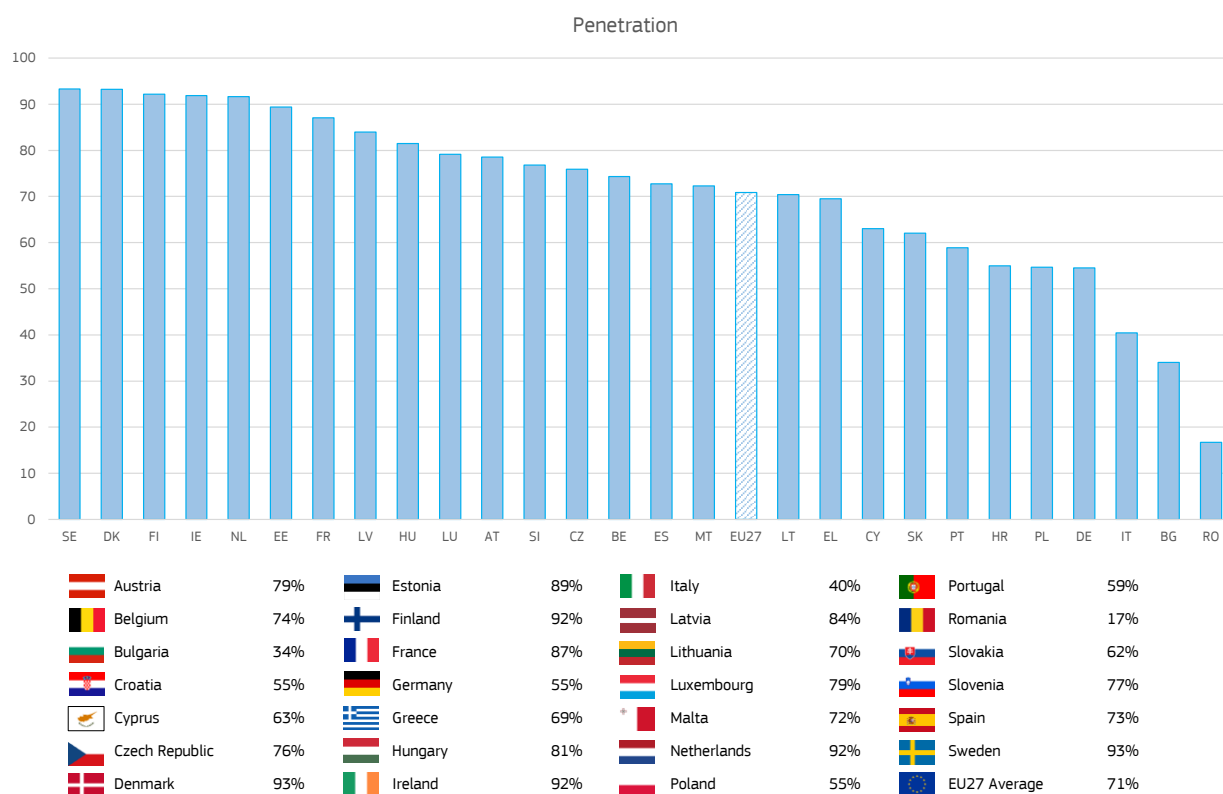


Figure 8.2: Penetration scores

⁶ DESI data on eGovernment users: <https://digital-strategy.ec.europa.eu/en/policies/desi>.

Digitalisation

The Digitalisation indicator captures the extent to which governments deliver digital public services. The data is obtained using the Mystery Shopping method and matches the overall eGovernment maturity scores for service provision in the previous chapters (Figure 8.3).

The study covers **4 key dimensions** of digital government (User Centricity, Transparency, Key Enablers, Cross-Border Services), which consist of **14 indicators** and **47 sub-indicators**. Their values are given by the measurement built on **9 life events**. The nine life events are measured in a biennial cycle (four each year) through biennial average.

Indicator	Composed variables	Data source
Digitalisation	Average of: <ul style="list-style-type: none"> • User Centricity • Transparency • Key Enablers • Cross-Border Services 	eGovernment Benchmark - Mystery Shopping

Figure 8.3: Digitalisation indicator design

The biennial European average is 71%.⁷ Results for the Digitalisation indicator as observed in Figure 8.4 show less variability than the ones for the Penetration indicator. Except for Romania, European countries score above 50%. To improve the Digitalisation score, progress should be made in terms of User Centricity, Transparency, Key Enablers and Cross-Border Services (more detailed recommendations can be found in chapter 2). Turning complex offline procedures into complex online procedures does not contribute to this. Digitalisation scores would benefit from simplifying online services and shaping end-to-end user journeys, supported with adequate help channels, transparent procedures, secure authentication means and interoperable solutions for both national and cross-border users.

Penetration and Digitalisation performances identify four different groups of eGovernment according to different levels of Penetration and Digitalisation (**Non-consolidated, Unexploited, Expandable, and Fruitful**).

Understanding Performances

The combination among Penetration and Digitalisation performances provides insights in a country's ability to match high levels of digital service usage with a high availability of digital services.

⁷ Please note that this chapter refers to the EU27 countries (71%), whereas the previous chapters of the report on digital service provision also include non-EU Member States, the EU27+ countries.

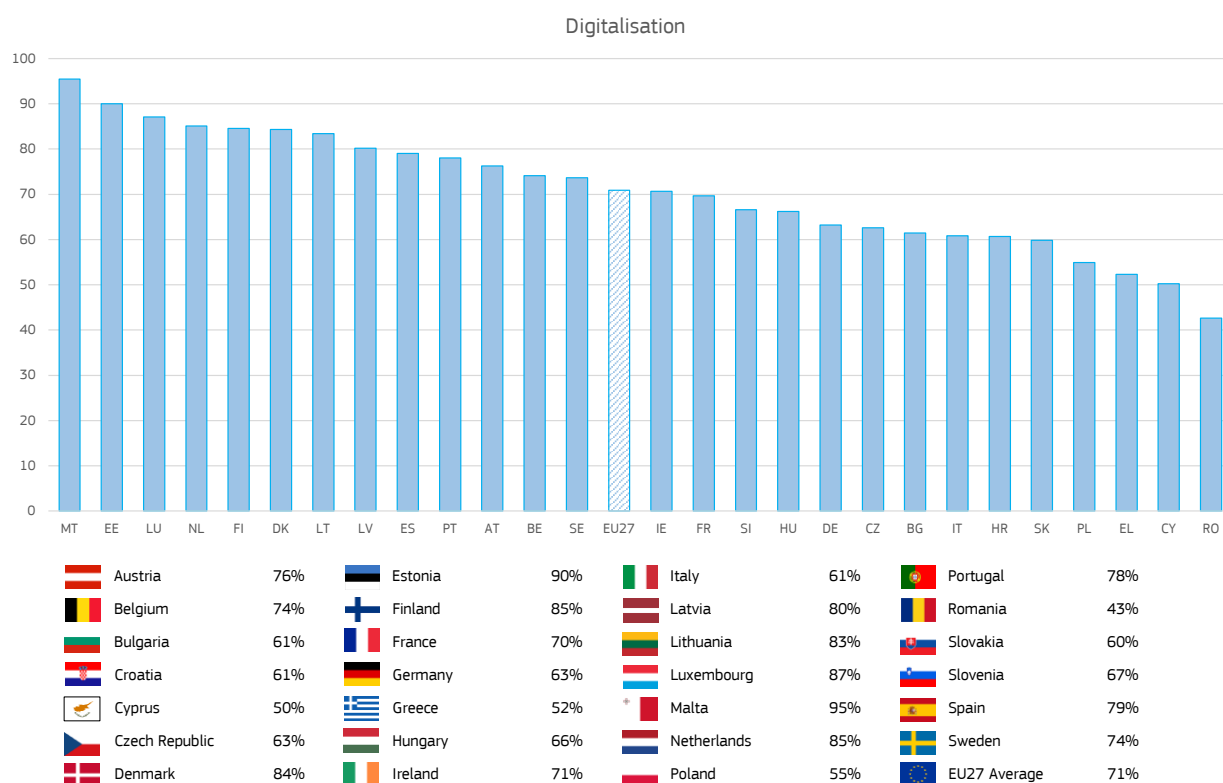


Figure 8.4: Digitalisation scores

Figure 8.5 depicts the four groups with different levels of Penetration and Digitalisation. Whereas some countries match well the characteristics and scores of their group, it should be noted that others lie at the border of their quadrant, close to countries in another quadrant.

- **Non-consolidated eGovernment:** this group contains low levels of Digitalisation⁹ and low levels of Penetration. A government in this group does not utilise ICT opportunities yet and has limited number of users of online public service but could reap corresponding benefits in the future.
- **Unexploited eGovernment:** this group contains low levels of Digitalisation combined with high levels of Penetration. A government in this group has room for enhancing its digital transformation process, but already has a large number of citizens and businesses using eGovernment services.
- **Expandable eGovernment:** this group contains high levels of Digitalisation and low levels of Penetration. A government in this group innovates its public services effectively. For example, by seeking greater citizen trust, expanding the number of online users would contribute to unfolding more potential benefits. Other solutions could be applied in order to improve Penetration.
- **Fruitful eGovernment:** this group contains high levels of both Digitalisation and Penetration. A government in this group achieved innovative digital services with many users. This helps to deliver public services in an efficient and effective way.

⁹ Low levels of Digitalisation/Penetration is below the EU average, High levels of Digitalisation/Penetration is above EU average

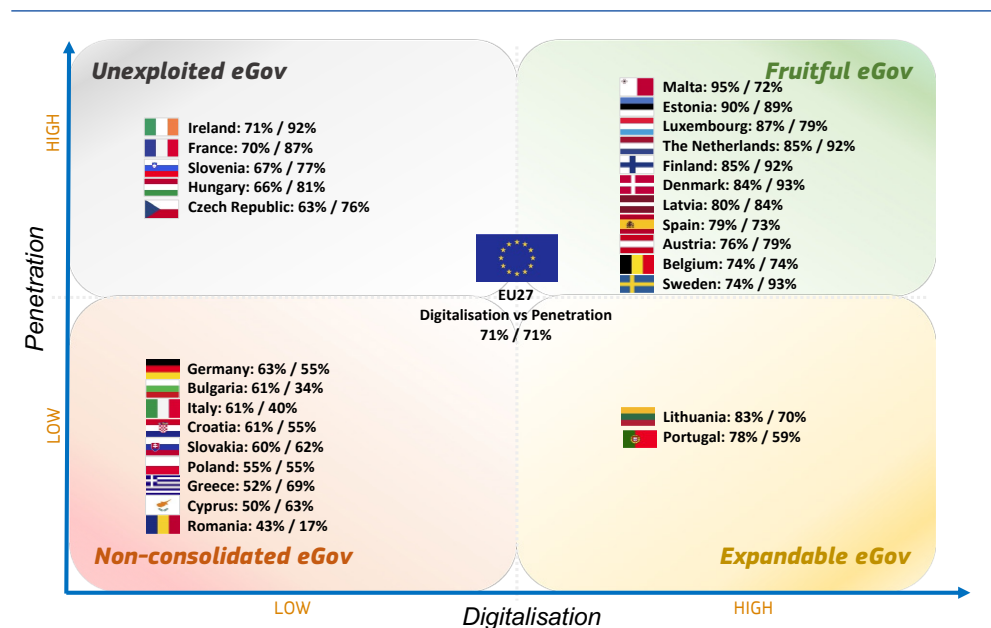


Figure 8.5: Penetration and Digitalisation groups

A few remarks regarding the classification of the countries according to the four groups:

- Non-consolidated eGovernment:** nine countries fall within this group (Germany, Bulgaria, Italy, Croatia, Slovakia, Poland, Greece, Cyprus, Romania). These countries could enhance Penetration and Digitalisation by digitalising both front and back offices of public service providers. ICT opportunities would need to be realised and citizens and businesses would need to be convinced to use eGovernment services.
- Unexploited eGovernment:** the countries in this group have a level of Digitalisation below the European average, but a high level of Penetration. Five countries fall in this category: Ireland, France, Slovenia, Hungary and Czech Republic. Business and citizens regularly use eGovernment services, but there are still opportunities to improve the availability and quality of digital services.
- Expandable eGovernment:** in this group, there is high Digitalisation but low Penetration. Two countries fall within this group: Lithuania and Portugal. Although the provision of digital services is above the European trend, these countries would welcome further uptake of their eGovernment services.
- Fruitful eGovernment:** this group has both high Digitalisation and high Penetration levels. This is achieved by combining a solid supply of digital services with a satisfactory number of users. With eleven countries falling in this group, it is the most populous of the four: Malta, Estonia, Luxembourg, The Netherlands, Finland, Denmark, Latvia, Spain, Austria, Belgium and Sweden.

A positive linear correlation can be found between the Penetration and Digitalisation indicators as depicted in Figure 8.6. If a country has a higher level of Digitalisation it is more likely to have a higher level of Penetration as well, and vice versa. To offer a more detailed picture of the state of play of performance of the European eGovernment, each group is divided into four blocks, corresponding to the *European average plus the standard deviation* ($\mu + \delta$) and the *European average minus the standard deviation* ($\mu - \delta$). The standard deviation (δ) for Digitalisation is 13%, whilst for Penetration it is 19%⁹.

The blocks separate countries with levels of Penetration and Digitalisation near to the European

average and countries with levels above or below the European average as illustrated in Figure 8.6.

Even within the same group, there are still considerable differences between country performances. For example, within the Fruitful eGovernment group, Belgium's performance is the closest to the European average both in Penetration and in Digitalisation, while Estonia performs much better in both categories. Large differences can be found in Non-consolidated eGovernment group as well, between Romania and countries such as Germany, Croatia or Slovakia, where the difference for the penetration indicator is close to (or even over) 40%.

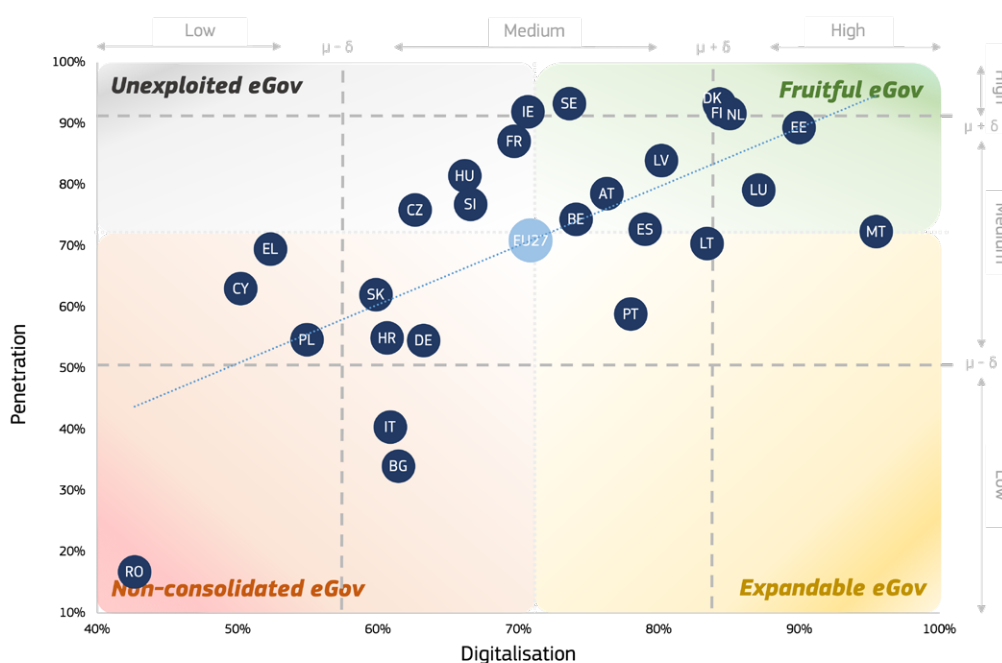


Figure 8.6: Penetration vs Digitalisation

⁹ Standard deviations are used to determine whether a country score can be statistically considered high or low. For Penetration, scores of one standard deviation (19%) above the EU average (71%) are considered high, thus 90% or higher. Scores of one standard deviation (19%) below the EU average (71%) are considered low, thus 52% or lower. Countries within these boundaries are considered medium. The same logic applies to Digitalisation. The standard deviation is calculated as the square root of the score variance. The larger standard deviation for Penetration means that the country scores disperse more relative to the EU average than for Digitalisation.

8.3 Step 2: Understanding the impact of context-specific variables on performances

Methodology

The second step of the benchlearning analysis searches for the exogenous factors ('relative indicators') that influence country performance.

Relative indicators that have the potential to affect eGovernment performance were identified by browsing several databases (Eurostat, the European Commission's Digital Economy and Society Index, Transparency International, World Bank, etc.). Each indicator describes an exogenous factor that might relate to Digitalisation and Penetration.

Figure 8.7 collects all the relative indicators adopted for the analysis. Those indicators will be further detailed in the following paragraphs.

The selected relative indicators are clustered into three categories:

User characteristics:

citizens' and professionals' ability and skills to use online services.

Government characteristics:

elements of how public organisations act and are organised that influence eGovernment performance.

Digital context characteristics:

exogenous factors that offer a proxy of the digital readiness in terms of adoption of digital technology in a country.

Category	Relative Indicator	Composed variables	Data source
User characteristics	Digital Skills	• Human Capital	<i>Digital Economy and Society</i>
Government characteristics	Quality	• Regulatory Quality • Rule of Law • Government Effectiveness • Reputation	<i>World Bank</i> <i>World Bank</i> <i>World Bank</i> <i>Transparency International</i>
	Openness	• Open Data • Voice and Accountability	<i>Digital Economy and Society Index (DESI)</i> <i>World Bank</i>
Digital context characteristics	Connectivity	• Connectivity	<i>Digital Economy and Society Index (DESI)</i>
	Digital in private sector	• Integration of Digital Technology	<i>Digital Economy and Society Index (DESI)</i>

Figure 8.7: Relative indicators

Users' characteristics that influence eGovernment performance

The user characteristics category reflects citizens' and professionals' ability and skills to use online services. In this analysis users' characteristics are captured by the DESI indicator concerning Human Capital:

- **Digital skills**¹⁰: The Human Capital dimension from the Digital Economy and Society Index (DESI) measures the skills needed to realise the potential offered by a digital society. Such skills cover basic user skills that enable individuals to interact online and to consume digital goods and services, as well as advanced skills that empower the workforce to use technology for enhancing productivity and fostering economic growth.

Government's characteristics that influence eGovernment performance

The indicators under government characteristics category reflect on the way public organisations act and are organised could affect eGovernment performance both in term of Digitalisation and Penetration. In our analysis, it is measured through the following indicators:

- **Quality**: this composite indicator summarises governments' perceived performances and take into account different perspectives. The composite indicator comprises:
 - **Regulatory quality**¹¹: a World Bank indicator that captures perceptions of the ability of the government to formulate and implement sound policies and regulations that allow and promote private sector development.
 - **Rule of law**¹²: a World Bank indicator that captures perceptions of the extent to which agents have confidence in and obey to the rules of society. In particular, the quality of contract enforcement, property rights, police and courts, as well as the likelihood of crime and violence.

- **Government effectiveness**¹³: a World Bank indicator that captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the governments' commitment to such policies.
- **Reputation**¹⁴: considers the reputation of the government. The selected indicator is "Perceived Corruption" calculated by Transparency International, which measures the perceived level of public sector corruption worldwide.

These four indicators are equally impacting on the performances of governments. Therefore, the Quality indicator is calculated as the average score of these four indicators.

- **Openness**: This indicator aims at identifying the openness of each country from an Open Government perspective, it takes into consideration two different aspects:
 - **Open data**¹⁵: a DESI indicator that measures the extent to which countries have an open data policy in place (including the transposition of the revised PSI Directive), the estimated political, social and economic impact of open data and the characteristics (functionalities, data availability and usage) of the national data portal.
 - **Voice and Accountability**¹⁶: a World Bank indicator that captures perceptions of the extent to which citizens are able to select their government, as well as freedom of expression, freedom of association, and free media.

The Openness indicator is computed as the average of these two indicators.

¹⁰ DESI data on Digital Skills: <https://digital-strategy.ec.europa.eu/en/policies/desi>

¹¹ World Bank data on regulatory quality:

https://datacatalog.worldbank.org/search?search_api_views_fulltext_op=AND&query=RQ.EST&nid=&sort_by=search_api_relevance&sort_order=DESC

¹² World Bank data on rule of law:

https://datacatalog.worldbank.org/search?search_api_views_fulltext_op=AND&query=RI.EST&nid=&sort_by=search_api_relevance&sort_order=DESC

¹³ World Bank data on Government effectiveness:

https://datacatalog.worldbank.org/search?search_api_views_fulltext_op=AND&query=ge.EST&nid=&sort_by=search_api_relevance&sort_order=DESC

¹⁴ Transparency International Data on Reputation: <https://www.transparency.org/cpi2020>

¹⁵ European Data Portal data on Open Data Maturity: <https://data.europa.eu/en/dashboard/2020>

¹⁶ World Bank data on Voice and Accountability:

https://datacatalog.worldbank.org/search?search_api_views_fulltext_op=AND&query=VA.EST&nid=&sort_by=search_api_relevance&sort_order=DESC

Context Characteristics that influence eGovernment performance

The indicators under digital context characteristics category reflect the status of the digital infrastructure and private sector digitalisation in a country, and include:

- **Connectivity**¹⁷: a DESI indicator that measures the deployment of broadband infrastructure and its quality. Access to fast broadband-enabled services is a necessary condition for competitiveness and to spread eGovernment in countries.
- **Digital in private sector**¹⁸: the DESI's Integration of Digital Technology dimension measures the digitalisation of businesses and their exploitation of the online sales channel. By adopting digital technology, businesses can enhance efficiency, reduce costs and better engage customers, collaborators and business partners. Furthermore, when the Internet is used as a sales outlet, it offers access to wider markets and potential for growth.

Relative indicators analysis

The European average and its standard deviation are determined for each relative indicator, with the same method as for the absolute indicators (Penetration and Digitalisation).

Relative indicators analysis identifies three categories of countries according to their performances:

Low: countries with a score lower than $(\mu - \delta)$.

Medium: countries with a score between $(\mu - \delta)$ and $(\mu + \delta)$.

High: countries with a score higher than $(\mu + \delta)$.

Figure 8.8 is a geographical mapping of each relative indicator showing the three categories described above.

8.4 Comparing countries to understand and improve performance

Methodology and data analysis

To understand how relative indicators affect country performances, statistical linear correlation analyses were performed on the relative indicators and performance levels of Penetration and Digitalisation. Only a limited statistical significance was found, due to the limited number of observations (27 countries) and the size of the direct correlation between single indicators. This means that we could only determine individual correlations between each relative and absolute indicator and not perform a multivariate analysis. In the upcoming paragraphs, the term 'positive correlation' is therefore to be interpreted in a comparative way, not in absolute terms. Whenever the explained variance of the indicators Penetration or Digitalisation is more than 10%, the analysis refers to a 'small positive correlation'.

Furthermore, confidence intervals were identified to categorise countries according to their performances. Such confidence intervals represent the range of values in which an observation is likely to fall given the punctual estimation of the country's performances.

¹⁷ DESI data on Connectivity: <https://digital-strategy.ec.europa.eu/en/policies/desi>

¹⁸ DESI data on Integration of Digital Technology: <https://digital-strategy.ec.europa.eu/en/policies/desi>

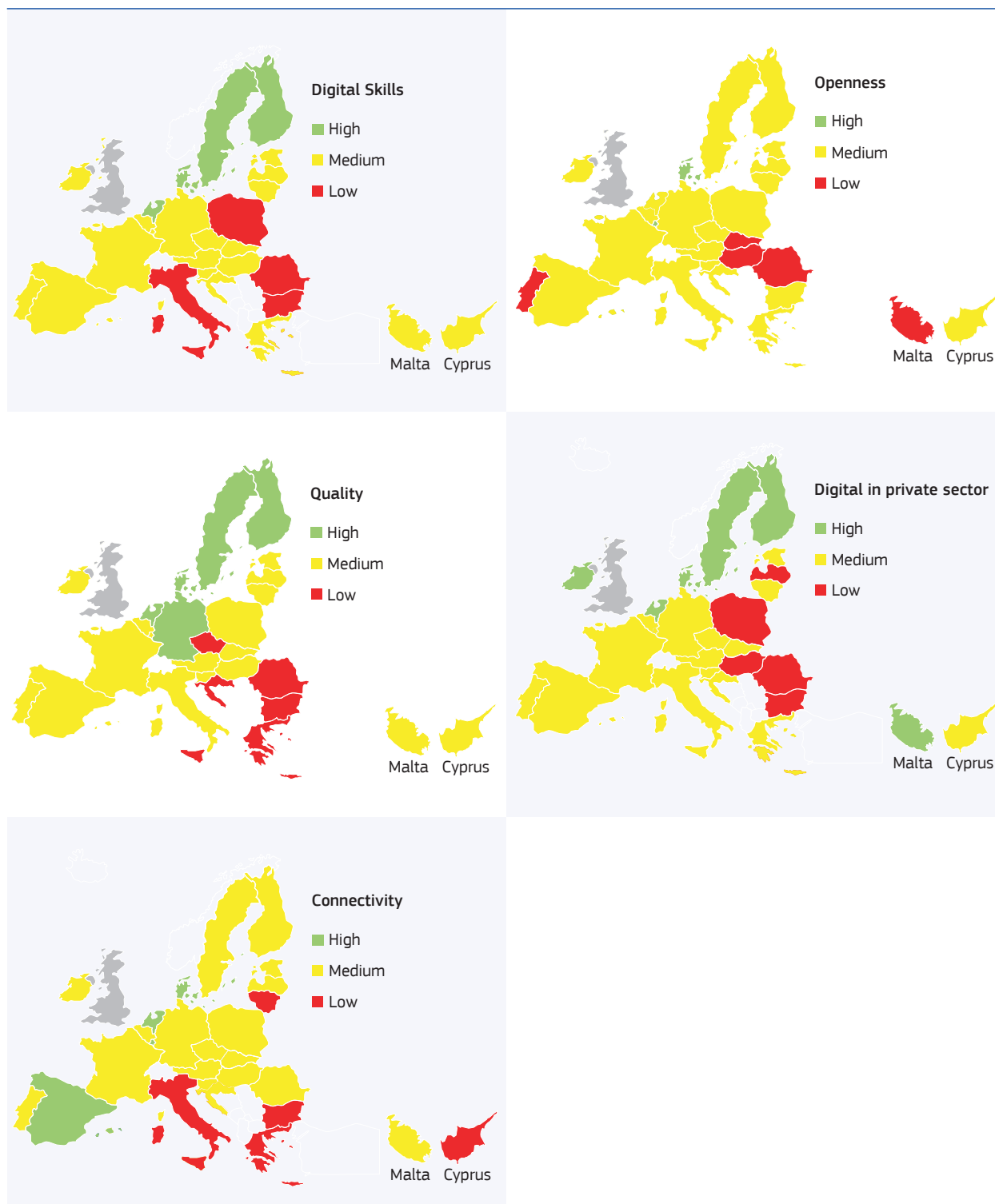


Figure 8.8: Map of relative indicators

Three types of countries can be distinguished when comparing relative with absolute indicators.

Underperforming countries: countries for which the score on the absolute indicators is lower than the European trend.

On-track countries: countries for which the score on the absolute indicators is in line with the European trend.

Overperforming countries: countries for which the score on the absolute indicators is higher than the European trend.

The three types of countries were differentiated using a 99% confidence level for all intervals. A confidence level measures the probability that a parameter falls within a specified range of values, defined by confidence intervals. In case of a 99% confidence interval, the range contains the values with a probability of 99%. If a country's value is outside of this range, the country does not fit the linear correlation model and was expected to perform better (Underperforming country, below the lower bound of the confidence interval) or worse than it actually does (Overperforming country, above the upper bound of the confidence

interval). By performing this analysis, it is possible to identify countries with similar contextual variables but with different Digitalisation and Penetration levels. This offers opportunities for countries with a lower level of Penetration and Digitalisation to identify and learn from countries with similar contextual variables but better performances in the two absolute indicators.

The benchlearning perspective

Multiple, complex, and sometimes interacting factors contribute to digitalisation processes. Progress in eGovernment is correlated with other factors such as citizens' preferences and digital skills, public policies, and digital context characteristics. Most of the relative indicators explored in the benchlearning exercise are correlated with the absolute indicators of Digitalisation and Penetration, with exception of the Openness indicator. Figure 8.9 shows the strength of the correlation, calculated considering the coefficient of determination (R²).

When we consider the Penetration indicator, the correlation is strongest with the relative indicators for Digital Skills and Quality (Figure 8.9). In general, it seems that countries with a high usage of eGovernment services are the countries with skilful citizens. Unfortunately, we cannot make causal

R ²	Digital skills	Quality	Openness	Connectivity	Digital in the private sector
Penetration	High	High	Low	Medium	Medium
Digitalisation	High	High	Uncorrelated	Medium	High
User Centricity	High	High	Uncorrelated	Medium	High
Transparency	Medium	Medium	Uncorrelated	Low	High
Key Enablers	Medium	Medium	Uncorrelated	Uncorrelated	Low
Cross-Border Services	High	High	Low	Medium	High

	R ²
Uncorrelated	< 10 %
Low	10 % - 20 %
Medium	20 % - 35 %
High	> 35 %

Figure 8.9: Correlations among absolute and relative indicators

statements based on the benchlearning exercise. However, our results provide some indications that it might be worthwhile to invest in awareness-raising and educational activities when it comes to increasing the use of online public services. The Quality indicator also provides some hints as what might be done to improve on eGovernment. For instance, results suggest that citizens are more likely to use online tools and public services when they perceived a trustable public administration (Quality indicator). One possible explanation could be related to 'security' and reliability issues of the online communication channel: citizens might only be willing to access to the online service and share personal data online when they generally trust their government and, therefore, they can trust the security of the online service and overcome the absence of a face-to-face communication channel.

When we consider the Digitalisation indicator, we see that the correlation is strongest with the relative indicators for Digital Skills, Quality and Digital in Private Sector. The correlation analysis on the Digitalisation indicator is also performed considering the sub-dimensions User Centricity, Transparency, Key Enablers and Cross-Border Services, adopting the same methodology and logic. What we can deduct is that positive linear correlation exists also with most of the four sub-dimensions. The only exception is given by Key Enablers, which is poorly correlated with the selected relative indicators. This could suggest that the diffusion of eID and eDocuments mostly depends on the demand generated by digitally skilled citizens and their perceived security in Governments.

A big advantage of the benchlearning exercise is the possibility to compare countries with similar characteristics and context. In this way, best practices can be identified in countries that are similar, making it easier to translate best practices to the own context. In the same way, the benchlearning exercise might indicate which similar countries might have interesting policies that could be used as a reference.

For more details, the table in the Figure 8.10 shows the relative performance in terms of Penetration and Digitalisation for each relative indicator, and the

overall category. The table summarises the previous sections of this chapter. If a country obtained a level of Digitalisation or Penetration that was lower than expected based on the relative indicator score, the country is "Underperforming" on this indicator. If a country obtained a Digitalisation or Penetration level that was higher than expected based on the relative indicator, the country is "Overperforming" on this indicator. "On-track" performance indicates Digitalisation and Penetration levels that were to be expected based on the relative indicator score.




























		eGovernment use / Penetration teristics	eGovernment Provision / Digitalisation Context characteristics				
		Overall Score	Overall Score	User Centricity	Transparency	Key Enablers	Cross-Border Services
Austria		On-Track	On-Track	On-Track	On-Track	On-Track	On-Track
Belgium		On-Track	On-Track	On-Track	On-Track	On-Track	On-Track
Bulgaria		Underperforming	On-Track	On-Track	On-Track	On-Track	On-Track
Croatia		On-Track	On-Track	On-Track	On-Track	On-Track	On-Track
Cyprus		On-Track	Underperforming	Underperforming	Underperforming	Underperforming	On-Track
Czech Republic		On-Track	Underperforming	Underperforming	On-Track	Underperforming	On-Track
Denmark		On-Track	On-Track	On-Track	On-Track	On-Track	On-Track
Estonia		Overperforming	Overperforming	On-Track	Overperforming	Overperforming	Overperforming
Finland		On-Track	On-Track	On-Track	On-Track	On-Track	On-Track
France		Overperforming	On-Track	On-Track	On-Track	On-Track	Underperforming
Germany		Underperforming	On-Track	On-Track	Underperforming	On-Track	On-Track
Greece		On-Track	Underperforming	On-Track	On-Track	Underperforming	Underperforming
Hungary		Overperforming	On-Track	Overperforming	On-Track	Overperforming	On-Track
Ireland		Overperforming	On-Track	On-Track	On-Track	Underperforming	On-Track
Italy		Underperforming	On-Track	On-Track	On-Track	On-Track	Underperforming
Latvia		Overperforming	Overperforming	Overperforming	Overperforming	Overperforming	Overperforming
Lithuania		On-Track	Overperforming	On-Track	Overperforming	Overperforming	Overperforming
Luxembourg		On-Track	Overperforming	On-Track	Overperforming	On-Track	Overperforming
Malta		On-Track	Overperforming	Overperforming	Overperforming	Overperforming	Overperforming
Netherlands		On-Track	On-Track	On-Track	On-Track	On-Track	On-Track
Poland		On-Track	On-Track	On-Track	On-Track	On-Track	Underperforming
Portugal		Underperforming	Overperforming	Overperforming	On-Track	Overperforming	On-Track
Romania		Underperforming	Underperforming	Underperforming	On-Track	Underperforming	On-Track
Slovakia		On-Track	On-Track	On-Track	Underperforming	On-Track	On-Track
Slovenia		On-Track	On-Track	On-Track	On-Track	On-Track	Underperforming
Spain		On-Track	Overperforming	Overperforming	On-Track	On-Track	Overperforming
Sweden		On-Track	On-Track	On-Track	On-Track	On-Track	Underperforming

Figure 8.10: Absolute and relative indicators

The overall Penetration performance is said to be “Underperforming” if the country is underperforming in at least three out of five relative indicators. Similarly, a country is labelled “Overperforming” if it is overperforming in at least three out of five relative indicators. For Digitalisation comparable rules apply, although the total number of relative indicators to be taken into account is four since Openness did not correlate with Digitalisation and therefore is excluded, resulting in boundaries that are set to three out of four relative indicators. Consequently,

a country is seen as “Overperforming” if it is overperforming in at least three out of four indicators, while it is labelled as “Underperforming” if it is underperforming in at least three out of four indicators. The same methodology applies for the four dimensions of Digitalisation, taking into consideration the correlations defined by Figure 8.9.

Estonia and Latvia are overperforming countries in both Digitalisation and Penetration. Hungary, France and Ireland are overperforming in

Penetration, while performing on average on Digitalisation. Lithuania, Luxembourg and Malta are overperforming in Digitalisation and show on-track performance in Penetration. Portugal is overperforming in Digitalisation and underperforming in Penetration. Austria, Belgium, Bulgaria, Croatia, Denmark, Finland, the Netherlands, Poland, Slovakia, Slovenia, Spain and Sweden perform in line with relative indicators, their performance matches expectations based on their country characteristics. Germany and Italy are underperforming in Penetration given their country characteristics, while they perform on average according to expectations in terms of Digitalisation. Looking at Digitalisation instead, Cyprus, Czech Republic and Greece are underperforming, while they are performing on-track with Penetration averages. Romania is the only country showing a relative performance below the European trend, both in Penetration and Digitalisation.

Figure 8.10 also provides information with respect to the four dimensions that compose Digitalisation (User Centricity, Transparency, Key Enablers, and Cross-Border Services), adding valuable insights concerning the performances achieved by each country on that indicator. The analysis allows to identify what dimensions may impact the overall score of Digitalisation most, given the actual relative indicators.

Among “Underperforming” countries Cyprus, Czech Republic, Greece and Romania are underperforming in three dimensions that compose the Digitalisation indicator. This suggests that these countries are not exploiting their country’s full potential associated to eGovernment provision, given their country characteristics. They can find room for improvement in each dimension by looking at the policies put in place by other countries with similar characteristics.

Austria, Belgium, Croatia, Denmark, Finland and the Netherlands perform on track both for the overall Digitalisation indicator as well as for the underlying key dimensions User Centricity, Transparency, Key Enablers and Cross-Border Services separately.

Hungary overperforms in User Centricity and Key Enablers; similar considerations hold for Spain, which overperforms in User Centricity. Their

priorities could shift to other key dimensions, to further build on their advanced digital government.

France, Germany, Ireland, Italy, Poland, Slovakia, Slovenia and Sweden underperform in one Digitalisation dimension, suggesting the need to take a look at how other countries with similar characteristics handle this key dimension.

To conclude, among the “Overperforming” countries in Digitalisation, Latvia and Malta are also overperforming in all of the sub-indicators User Centricity, Transparency, Key Enablers and Cross-Border Services, highlighting their governments’ advanced digital maturity.

Estonia and Lithuania achieved overperformance in most Digitalisation dimensions with respect to their country characteristics, while performing on-track in the remaining one (User Centricity). Luxembourg and Portugal are also overperforming countries, yet they overperform in only two dimensions (respectively, Transparency and Cross Border Services, and User Centricity and Key Enablers).

Moving Penetration and Digitalisation scores forward

As mentioned in the Insight Report, governments will need to find ways the coming years to: 1) rethink the user, 2) realign the user journey, and 3) reinforce their interoperability ambition. Looking at the overperforming countries from a benchlearning perspective, some examples illustrate how these challenges can be addressed effectively. Countries with a similar context are encouraged to learn from these practices and to adapt solutions to their own unique context.

For example, in order to rethink and better serve the user, Estonia has invested in basic reusable components to make public sector websites more accessible to people with visible disabilities. By opening up digital governments to a broader range of users, the uptake of the digital government is expected to increase. When it comes to realigning user journeys, Malta launched its Workflow Automation Solution (WAS), a shared government platform. This allows the country to implement a ‘whole of government’ approach, build and maintain eServices and automate back-office processes,

whilst integrating with all the eGovernment Shared Services to address the key dimensions of eGovernment. The country's maturing digitalisation of services thereby supports the full user journey. In light of interoperability, another example from an overperforming country comes from Latvia. Considering its country characteristics, it has been able to shape an advanced series of interoperable eID solutions. This includes the eParaksts mobile

app, a modern and secure solution for working on the eParaksts.lv website and verifying person identity in other information systems. Making interoperable eIDs less device-dependent helps users to interact with their government safely, while they can sign documents at anytime from anywhere in the world with an internet connection. More details on these and other examples can be found below and in the Annex of Good Practices.

Estonia | Neurokõne

Relevant Key Dimensions: User Centricity, Key Enablers

Life Event: Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

Neurokõne helps to provide more accessible e-services. This can be used as a basic component for all public services which enables visually impaired people to consume e-services more comfortable manner. This can also be used in network applications.

Neurokõne is a prototype of Estonian neural speech synthesis developed by the NLP research group at the University of Tartu. The model has been trained on Estonian news and literature corpora. The system is currently able to imitate the speech of six different speakers. Although the project is not finished, we can already see that a neural speech synthesis model sounds much more natural when compared to previous approaches.

2. Benefits

There are 200 000 visually impaired people in Estonia and 2000 blind people who can benefit this service

3. Key success factors

- Cooperation
- Science

4. More information

More information can be found at: <https://neurokone.ee/>

Malta | Workflow Automation Solution

Relevant Key Dimensions: User Centricity, Transparency, Key enablers, Cross-Border Services

Life Event: Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The Workflow Automation Solution (WAS) is a shared platform commissioned by the Malta Information Technology Agency (MITA), on behalf of, the Government of Malta to act as a centralised platform to automate business processes across the whole of Government. It assists different Government functions to conduct Business Process Management and refine their own business processes whilst digitalising their services. It offers the Government of Malta the ability to build and maintain eServices, automate back-office processes whilst integrating with all the eGovernment Shared Services to address all the key dimensions. The Workflow Automation Solution is a centralised platform, and thus it provides standardisation of eServices, in terms of UI and general functionality.

2. Benefits

- Standardised User Interface and eService Process, that will help the citizen when filling in and submitting for eServices.
- Use of all eGovernment Shared services, thus achieving a standard and harmonious level of interoperability.
- One technology offered by MITA across Government.
- Other technological advantages, such as:
 - a. Creative Visual Modelling of Processes
 - b. Citizen Centric Services
 - c. Back-Office Dashboard and Reporting
 - d. Mobile and Multilingual Features by Default
 - e. Out of the Box Centralised Branding
 - f. Data Pre-Population to adhere to the Once Only Principle
 - g. Third-Party Integrations

3. Key success factors

- An opportunity for the Public Service and Public Sector to continue to digitalise all their processes and/or modernise current ones.
- The ability for the whole of Government to conduct Business Process Management and Process Reengineering, both before and during operation lifetime.
- Taking the Public Service to a whole new level with a modern tool that is constantly being kept current.

4. More information

More information can be found at:

<https://mita.gov.mt/portfolio/information-systems/workflow-automation-solution/>

Latvia | eParaksts (eSignature) mobile app

Relevant Key Dimensions: Key Enablers

Life Event: Business Start-Up, Studying, Family, Career, Regular Business Operations, Moving, Transport, Starting a Small Claims Procedure

1. Good practice description

The eParaksts mobile app is a modern and secure solution for working on eParaksts.lv site and verifying person identity in other information systems thus serving as key enabler. Upon receipt, the user may sign documents electronically, enter into contracts and receive services from authorities and merchants remotely. eParaksts mobile is available free of charge for iOS and Android smartphones.

The app also provides e-Identity authentication on a variety of self-service portals for institutions and companies, including municipal services, house management, medical and insurance service providers.

2. Benefits

- User can sign documents at anytime from anywhere in the world with an internet connection.
- Provides e-Identity authentication on a variety of self-service portals

3. Key success factors

- Increased popularity of use of mobile applications.
- Similar solutions to authentication at online banks, to which mobile users are already used to.

4. More information

More information can be found at:

<https://www.eparaksts.lv/en/Produkti/Privatpersonam/mid/apraksts>

Annex. Good Practices

Annex: Good Practices

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Austria | Electronic Vaccination Certificate (elmpfpass)

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border Services

Life event

Health

1. Good practice description

The electronic vaccination certificate (“elmpfpass”) is one of the flagship projects in healthcare reform. It has numerous benefits for both citizens and the public healthcare authorities. The central vaccination register – as key element of the elmpfpass scheme – brings together important information about vaccinations in a standardised format. Thus, the complete and rapidly accessible database enables an assessment of current rates of vaccination and helps to identify potential gaps in vaccination take-up

By spring 2021, several thousand vaccination centres had already been digitally connected to the central vaccination register via a variety of technical solutions. Progress with the vaccination rollout can be tracked on a daily basis on the Ministry of Health Dashboard. People can view their own personal vaccination data at any time via the central electronic health records portal (ELGA) using the secure eID-solution (Identity Austria).

2. Benefits

- Doing away with paper proof of vaccination means that the days of forms getting lost or becoming illegible are gone.
- Being able to send vaccine recommendations based on Austria’s vaccination plan and automatic reminders about required boosters enables the government to play a more active role than previously in disease prevention.
- The additional functionality of the elmpfpass that has not yet been implemented, such as personalised vaccination calendars and reminders about forthcoming vaccinations, should be available nationwide in the near future.

3. Key success factors

- A key element of the elmpfpass scheme is the central vaccination register (complete and rapidly accessible database).
- Highest data protection standards and integration in existing infrastructure.

4. More information

More information can be found at: <https://www.elga.gv.at/e-impfpass/e-impfpass/>

Austria | eJOBmeeting finding jobs and specialists online

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Career

1. Good practice description

The eJOBmeeting project is a new online tool offered by Arbeitsmarktservice Österreich (Public Employment Service Austria). As an online job exchange, it offers an alternative to traditional jobfinding services in Covid times. The AMS's eJOBmeeting is a virtual jobs fair that enables employers and people looking for work to introduce themselves in a modern, flexible way, regardless of where they are located – and in full compliance with data protection regulations.

Even when the pandemic is over, eJOBmeeting will continue to offer a useful way of setting up virtual job fairs to find and pre-select candidates from all parts of the country.

2. Benefits

- It meets the needs of both employers and people seeking work in a way that is less labour-intensive and cuts costs.
- Alternative for existing formats for matching workers to jobs.
- More flexibility and results are available in real time.

3. Key success factors

- Holistic approach and user-centric service design.
- It meets the needs of both employers and people seeking work.

4. More information

More information can be found at: <https://app.ams-digital.at/ejobmeeting3/>

Austria | AI based pre-selection of business subsidies

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Business Start-Up

1. Good practice description

The Austrian Business Service Portal (www.usp.gv.at) aims to serve as a single-entry point for businesses to administrative services. By offering information (such as administrative activities, starting a business, tax and legal requirements) and transaction services, it intends to help businesses to fulfil their information obligations and reduce their administrative burden.

The Business Service Portal project “AI-based pre-selection of business subsidies” - which was awarded first place in the category “Best project for the use of innovative technologies and infrastructures” at the 20th eGovernment Competition in October 2021 (see: <https://www.egovernment-wettbewerb.de/gewinner/gewinner-2021.html>) - uses Artificial Intelligence Methods to facilitate the highly effective search for matching company subsidies. Based on the existing company data, companies receive an individual selection of suitable funding directly in the One-Stop-Portal for businesses (USP.gv.at).

Artificial intelligence will be used to automatically compare company data with the complex and individual funding criteria of the respective funding bodies. The result: companies will be able to comprehensively see the subsidies they are eligible for in the USP.

2. Benefits

- High relevance of results due to an automatic comparison of company data with the complex funding landscape.
- Reduction of administrative burdens is achieved through the use of existing company data (once only).
- Comprehensive overview for companies of the subsidies they are eligible for.

3. Key success factors

- use of the existing infrastructure and structured data (business service portal)
- user-centric approach of the project

4. More information

More information can be found at: eGovernment Wettbewerb (usp.gv.at)

Austria | JustizOnline

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Starting a Small Claims Procedure, Business Start-Up, Regular Business Operations

1. Good practice description

The idea of JustizOnline is, firstly, that physically going to court will no longer be necessary in many cases and, secondly, that information and answers will be provided quickly. The chatbot “Justitia” guides people in search of information directly to the information and functions that are relevant to them. It can also answer simple justice-related questions.

Searches of the Companies Register and Land Register can now also be carried out simply and directly online. Links and interfaces to other e-government portals, such as the business service portal and oesterreich.gv.at, mean that information about representation and authorisation now only needs to be updated in a single place.

2. Benefits

- Reading files online not only saves time and effort for the parties in the case but also reduces the workload of Ministry of Justice employees.
- Court files can be reproduced in full for cases handled online – including all legal documents, attachments and rulings by the decision-making body. This satisfies people's strong desire for information about the progress of their case and the current status of court proceedings.
- By the end of January 2021, about 1000 Ministry of Justice employees at 42 offices were working with Justiz 3.0. They have handled over 70,000 cases exclusively online and conducted over 37,000 trials using digital files. That means that, already, 1.5 million documents with 7.5 million pages have not needed to be printed out or stored.

3. Key success factors

- Introduction of the option of managing files entirely online.
- Involvement of all stakeholders in the development of JustizOnline use of the existing infrastructure and structured data (business service portal)
- Process for viewing files electronically was completely revised, improved and tailored to meet the needs of citizens.

4. More information

More information can be found at: JustizOnline - Startseite (<https://justizonline.gv.at/>)

Belgium | Digital Open Network

Relevant Key Dimension(s)

User Centricity

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The Digital Open-network unites people from (federal) government services working on user-centric, people oriented (digital) public services. In 2021, 270 people took part in the activities organised by Digital Open, such as lunchtalks (thematic webinars), mini-masterclasses and the collection of 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.

2. Benefits

- 56 Design Thinking-projects were initiated in 2021
- 22 teams worked on their challenges together with the Digital Open service designers.
- 11 public institutions invested in user-oriented innovation.

3. Key success factors

- Collaborators with different responsibilities (communications, IT, strategy, innovation, HR etc.) and from multiple organisations work together, which creates a sense of unity and ownership that is needed to create better, human-centered public services.
- The Service Design methodology, enabling User Centricity, gets increasingly more attention thanks to the work and activities of the Digital Open-network.

4. More information

More information can be found in the yearly report at:

<http://digitalopen.belgium.be/sites/default/files/case/files/2022-01/Digital%20open%20Jaarrapport%202021.pdf/> and on the website <https://digitalopen.belgium.be/nl>.

Belgium | MyData.belgium.be

Relevant Key Dimension(s)

Transparency

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The Belgian federal government created the MyData-portal in order to inform citizens regarding the processing of their personal data by federal government instances. It allows citizens to easily find information about their personal data that is being looked at by the government, and the legal basis that allows them to do so. It is an important step in the 'Operation Transparency' of the Secretary of State for Digitalization, Mathieu Michel. Two more phases are to follow in 2022 and 2023.

2. Benefits

- The site can be looked at from two angles: from the different categories of data or from the viewpoint of individual federal government services. In the first case, a citizen can see which government institutions use personal data in their work and why.

3. Key success factors

- With MyData, information about personal data that is accessible by the government is shared on one unique website, instead of on the websites of multiple individual organisations.

4. More information

More information can be found at: <https://www.mydata.belgium.be>

Belgium | MAGDA Document Delivery Services

Relevant Key Dimension(s)

Key enablers

Life event

Business Start-Up, Studying, Family, Career, Regular Business Operations, Health

1. Good practice description

In Flanders, as part of the well-known MAGDA data sharing platform, a set of document delivery services were created that allow a government organisation to generate and deliver electronically official documents to citizens and enterprises. These electronic documents can be signed by the issuing organisation and are safely delivered in the eBox digital mailbox of the citizen or enterprise. By reusing the existing federal eBox, documents from the regional administration and local authorities are now also delivered in one and the same place, providing a one-stop official communication channel.

2. Benefits

- More than 25 million documents were created and delivered in 2021, including COVID-19 vaccination invitations, by more than 79 different regional and local government organisations
- The solution successfully reuses an existing federal building block, the eBox digital mailbox.
- Documents are securely delivered electronically to the citizen's eBox, or if the citizens prefers so, are automatically converted into paper mail delivered by the post office. This makes this solution easier to use by citizens who do not (yet) have the necessary digital skills

3. Key success factors

- Public sector organisations can easily integrate this solution into the back-end of their digital services, allowing the electronic delivery of the official documents resulting from those services
- The solution is not only available to the regional administration, but also to all 300 local authorities
- The solution saves considerable amounts of money by eliminating the need to send paper documents

4. More information

More information can be found at:

<https://overheid.vlaanderen.be/informatie-vlaanderen/producten-diensten/magda-documentendienst>

Bulgaria | Single portal for access to electronic administrative services (egov.bg)

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Business Start-Up, Studying, Family, Career, Regular Business Operations, Moving, Transport, Starting a Small Claims Procedure

1. Good practice description

The Single portal for access to electronic administrative services of the Republic of Bulgaria has been upgraded to meet the needs of e-government users. The portal provides an easy-to-use interface for a simpler and more convenient way to use electronic services. The upgraded portal serves as a national point of contact under Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018. It is also compliant with the requirements of Directive (EU) 2016/2102 of 26 October 2016.

Users of the Portal have the opportunity to use a personal space where they can store their favorite (important) services, track their history of searched and / or requested electronic services, as well as the results of these services.

At present, 439 electronic administrative services have been developed and published for centralized request through the Portal, 213 of which are provided by central administration, 170 by municipal, 32 by specialized territorial and 21 by regional administration.

In response to the COVID-19 situation, a job application service was developed for the unemployed at the Labor Office, which is one of the most used electronic services.

2. Benefits

- Single point of access for eGovernment services, personal information and electronic messages.
- Online services 24/7.

3. Key success factors

- Available for both citizens and businesses.
- Whole government cooperation in service design and delivery to have more digital services available.

4. More information

More information can be found at: <https://egov.bg/>

Croatia| System e-Citizens

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border Services

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The redesigned e-Citizens system with a new unique interface is becoming a central place in the country where citizens can get all relevant information regarding the use of digital public services, where they can access public digital services in the country and see all notifications sent by the state. 13 new e-services have been connected to the system, for a total of 99 e-services. In 2021, a unique user box was developed, whose design is in line with the redesigned e-Citizens portal. The user box becomes a central place for exchanging messages for all citizens who use the e-Citizens system. A new element has been introduced - a navigation bar, which enables the functionality of a single login and logout, accessibility (contrast, dyslexia) and retrieving user data via OIB, regardless of whether it is a natural person or a business user. New functionality has been provided through which a parent can access the service for their child and an authorized person for the company. Parents are allowed to use 13 services on behalf of a minor child.

The authorized business user can select the business entity on whose behalf he wants to act, and it also contains a link to the user box (KP) for secure and reliable communication with individual business entities. Users authorized to represent legal entities are automatically downloaded from several registers: the Court Register, the Register of Non-Profit Organizations (Register of Associations, Foundations, Political Parties and Religious Communities), the Commercial Register of Crafts, the Register of Farmers and Family Farms.

The persons authorized to represent may grant the right of access to other persons within their business entity or to other persons in another business entity through the e-Authorization and its e-Power of Attorney module. This functionality provides all business users with the necessary flexibility in accessing and using available public e-services.

The e-Citizens portal has been translated into English.

2. Benefits

Total number of e-Citizens on December 31st, 2021, is 1.571.947, with annual increment of approx. 380.000 users for each of the last two years, which is 2,3 times higher when compared to the annual increment for 2019.

A total of 99 e-services are available. Citizens were able to receive 122 types of personalized messages in the user box, and 44 bodies and institutions were involved as senders of messages.

3. Key success factors

The new interface with a simple design, and a series of information that a citizen can get without logging in to the e-Citizens portal, puts the user and his / her needs in the forefront.

By logging in to the e-Citizens system, each user automatically logs in to the My Profile service. A user profile allows you to create shortcuts to frequently used services and adjust settings such as automatic permissions or to set an address to notify you of messages arriving in the user's inbox.

E-Citizens can view all electronic services through the catalog of services. With the help of a series of filters, they can quickly and easily find exactly the service they need, and they will see what the levels of security are, so choosing the credentials you need to apply for will become much easier.

Parents are allowed to use 13 services on behalf of a minor child.

The authorized business user can select the business entity on whose behalf he wants to act.

4. More information

More information can be found at: <https://gov.hr>

Croatia| e-Enrollments – Establishment of complete electronic services of enrollment in educational institutions

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Studying

1. Good practice description

This digital solution provided citizens with the establishment of a complex electronic service to users of educational institutions, which includes enrollment in kindergartens, primary and secondary schools and admission to dormitories, registration and implementation of state graduation exams and registration at higher education institutions. adults and records of key data on schools, students and staff in the central records. This system allows end users to use public enrollment services with as few additional administrative obligations as possible.

2. Benefits

A total of 3,214 enrollment applications were submitted and processed through the system. Also, the system was used by 1,951 students who sought accommodation in one of the 60 student dormitories in the pedagogical year 2021/22. A total of 1,758 students are enrolled.

3. Key success factors

The system enables users a simpler, more transparent and faster enrollment procedure and is connected to state services, which represents a less administrative burden, both for students and parents, and for educational institutions and dormitories themselves.

4. More information

More information can be found at: <https://e-upisi.hr/>

Croatia | Delivery of documents for vehicle registration in the Republic of Croatia

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Transport

1. Good practice description

The service enables the delivery of electronic documents in the procedures of registration, testing and verification of conformity (homologation) of vehicles. Croatian citizens register in the system through NIAS, and EU / EAA citizens through the equivalent system of member states. Documents related to a specific vehicle via the VIN mark will be visible to all vehicle technical inspection stations in the Republic of Croatia for the next 15 days from the day of delivery of the document. Technical inspection stations will be informed of the existence of electronic documents during the technical inspection or registration process, will be able to inspect the document, check the validity of digital signatures and, if these documents meet all conditions, download and use them in the original, electronic form.

2. Benefits

From 24.09.2021. - 1512 authorized accesses and 712 received documents.

3. Key success factors

Technical inspection stations are notified of the existence of electronic documents when calling for a vehicle in the process of reporting a technical inspection or registration, they can inspect the document, check the validity of digital signatures and use them in procedures in the original, electronic form. This significantly shortens the registration process itself.

4. More information

More information can be found at: <https://edokumenti.tehnicki.hr/>

Cyprus | European Digital Covid Certificate (EUDCC)

Relevant Key Dimension(s)

User Centricity, Cross-Border Services

Life event

Health, Moving

1. Good practice description

The EU Digital COVID Certificate (EUDCC) aims at facilitating safe and free movement during the COVID-19 pandemic within the EU.

It is a digital proof that a person has either been vaccinated against COVID-19 or received a negative test result or recovered from COVID-19. The EUDCC portal was created for citizens to navigate and issue their EUDCC following 4 simple steps:

- a. Select Certificate Type
- b. Fill in the details
- c. Insert the OTP
- d. Download and/or print the certificate

The portal is easy to navigate, and the user can issue the EUDCC in 1-2 minutes. The content of the portal is in line with the content created by other EU countries and Europe.eu.

To further support this European initiative, the CovPass Cyprus application was created for smart devices (mobile phones, tablets). The purpose of the CovPass Cyprus app is to act as a wallet app - electronically store the EU Digital COVID Certificate for easy finding and use.

In line with the above, the CovScan Cyprus application was created to act as a verifier app - verify electronically the validity of the EU Digital COVID Certificate, according to the national directives in force.

2. Benefits

- The process to download EU Digital COVID Certificates is easy and users can download their EUDCC in 1-2 minutes.
- Once the user downloads his/her EUDCC, it can easily be stored in the CovPass Cyprus app for an easy access, rather than have to look for it in emails, photo gallery etc. The CovPass Cyprus app allows the user to store multiple certificates.
- **Total (last month):**
 - Total certificates: ~1,249,935
 - Average per Day: ~40,407
 - Vaccination: 103,459
 - Recovery: 87,750
 - Rapid: 1,040,558
 - PCR: 16,168
- Additionally, to stay up-to-date with the national control rules, and to further support citizens and businesses the CovScan Cyprus app was created. The app allows businesses to scan the QR code included in the EUDCC and verify its validity in seconds, preventing long queues in supermarkets, restaurants and other spaces/premises while ensuring the safety of the citizens. Latest statistics of the CovScan Cyprus app can be found below:
 1. CovScan: 95,783 active devices (At least one session over the past 30 days)

3. Key success factors

1. **Determination:** Working under pressure to meet strict deadlines
2. **Analysis:** While looking at statistics, we were able to make rational decisions, prioritize and establish realistic goals
3. **Flexibility:** We were able to react and adapt to the changes that occurred, the new directives in force etc. to ensure the best possible experience of the user
4. **Vision:** Successfully identified and applied adequate strategies that led to the success of the project. Created a clear customer experience vision.
5. **Communication:** Between the different stakeholders and teams involved, communication was flowing and the message was successfully delivered to the public.
6. **Work team:** Team could work well together and could understand the importance of the project.
7. **Creativity:** Team was able to come up with new ideas, to constantly improve the experience of the user

4. More information

More information can be found here:

1. FAQs EUDCC - EUDCC Portal
2. FAQ CovPass Cyprus App - EUDCC Portal
3. FAQs CovScan Cyprus App - EUDCC Portal

Cyprus | iJustice

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Justice, Starting a Small Claims Procedure

1. Good practice description

Justice reform is widely recognized among the highest priority areas and categorized as a project of public interest in Cyprus.

The COVID-19 pandemic called for the implementation of an interim solution until the fully-fledged system described above is fully functional. This interim solution (called iJustice) enabled the absolutely necessary digital functioning of the Courts. The iJustice solution does not only aim to cover the basic needs between 2020 and 2022, until the fully-fledged system will be fully functional, but it also lays the foundations for a smoother transition to the new digital era in the field of justice, in addition to addressing early on possible impediments/risks that would otherwise arise during the implementation of the permanent solution.

The iJustice system also provides for the creation of electronic case files, accessible to beneficiary users either for case management or case monitoring, while facilitating a two-way communication between internal (courts and court registrars) and external users (lawyers, law firms and citizens). Access is provided to both internal users which include the Law Office of the Republic, the courts, the police and other governmental authorities, as well as external users, which include law firms and other private sector entities as well as individual citizens.

By simplifying the filing, control of and access to legal documents, monitoring cases can be easier, thus facilitating the work of the judiciary. As a result, a more efficient delivery of justice will be achieved, minimizing time and administrative costs, while increasing transparency and quality of output. Most importantly, it will enhance and accelerate the service delivery to the public, minimizing the need for on-site visits, and increasing confidence in the system and State institutions as a whole. A very important element of the project is the fact that it includes a business-continuity plan, protecting against future crises or adverse situations.

Furthermore, the cases already registered electronically in the ijustice system, will be simply migrated to the holistic e-justice system, while users will be already familiar with its functionalities. This is a highly important side benefit, as it will reinforce the justice ecosystem and its stakeholders and enhance their readiness and willingness to accept and embrace this fundamental reform, while 'forcing' - in a way - the redesign of related administrative processes to fit the new digital environment.

2. Benefits

- The use of internet technologies in the judicial system significantly accelerate the processing of cases, benefiting all participants in the field of justice.
- By simplifying the filing and the control of legal documents, it is easier to monitor pending cases and facilitate the work of the judiciary.

3. Key success factors

- iJustice lays the foundations for a smoother transition to the new digital era in the field of justice, addressing at an early-stage possible impediments and risks that would otherwise arise during the implementation of the permanent solution.
- It provides for the creation of electronic case files, accessible to users either for case management or case monitoring, while facilitating two-way communication between internal users (courts and court registrars) and external users (lawyers, law firms and citizens).
- It allows for the online filing of claims, pleadings, contact details and other information or documents relating to a case.
- It allows for the electronic filing of judicial documents in new civil cases in all courts' civil registries including the registry of appellate civil jurisdiction of the Supreme Court.

4. More information

Cyprus Bar Association has issued relevant material that can be found at the following links:

<https://www.cyprusbarassociation.org/index.php/el/news/17553-i-justice-10>

https://www.cyprusbarassociation.org/files/User_Manual.pdf

Cyprus | E-application environment of the Hippodamos System for the submission of applications for planning and building permits

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Regular Business Operations

1. Good practice description

- The e-application environment of the Hippodamos System for the submission of applications for planning and building permits enables citizens to obtain their permit in less than 1 month.
- This fast-track framework applies for constructions up to duplex.
- This on-line environment was initially applied in October 2020 for the Town Planning and Housing Department and all the District Administration Offices.
- At the moment it covers all planning and building authorities, including municipalities and other local authorities.
- The Ministry of Interior is planning in 2022 to extent the framework to more complex constructions.

2. Benefits

The average time of processing to obtain a planning and building permit is reduced from 18 months to 1 month.

The submission of the application is controlled by a common platform for all Planning and Building authorities of the Government.

3. Key success factors

1. **Determination:** Working under pressure to meet strict deadlines
2. **Analysis:** While looking at statistics, we were able to make rational decisions, prioritize and establish realistic goals
3. **Flexibility:** We were able to react and adapt in changes, new directives in force etc. to ensure the best possible experience of the user
4. **Vision:** Successfully identified and applied adequate strategies that led to the success of the project. Created a clear customer experience vision.
5. **Communication:** Between the different stakeholders and teams involved, communication was flowing and the message was successfully delivered to the public.
6. **Work team:** Team could work well together and could understand the importance of the project.
7. **Creativity:** Team was able to come up with new ideas and to constantly improve the experience of the user

4. More information

More information can be found at: www.moi.gov.cy

Czech Republic | Registry of motor vehicles and the Driver Register made accessible from the Citizen's Portal

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Transport, Moving

1. Good practice description

After logging in to the national Citizen's portal, registered citizens can conveniently access their data stored in the car and the driver registries. This data-sharing service makes it possible for citizens to download their extract from the demerit point system and to have an accurate overview of their penalty points. The citizens can also fill an e-request and re-new their driving licence after its expiration date.

2. Benefits

The fact that this service is available from the Citizen's portal, makes it much more convenient for registered users to instantly access information on their driver's licence, the driving violations record and the demerit point situation retrieved in the central driver register. There is no need to visit in person a particular public administration office or pay an administrative fee. Also, the automated notification service informs registered users about the time to renew their driving licence. The license renewal request can be sent online as well, to the relevant administration at the preferred location, where the citizen wishes to pick up his or her new driving licence afterwards. Similarly, from the Citizen's portal, it is now possible to access information on the motor vehicles currently owned by the person, as well as the history of ownership due to interconnection of the portal with the registry of motor vehicles.

3. Key success factors

- A joint effort of two ministries, the Ministry of Interior and the Ministry of Transport, with a single objective to introduce new digital services to citizens;
- The interconnection of the Citizen's portal and two public administration registries – the registry of drivers and the registry of motor vehicles. This technical solution makes it possible to gradually improve already available and to introduce new digital services accessible from the Citizen's portal.

4. More information

More information can be found at:

<https://obcan.portal.gov.cz/>

<https://portal.gov.cz/rozcestniky/prodlouzeni-ridickeho-prukazu-na-portalu-obcana-RZC-109>

<https://www.mdcr.cz/digitalizace/?lang=cs-CZ>

<https://www.mdcr.cz/digitalizace/e-podani>

Czech Republic | Pension calculator: citizens can now check their state pension forecast online

Relevant Key Dimension(s)

User Centricity

Life event

Health, Family

1. Good practice description

The informative application of the Czech Social Security Administration, the pension calculator is now accessible to registered users from the Citizen's Portal. Citizens use this service to find out how much old-age pension they could get. They can also see an overview of time periods covered by the pension insurance according to the government records, including the pension assessment basis.

2. Benefits

- In order to better plan for their retirement period, this application helps citizens to forecast their state old-age pension as well as the date from which they will be eligible for pension benefits
- Citizens can easily check the accuracy of the calculated pension insurance periods as well as to find out how to increase their state pension, if they can. Since this application uses real public administration data from the Czech Social Security Administration's records, the provided forecasts are of a high level of accuracy.

3. Key success factors

- The digitalisation of services and the back office infrastructure of the Czech Social Security Administration;
- Implementation of the national eID scheme according to eIDAS across all government services.

4. More information

More information can be found at:

<https://eportal.cssz.cz/web/portal/-/sluzby/informativni-duchodova-aplikace>

<https://www.cssz.cz/informativni-duchodova-aplikace-ida->

<https://eportal.cssz.cz/>

Czech Republic | ePetition service at the Citizen's Portal makes it easier to have a say in important matters

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The ePetition service simplifies the whole process of starting, signing and sending the petition electronically. The service complements a paper-based practise of submitting petitions to government authorities in the Czech Republic.

Citizens can start, sign or find the ePetition of their interest directly after logging in the Citizen's Portal.

The list of electronic petitions accessible for the public is available at the government Portal of public administration.

2. Benefits

- The ePetition service was introduced as an additional option to submitting paper-based petitions to government authorities, such as public administrations, public institutions, schools, health insurance offices and number of other organisations. ePetition provides a user-friendly option to start, sign and send a petition electronically;
- Compared to already available online petition services, the ePetition is fully legally binding, i.e. from the legal point of view, it is comparable to paper-based documents, and every use of the "sign the petition" button within the ePetition application is considered an unambiguous expression of the support by the authenticated user;
- The digitisation of the whole petitioning process represents the most valuable benefit for the users. Citizens can start, sign and send authorised and legally valid petitions from the comfort of their home, without a need to engage into the paper-based process;
- From the government institution and public authority perspective, the ePetition service provides a validation of every petitioner's signature, thus eliminating any duplicities or non-existing signatories.

3. Key success factors

- Amendment of the Act No. 85/1995 Coll., on the petition right;
- Availability of the ePetition service at the Citizen's portal with the use of the electronic identification means from the national eID scheme according to eIDAS for the log in to the portal and for legally valid signature of the petition.

4. More information

More information can be found at:

<https://obcan.portal.gov.cz/>

<https://portal.gov.cz/rozcestniky/epetice-RZC-110>

<https://portal.gov.cz/e-petice/>

<https://www.mvcr.cz/clanek/informace-o-nastroji-epetice.aspx>

Denmark | The role of eGovernment in the Danish management of COVID-19

Relevant Key Dimension(s)

User Centricity, Transparency, Key Enablers, Cross-Border Services

Life event

Health (as well as Regular Business Operations, Moving, Transport, Starting a Small Claims Procedure, Business Start-Up, Studying, Family and Career)

1. Good practice description

Danish eGovernment has shown its worth during the COVID-19-pandemic, in which the initiative of digital-ready legislation is recommended by Denmark as an essential tool supporting eGovernment. Denmark has solved a number of the challenges related to the pandemic through digital solutions. Enablers, such as digital infrastructure, political collaboration, trust in public administration, and strong digital skills, have supported the solutions. Digital-ready legislation is a specific initiative that supports these enablers. Moreover, the government has launched a range of new initiatives to cope with COVID-19, including a contact-tracing app, digital booking of tests and vaccinations, compensation schemes for companies and more.

2. Benefits

- Digital-ready legislation is a low risk, high-reward initiative as it is implementable across all sectors of public administration.
- The main function is to create a more coordinated, quick, and seamless public administration by making new legislation easily understandable and digitally compatible.

3. Key success factors

- Secretariat for digital-ready legislation was established in 2018 under the Department of the Ministry of Finance; the secretariat screens the government's legislative programme and provides consultation responses to almost every bill submitted to the Parliament.
- Provide the prerequisites for ensuring that digital-ready legislation is included as early as possible in the political decision-making process.

4. More information

More information can be found at:

<https://en.digst.dk/policy-and-strategy/digital-ready-legislation/>

Denmark | eID (NemID/MitID)

Relevant Key Dimension(s)

Key enablers, Cross-Border Services

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The digitisation of public self-service solutions was made mandatory by law in 2012. Therefore, all citizens and businesses in Denmark have an eID issued by the national eID scheme called NemID/MitID. Throughout 2022 all NemID users will gradually migrate to MitID: Denmark's 3rd generation infrastructure of digital ID. MitID satisfy the newest requirements for security and is adapted to new technologies and future needs. As its predecessor, it is used to access all public services, all online payment and banking services, and a large number of other private services. NemID was notified in 2020, while MitID became pre-notified February 2022.

2. Benefits

- One secure national eID solution across sectors used by all Danish citizens from the age of 13; provides access to all public digital services (more than 300 public service providers) and a large number of private digital services (more than 700 private service providers) such as banks, insurance companies and other private companies for validation of payment transactions.
- It is already possible for Danish citizens to use their national eID across EU borders and access self-service solutions in those EU countries where solutions have been developed for this purpose and identity matching is in place.

3. Key success factors

- Public-Private collaboration. MitID as well as NemID is envisioned and jointly developed by the Danish Agency for Digitisation and Finance Denmark; a unique and well-established partnership between the public sector and an organisation representing the Danish financial institutions.

4. More information

More information can be found at: <https://www.mitid.dk/en-gb/>

Denmark | My Overview on the citizens' web portal borger.dk

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

My Overview (Mit Overblik) on borger.dk aims to provide citizens with an overview of their personal data and interactions with the public sector. My Overview helps citizens navigate the complexity of the public sector e.g. by showing an overview of their ongoing cases, public benefits, payments and appointment and by directing citizens to a self-service solution or to more information. The web portal borger.dk provides citizens with a single point of entry to cross sector information and around 2.000 user-friendly digital self-service solutions across the public sector, similar portals exists within the health (Sundhed.dk) and business domain (Virk.dk).

2. Benefits

- My Overview gathers data from 98 local authorities, 5 regions and a wide array of governmental websites and portals – and it ensures that the most important data that public authorities have about each citizen are displayed – as well as continuously and automatically updated – in one place for the benefit of the citizen.
- My Overview is helpful in creating better and more coherent digital service with more transparency across the public sector by allowing citizens to experience a new and far more manageable way of accessing their own personalised data.

3. Key success factors

- Collaboration between central government, regions and municipalities with a shared desire for a strengthened and transparent digital public sector.

4. More information

More information can be found at: <https://en.digst.dk/digitisation/national-citizen-portal/>

Estonia | Neurokõne

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

Neurokõne helps to provide more accessible e-services. This can be used as a basic component for all public services which enables visually impaired people to consume e-services more comfortable manner. This can also be used in network applications.

Neurokõne is a prototype of Estonian neural speech synthesis developed by the NLP research group at the University of Tartu. The model has been trained on Estonian news and literature corpora. The system is currently able to imitate the speech of six different speakers. Although the project is not finished, we can already see that a neural speech synthesis model sounds much more natural when compared to previous approaches.

2. Benefits

- There are 200 000 visually impaired people in Estonia and 2000 blind people who can benefit this service

3. Key success factors

- Cooperation
- Science

4. More information

More information can be found at: <https://neurokone.ee/>

Finland | My Kanta Service – Cross-Border ePrescriptions

Top-level benchmark / Action Plan Principle

User centricity, Cross-border Services

Life event

Health

1. Good practice description

Since 2019, Finnish citizens have been able to retrieve medicine prescribed electronically by their doctor in Finland in three EU member states: Estonia, Portugal and Croatia. The ePrescriptions are visible digitally to participating pharmacists in the receiving country via the new eHealth Digital Service Infrastructure, meaning that the patient does not need to provide a written prescription. The Finnish patient is able to retrieve medicine from participating pharmacies by proving their identity with an official identity document.

2. Benefits

- The total number of Finnish citizens' medicine retrievals in Estonia and Croatia in the period from January 2019 to February 2020 was 8,088. The monthly peak was in July 2019, with a total of 831 retrievals.
- The total numbers of pharmacies capable of retrieving digital patient information, prescription information and logging the medicine retrieval in 2019 was 671 in Q1, 843 in Q2, 927 in Q3 and 830 in Q4.

3. Key success factors

- Cooperation between Finnish public authorities and between EU member states
- National contact points for data

4. More information

More information can be found at: Kanta

France | Open Data

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

In 2021, France was ranked at the first place in the EC's Open Data Maturity Index. Since 2011, Etalab has been involved in building a strong (open) data policy for France. In 2021, France gave a new impulse to its data policy, with the designation of chief data officers in ministries and the production of ministerial roadmaps on data, algorithms and source codes. In the Covid-19 context, Etalab played a significant role in making health and economic data available and in building a dashboard to monitor the crisis.

2. Benefits

- More than 40k datasets available on the national open data portal, more than 16 million of visits in the last year, more than 3000 data reuses referenced on the portal.

3. Key success factors

- A strong policy framework, including open data by default, and strict data quality definitions for some sectors (high value datasets, data schemas).
- An agile methodology adopted by the Open Data team, taking into account the needs of data producers, data reusers, and citizens.

4. More information

More information can be found at: <https://etalab.gouv.fr/> and <https://data.gouv.fr>

France | Cloud

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

In May 2021, France adopted a doctrine for the use of cloud computing technology by the French State ("Cloud au centre"). With this doctrine, cloud computing has become the default hosting and production mode for the State's digital services, for all new digital products and for products undergoing a substantial evolution. The State's digital services must now be hosted on one of the two internal interministerial Clouds of the State or on Cloud solutions provided by industrials satisfying strict security criteria in proportion with the level of required data confidentiality. Indeed, the objectives of this doctrine is to ensure the French State's sovereignty, the continuity of the public services and data protection for citizens.

2. Benefits

- Cost savings
- Real-time scalability

3. Key success factors

- Flexibility allowed the use of cloud technology
- Accompaniment of the projects by expert squads
- France Relance Programme financing

4. More information

More information can be found at: <https://www.numerique.gouv.fr/services/cloud/doctrine/> and project based on cloud technology: <https://webinaire.numerique.gouv.fr/home>

France | GreenTech

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border Services

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description SSI Wallet

France has been involved in building a more environmental-friendly digital transformation of administrations. In 2021, a new Interministerial Mission for an Eco-Responsible Digitalization ("Mission interministérielle numérique écoresponsable") has been established. Its work include the ongoing or completed production of:

- a Guide for Sustainable Digital Procurement;
- a Guide to Responsible Digital Good Practices;
- an Eco-design framework for digital services;
- Action Plans of French ministries for the reduction of the environmental footprint of the digital sector.

The Interministerial Mission for an Eco-Responsible Digitalization also offers trainings to civil servants in order to raise awareness on this topic.

2. Benefits

- Reducing the environmental and social footprint of digital technology
- Exemplarity of public services

3. Key success factors

- Onboarding of a large number of administrations
- Raising awareness among civil servants
- Shedding light on quantity of equipment saved per year, etc.

4. More information

More information can be found at: <https://ecoresponsable.numerique>

Germany | Bafög-Digital

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Studying, Family, Career

1. Good practice description Smart eID

BAföG is the abbreviation for the Federal Training Promotion Act. Colloquially, BAföG refers to the financial support that students and pupils may receive under this law. The aim is to enable young people, regardless of their financial and economic situation, to pursue the studies of their choice. This makes BAföG a highly relevant public service, with hundreds of thousands of recipients each year. The main goal of BAföG Digital was to provide a solution that improves and simplifies the online application process and increases ease of access to financial support for students.

Previously, the BAföG application process was known to be complicated, which is why many applicants abandoned the process halfway through. The predominantly young target group had to find the right forms, fill in up to eight forms with several pages and provide the required evidence to qualify for financial support for their studies on an annual basis. With BAföG Digital this application process has been digitized and simplified so that all potential BAföG applicants can also be future recipients.

To develop this user-friendly digital application form, a digitization lab was held with BAföG experts from several authorities and ministries, together with representatives from student unions and BAföG recipients. In the lab it was ensured that heavily involved future users of the online service could help develop/design the user-centric application.

Probably therefore, the application has been well received by users: Shortly after the go-live, 3,900 BAföG applicants and parents had already registered at the beginning of November. At the beginning of January 2021, there were over 24,040 registrations, and by the end of February 2022, there were already 238,230. This represents an increase of 891% within 13 months. Plus, the application performs very well in user surveys.

2. Benefits

- With the introduction of the online platform “BAföG Digital,” in April 2021 there has been a significant uptick in applications from students and pupils. The importance of BAföG, especially in the strained economic situation caused by the pandemic, to ensure reliable access to education for many young people and to offer a simple, straightforward digital solution further underscores the impact this project has on citizens.

3. Key success factors

- A simple, straightforward, secure and user-friendly tool that reduces complexity for students as well as for the public administration. Everything in the area of BAföG works digitized, paperless, without media discontinuity and independent of location.
- Enables students to receive an answer to their application more quickly and saves the respective administrative bodies' time in processing through high-quality, plausible digital applications
- The online application was developed to be as user-friendly as possible by involving users in the process from the very beginning.

4. More information

More information can be found at: <https://www.bafoeg-digital.de/ams/BAFOEG>

Germany | Digitalakademie Bund

Relevant Key Dimension(s)

Key enablers

Life event

Studying, Career

1. Good practice description

The digital transformation is accompanied by a significant change in working methods, which requires employees in the public sector of the Federal Republic of Germany to be suitably qualified. The Federal Digital Academy is breaking new ground to achieve the associated goals. The offering is currently under development and will include a variety of new, modern, cooperative forms of learning in the future. For more information, please visit www.digitalakademie.bund.de

2. Benefits

The Academy follows the best practice of hybrid learning, by including both a physical campus and an online platform that offers courses, webinars, lectures, training and coaching. These mixed methods are intended to maximise accessibility and scalability.

3. Key success factors

The basis and philosophy for the heterogeneous learning offering is the “Federal Digital Competence Initiative” launched in September 2021 and approved by the Federal CIO. The initiative is an integrative and systemic approach to qualifying employees in the federal administration on the one hand and networking them on the other. The “Federal Digital Competence Initiative” consists of three pillars.

- a. Promoting digital competencies: All existing and future offers and activities of the BAKöV with digitalization relevance to support the digitalization of the federal administration are bundled and offered for different positions and areas of responsibility.
- b. supporting cultural change: BAKöV training courses on leadership, new work and change support the change process and cultural change in public authorities on the basis of systemic HR development.
- c. create networking: Employees working in the environment of digitalization are brought into interaction and networking in a learning world in Berlin, in a modern environment.

4. More information

More information can be found at: www.digitalakademie.bund.de

Germany | GovTech Campus

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Regular Business Operations, Business Start-Up

1. Good practice description

In 2021, the GovTech Campus was founded as a non-profit association in cooperation between the federal government, the federal states of Hesse and Hamburg and several for-profit, non-profit and applied research organisations. The aim of the GovTech Campus is the establishment of a (“physical” and virtual) platform to foster the connection and collaboration between public administration and GovTech community – a platform that generates international visibility, fosters the positive development of a GovTech ecosystem and facilitates and sustainably increases collaboration and co-creation between civil society, administration, science and technology. As a physical space, the GovTech Campus will offer ideal spatial conditions for the joint development and realization of GovTech innovations as well as networking among each other: office space, co-working areas, event and seminar rooms are available to members and residents of the Campus. At various locations in Berlin and other German states, the Campus will built an inspiring environment that intelligently combines working worlds and brings together industries, technologies, knowledge and implementation skills.

2. Benefits

- Stronger cooperation with startups
- Fostering usage of innovative solutions in the public sector

3. Key success factors

- Open cooperation between partners from governmental, for-profit or non-profit organisations

4. More information

More information can be found at: <https://govtechcampus.de/>

Greece | Digital document verification & Digital certificate of private contract

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Starting a Small Claims Procedure

1. Good practice description

These two new services allow citizens to digitally certify their signature on any kind of document or agreement. The citizen uploads in pdf format the document on which they want to certify their signature. The process is completed once they have filled in the One Time Password (OTP), which is sent to their mobile phone number. Right afterwards, the document is registered in their vault at my.gov.gr and is available for saving, printing or sending to a public body.

2. Benefits

- reducing bureaucratic costs, reducing inconvenience for citizens
- 154,324 digital document verifications (Total – from November 2021)
- 4,118 digital certificates of private contracts (Total – from November 2021)

3. Key success factors

- Citizen's vault (my.gov.gr) infrastructure
- OTP authentication system

4. More information

More information can be found at:

<https://www.gov.gr/ipiresies/polites-kai-kathemerinoteta/psephiaka-eggrapha-gov-gr/ekdose-exousiodoteses>

<https://www.gov.gr/ipiresies/polites-kai-kathemerinoteta/psephiaka-eggrapha-gov-gr/psephiake-bebaiose-idiotikou-sumphonetikou>

Greece | Digital driving licenses

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Transport

1. Good practice description

Citizens can obtain a copy of their driving license or renew it due to age limits/medical reasons (<https://drivers-vehicles.services.gov.gr>). The digital process is very friendly and easy to use for the approximately 27,000 doctors across the country with specialties related to the renewal of driving licenses. It results in the most thorough medical examination and the safe and immediate exchange of information between the doctors that every citizen needs to examine. The electronic renewal of the driving license will save unnecessary inconvenience every year more than 210,000 citizens, including citizens over 65 years, professional drivers, but also citizens with chronic medical problems.

2. Benefits

- reducing bureaucratic costs, reducing inconvenience for citizens, enhancing road safety
- **23,149** copies of driving licenses (Total – from December 2020)
- **7,563** renewals of driving licenses (Total – from December 2021)

3. Key success factors

- Safe and immediate exchange of information between doctors and citizens

Hungary – ‘e-bejelentő’ Data change management and utility service transfer

Relevant Key Dimension(s)

User centricity, Transparency, Key enablers

Life event

Moving, Family *(Besides the Life events monitored by eGovernment Benchmark, this service is applicable and especially useful when purchasing or renting real estates)*

1. Good practice description

In Hungary, notifying the changes in our data (marriage, moving etc.) to all the utility service providers – such as water, gas, electricity and district heating – had put huge administrative burdens on the citizens in the past. The different data requests of several service providers and in each case the in-person administration at the different customer services had taken a lot of time.

In order to provide a solution for this problem, the Hungarian Government launched the “Data change-management service” (e-bejelentő in Hungarian) at the beginning of 2022. With the help of the free e-bejelentő service clients can arrange their utility service transfers online, through a single website conveniently and quickly, and they can submit their personal data changes to all service providers contracted with them that have already connected to e-bejelentő. The service provides an automated data change notification function as well – when authorised by the client, the service automatically notifies utility service providers of any personal data changes within the national base registry of persons and addresses.

Through the e-bejelentő service, clients can administer the following cases:

1. Data Change Submission
 - Ad hoc data change submission
 - Bill Payer Data Change Submission
 - Subscribe to automated Data Change Submission
 - Death report to service providers
2. User Transfer Submission
 - Utility Service Transfer Submission acting as New Contractor
 - Initiate a transfer as an old contractor
 - Initiate transfer as an agent

2. Benefits

- Clients can save the burden of personal administration, e.g. in case of moving. Whether it is electricity, water, gas or district heating, they no longer need to visit the utility service providers’ customer services or Internet sites one by one, but they can do it in one step.
- Automated data change notification from national base registry is also available on the clients’ request.

3. Key success factors

- Public service significantly reducing the administrative burdens of citizens and businesses.
- Easy administration for data changes, and public utility transcription procedures.
- Cross-platform solution can be used on computers, laptops and smartphones.
- Authentication of clients via all available national eID solutions

4. More information

For more information please visit <https://e-bejelento.gov.hu/>.

All the information is available on the website both in English and Hungarian.

Iceland | Island.is App

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Transport, Family

1. Good practice description

Ísland.is just released an app to bring better public service to Iceland's public. This first version of the app gives direct access to the digital mailbox as well as access to public certificates such as drivers licences. All institutions in Iceland must share data through the digital mailbox by the year 2025 so an app simplifies all public communication to the public. The app also shows the status of applications with institutions using the new application system at Ísland.is bringing more transparency towards applicants. The driver's license overview gives the user access to the details of their driver's license and a quick convenient way to obtain an official digital driver's license to store and display in a wallet app on their phones. A certification scanner is also available in the app giving users the possibility of verifying credentials by scanning, for example, one's driver's license.

2. Benefits

- Easy access to private documents and data sent by institutions
- Easy access to public certificates and licenses
- Transparency on the status of applications
- Simple verification of credentials via scanner

3. Key success factors

- Scanner for simple identification check
- User friendly for all smartphones giving easier access for all
- Pocket version for all personal gov data

4. More information

More information can be found at: <https://island.is/en/app>

Iceland | Application for maternity leave

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Health, Family, Career

1. Good practice description

Meeting the needs of expecting parents the digital parental leave application simplifies the process and deletes all paperwork. Expecting mother fills out an application online by filing in necessary information such as pension fund and selecting dates for maternity leave. The application then moves to the other parent (if there is one) for approval and onward to the employer for final approval on dates. The application collects all the necessary information needed from institutions via API's calculating the monthly payment throughout the parental leave. Information such as tax, expected date of birth, length of parental leave then transferred automatically to the operation systems of the institution responsible for the parental leave. Applicants can always access the application through My Pages on Ísland.is as well as follow up on it's status.

The application is very mobile friendly with the user experience as a focus.

2. Benefits

- Simplifies the process of selecting the dates of parental leave.
- Transparency for expecting parents of the status of the application.
- Transparency for the expecting parents on the payment plan throughout the parental leave

3. Key success factors

- No paperwork or transport needed
- Automativcaly gets relevant information from other systems/institutions. Such as expected date of birth, salary information.
- Spouse approves joint rights with digital login
- Employer approves with digital login

4. More information

More information can be found at: <https://island.is/en/parental-leave>

Iceland | Island.is Authentication

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

Ísland.is digital authentication is the foundation for simplifying and digitizing all public services. The system is a shared identification for all citizens to public services such as the digital mailbox. The system has built in authorization which allows individuals and organisations to grant others access to digital services on their behalf. All Icelandic public entities can use the digital authentication system to simplify their sign in process in a user friendly and secure way.

2. Benefits

- Simple and secure sign in
- Is User friendly
- Enables digital service for disabled
- One way to enter all digital public services
- Enables public entities to open up citizens data in a secure manner
- Authentication is done once across the government

3. Key success factors

- Equality
- Cost savings
- Efficiency
- Reliability
- Security

4. More information

More information can be found at: <https://island.is/en/authentication-system>

Ireland - EU Digital COVID Certificates

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Studying, Family

1. Good practice description

Ireland's EU Digital COVID Certificates implementation involved a cross government working group with representatives from several key Departments and agencies, in addition to private 3rd party providers.

The EU DCC system was launched mid-July 2021 with the API being made available to the Health Service Executive and other providers for the generation of Vaccination and Certificate of Recovery DCCs. A web portal was developed to support the generation of Negative COVID Test DCCs for Antigen tests and an online Digital COVID Certificate portal to help individuals manage their certificates. A telephone helpline and WebChat channel were also made available, line with the Government's commitment to the provision of accessible digital services The Digital COVID Certificates can also be added to Ireland's COVID Tracker app for secure and easy access.

2. Benefits

- Almost 8.7 million certificates have been issues since go live, which facilitated safe, free movement during the COVID-19 pandemic within the EU.
- The API allowed for 22 labs and larger test providers to integrate seamlessly with their existing systems in order to generate DCCs.
- The web portal access has allowed 726 pharmacies and small test providers to access the service without the additional IT costs of integrating with the API.

3. Key success factors

- Successful collaboration across Government Departments.
- Development of processes and IT structures to ensure the highest level of service security, minimising the risk of fraudulent certificates.
- Working closely with private providers.

4. More information

More information can be found at: <https://www.gov.ie/en/publication/3a698-eu-digital-covid-certificate/>

Italy | National API Catalog and Citizen Single Portal

Relevant Key Dimension(s)

Key enablers, Cross-Border Services

Life event

Regular Business Operations, Moving, Transport, Health, Business Start-Up, Studying, Family, Career

1. Good practice description

Central API Catalog, with identification and authorization features will allow all public administrations to streamline the bureaucratic processes required to discover and exchange data between agencies. This catalog can be consulted and accessed by all agencies and will be used like a “marketplace” for consuming information by agencies.

For example, the API Catalog is an enabler of platforms such as the Citizen Single Portal. This portal will provide a comprehensive view for all the citizen’s data and will ease the addition of new services in time. The creation of a single citizen’s digital profile ensures that such information is available “once-only” to administrations in an immediate, simple and effective way.

2. Benefits

- data access will be granted in a short time instead of weeks;
- consolidate data access security;
- ease the creation of new digital services.

3. Key success factors

- Interoperability framework based on international standards;
- National Project that engages all the local administrations (Regions, Municipalities, etc.);
- One of the pillars of investment 1.3 of the Italian National Resilience and Recovery Plan.

4. More information

More information can be found at:

<https://innovazione.gov.it/notizie/articoli/servizi-pubblici-online/>

<https://italiadomani.gov.it/Interventi/investimenti/dati-e-interoperabilita.html>

Italy | Digital Covid Certificate (Green Pass)

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border Services

Life event

Regular Business Operations, Moving, Transport, Health

1. Good practice description

The Digital Covid Certificate - DCC is the digital certification meant to restore the freedom of movement among different European Countries and the rest of the world. The Italian solution, built in accordance with the European specifications, has been used inside the National territory and it has been proven to be a vital tool to restore the common life events during the outbreak of the pandemic. The DCC was built in a few months thanks to its open-source nature: every component of the system has been designed and implemented in the open; indeed, this choice has helped to reach a general consensus over the technology. Moreover, Italy encouraged the development of a set of open-source Software Development Kits (SDKs) which dramatically increased the creation of services built by the private sector around the DCC platform. A total of more than 250 millions of DCCs have been created and distributed to the citizens.

2. Benefits

- Restore the freedom of movement during the COVID-19 global pandemic;
- Restore the access to the basic life events;
- Reducing the spread of COVID-19 infections and the mortality rate;
- Easy to get, store and show to the verifier, thanks to the QR code nature;
- Privacy preserving, just a minimum dataset is stored in the QR and the verifier is displayed only with subset of such information;
- The system has been rapidly engineered, created and deployed across the Nation.

3. Key success factors

- User centered and proactive design: the architecture of the platform makes it possible to distribute the certificates to the citizens without actively requesting it thus reducing the bureaucratic burden for citizens
- Citizens can easily access the certificate through the App IO after authentication with their e-ID (SPID).
- Interoperability with other EU MSs and more than 40 non-EU countries
- Open-Source nature: both the backend and the frontend (mobile apps) are developed and released in the open
- Complete transparency of the systems
- Open-source SDKs developed by private companies and by community members increased the penetration of the technology in the private sector

4. More information

More information can be found at: www.dgc.gov.it or on <https://developers.italia.it/it/dcc/>

Italy | Design system

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

A design system is a complete set of standards intended to manage design at scale using reusable components and patterns. With the recent upgrade and development of Bootstrap Italia, the national design system is now offering a full library which overtakes the accessibility standards of the well-renowned open-source reference library (bootstrap 5.0), offering best-in-class accessibility level by design. The result is a reference point not only for the public but also for the private sector. Starting from this library, a full set of UI libraries and documentation is being built to enable small public administrations to prototype and test at higher cycle speed with lower costs, and eventually to ensure extensive adoption within the public as well as the private sector.

This not only directly impacts the recovery fund investment 1.4.1 Citizen Experience, but also indirectly benefits all the other investment that exposes interfaces publicly.

2. Benefits

- Foster the public sector capability to prototype and test digital services at lower budget and time;
- Enable accessibility by design of all the portals and websites developed based on this framework;
- Maximize re-use of components and patterns, reducing time and cost of development;
- Increase general user experience quality and usability of all the digital interfaces used by citizens to interact with public digital services;
- Streamline the design system key elements for measuring adoption and usage;
- Create a benchmark not only for the public sector but also for the private one.

3. Key success factors

- Modular approach in between different technological libraries to improve scalability and maintainability;
- National project that engages the major users of the design system (developer community, designers community, main central PA suppliers, State owned ICT companies);
- A public roadmap to gather open sources efforts;
- Training and education activities to maximise adoption.

4. More information

More information can be found at:

<https://designers.italia.it/kit/progettazione-interfaccia/>

<https://designers.italia.it/kit/sviluppo-interfaccia/>

<https://italia.github.io/bootstrap-italia/>

Italy | National Registry Programme

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Moving, Transport, Health, Studying, Family, Career

1. Good practice description

The “National Registry Programme” (“Programma Anagrafi”) aims to bring the main databases of the Italian Public Administration into an organic and interoperable system, according to the art. 60 of the Digital Administration Code (Codice dell’Amministrazione Digitale - CAD). Every public administration involved will be allowed to reuse and share data and documents through a machine to machine communication, upon the user’s approval. The integration of databases and services will generate an ecosystem able to ensure a virtuous data quality management cycle and implement the once-only principle.

The future-state model is based on a service-distributed infrastructure, enabled by PDND, that assumes the ANPR - National Register of Resident Population- as a central store for citizen information updated in near real-time by municipalities. Each citizen will be identified by an unchangeable code named ID ANPR aligned with current identity systems. Sectoral information (as education, qualifications, etc.) will be stored in local PA systems maintaining the link with the reference of the ID ANPR.

2. Benefits

- Provide an ecosystem of certified data, updates in near-real time and unduplicated (ie aligned with the master data of the owner administration);
- Optimize the operation and the quality of the data of the existing registries;
- Accelerate the de-certification process, making the entire information assets accessible to the public and private sector, in compliance with the current regulatory framework;
- Encourage the development of integrated and proactive intra-PA and extra-PA services (private sector);
- Accelerate the adoption of the National API as a key tool for interoperability and secure access to data.

3. Key success factors

- Possibility for citizens to access different public services from a single website and, according to the Once-Only Principle, entering their information just once;
- Enabling different public administrations to share data and to keep their registry always updated.

4. More information

More information can be found at: <https://innovazione.gov.it/progetti/dati-e-interoperabilita/>

Latvia | eParaksts (eSignature) mobile app

Relevant Key Dimension(s)

Key enablers

Life event

Business Start-Up, Studying, Family, Career, Regular Business Operations, Moving, Transport, Starting a Small Claims Procedure

1. Good practice description

The eParaksts mobile app is a modern and secure solution for working on eParaksts.lv site and verifying person identity in other information systems thus serving as key enabler. Upon receipt, the user may sign documents electronically, enter into contracts and receive services from authorities and merchants remotely. eParaksts mobile is available free of charge for iOS and Android smartphones.

The app also provides e-Identity authentication on a variety of self-service portals for institutions and companies, including municipal services, house management, medical and insurance service providers.

2. Benefits

- User can sign documents at anytime from anywhere in the world with an internet connection.
- Provides e-Identity authentication on a variety of self-service portals

3. Key success factors

- Increased popularity of use of mobile applications.
- Similar solutions to authentication at online banks, to which mobile users are already used to.

4. More information

More information can be found at: <https://www.eparaksts.lv/en/Produkti/Privatpersonam/mid/apraksts>

Lithuania | Online platform and database for social enterprises

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Business Start-Up, Studying

1. Good practice description

Free of charge online learning platform launched by Enterprise Lithuania to provide social enterprises and social entrepreneurs with tools and information about the SE ecosystem in Lithuania and help them develop valuable skills. The platform helps social enterprises analyse their impact and create an impact measurement plan, assess the effectiveness of their solution, validate their business model and better understand the needs of the market and customers. By using these online tools, social enterprises learn how to improve strategic business decisions allowing them to contribute effectively to solving social problems, become successful businesses and generate steady income streams alongside creating impact. Each part of the training material include videos explaining the part in more detail, so the user knows how to fill in information.

Additionally, the platform offers a comprehensive list of social enterprises, making it the main database of SE's in Lithuania.

2. Benefits

- Free online materials available for registered social enterprises
- Database with information about social enterprise ecosystem in Lithuania
- Building a community for social enterprises
- Potential for networking and collaboration

3. Key success factors

- Comprehensive, user-friendly content
- The 'one stop shop' website dedicated for social enterprises and social entrepreneurs

4. More information

More information can be found at: <https://socialinisverslas.versli Lietuva.lt/>

Lithuania | digital diagnostic tool for SMEs

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Regular Business Operations, Business Start-Up

1. Good practice description

Digital diagnostic tool for businesses launched by Enterprise Lithuania to provide SMEs the possibility to evaluate management and business practices with a view to improvement and to benchmark business performance against same sector firms. Digital diagnostic tool for businesses require the user – typically an entrepreneur or SME manager – to do a test and to input quantitative information about the business performance or management practices into an online platform and then benchmark performance or assess practices relative to similar businesses. The feedback is intended to enable the entrepreneur to judge whether they are running the business effectively. Also, it is provided some guidance on how entrepreneurs can adjust management practices to improve business performance. The digital business diagnostic tool was developed in collaboration with the Organisation for Economic Co-operation and Development.

2. Benefits

- Free online tool available for each SME
- Universal methodology for assessing the business performance
- Comprehensive report and recommendations for business improvement
- Integrated into broader business development services, with a strong link to in-person follow-up services

3. Key success factors

- Fast “health check” for businesses
- There are no analogous tools available on the market

4. More information

More information can be found at: <https://verslodiagnostika.verslilietuva.lt/>

Lithuania | e-learning platform “Verslo e. gidas” for SMEs

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Business Start-Up, Studying

1. Good practice description

E-learning platform “Verslo e. gidas“ launched by Enterprise Lithuania with a purpose to support the development of knowledge and competencies that enable business owners/managers to create, sustain and grow enterprises. By using this platform entrepreneurs are able to learn by supporting their theoretical knowledge and doing practical tasks in 7 different topics: starting a business, sales and marketing, finance management, strategy, processes, innovations, and human resources. Practical tasks in the platform are provided with templates and valuable tools that could be used in business management. The e-learning platform was developed in collaboration with the Organisation for Economic Co-operation and Development.

2. Benefits

- Free online materials to learning available for registered SMEs
- Entrepreneurs can access content at a time, place and pace of their own choosing
- Practical tasks could be applied in business processes

3. Key success factors

- User-friendly and well-structured content

4. More information

More information can be found at: <https://versloegidas.verslilietuva.lt/>

Lithuania | Solution to evaluate science and business cooperation in terms of knowledge usage efficiency

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Studying

1. Good practice description

Solution to evaluate science and business cooperation in terms of knowledge usage efficiency - it is an innovative tool using AI that will allow for the collection, processing and systematisation of relevant data on the knowledge generated by the Institutions of Science and Studies (ISS). A user interface is being developed that will provide structured data, to allow for a twofold analysis of the ISS's contribution to different sectors of economic activity: quickly comparing the data using an interactive interface diagram; or conducting a detailed and cross-sectional analysis using a data summary. The owner of the solution is Lithuanian innovation centre, the solution was co-created with company "Vilantis".

2. Benefits

- It helps to collect the data, which could then be used to systematically assess the impact of science and business cooperation.
- It can also determine the efficiency of using scientific knowledge from different aspects

3. Key success factors

- Engagement with innovative companies via GovTech Lab
- Centralised funding and support for innovation procurement (design contest method)

4. More information

More information can be found at:

<https://govtechlab.lt/wp-content/uploads/2022/01/GovTech-Lab-apzvalga-2021-EN.pdf>

Lithuania | Solution for systematised forecast of the regional labour market demand

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border Services

Life event

Moving, Career

1. Good practice description

The solution allows the automatic collection of publicly accessible data and drawing conclusions about the labour market situation and future demands. The labour market is a complex socio-economic system, so it is important to properly select the most representative data sources and to select appropriate deep-learning algorithms for the creation of accurate future forecasts. The owner of the solution is Panevėžys Development Agency, the solution was co-created with company "Neurotechnology".

2. Benefits

- Comprehensive picture of the regional labour market model, its evolution and a forecast based on this data for a long future period.
- It allows for the purposeful organisation of local vocational guidelines and the formulation of training and retraining services.

3. Key success factors

- Engagement with innovative companies via GovTech Lab
- Centralised funding and support for innovation procurement (design contest method)

4. More information

More information can be found at:

<https://govtechlab.lt/wp-content/uploads/2022/01/GovTech-Lab-apzvalga-2021-EN.pdf>

Lithuania | Solution for greening the city of Vilnius using satellite data and artificial intelligence

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Moving

1. Good practice description

Prototype for monitoring urban greenery, which will allow to identify problem areas. Such areas include dried plants that are likely to need replacing, Vilnius plant system requiring watering, mowing, removal of illegal greenery, etc. The prototype will depict the greenery of Vilnius that is constantly monitored using radar and optical satellites, machine learning, artificial intelligence, and algorithms. The owner of the solution is Vilnius City Municipality, the solution was co-created with company "Coetus".

2. Benefits

- Lower administrative resources for controlling and monitoring the greenery of the entire territory of Vilnius
- Easier identification of illegal felling

3. Key success factors

- Engagement with innovative companies via GovTech Lab
- Centralised funding and support for innovation procurement (design contest method)

4. More information

More information can be found at:

<https://govtechlab.lt/wp-content/uploads/2022/01/GovTech-Lab-apzvalga-2021-EN.pdf>

Lithuania | Innovative solution for the assessment of the impact and damage of hydrometeorological phenomena

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Moving

1. Good practice description

Using modern data processing and retrieval software with machine learning algorithms, the solution will enable the collection of information about hazardous phenomena from a variety of sources, perform climate monitoring and forecasting, assess the impact of dangerous, natural and catastrophic phenomena and ensure that better alerts are delivered to the population and economic entities. The owner of the solution is Lithuanian Hydrometeorological Service, the solution was co-created with company "Dizaino kryptis".

2. Benefits

- Better performance of climate monitoring and forecasting
- Better assessment of the impact of dangerous, natural and catastrophic phenomena
- Better alerts are delivered to the population and economic entities.

3. Key success factors

- Engagement with innovative companies via GovTech Lab
- Centralised funding and support for innovation procurement (design contest method)

4. More information

More information can be found at:

<https://govtechlab.lt/wp-content/uploads/2022/01/GovTech-Lab-apzvalga-2021-EN.pdf>

Luxembourg – Live estimated waiting time

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Family, Moving

1. Good practice description

Although the majority of services in Luxembourg can be completed fully online, some services require a personal visit to a government office. To make such visits as convenient and efficient as possible, the Municipal Office of the City of Luxembourg displays on its website the estimated waiting time. This is a real-time indication of how many minutes someone is expected to stand in line before someone can pick up an identity card or register a birth.

2. Benefits

- More efficient and pleasant visits for citizens.
- Clear management of user expectations and less service peaks for civil servants.

3. Key success factors

- Real-time data.
- Integration with services that require a personal visit to the municipal office.

4. More information

More information can be found at: <https://www.vdl.lu/en>

Malta | Workflow Automation Solution

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border Services

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The Workflow Automation Solution (WAS) is a shared platform commissioned by the Malta Information Technology Agency (MITA), on behalf of, the Government of Malta to act as a centralised platform to automate business processes across the whole of Government. It assists different Government functions to conduct Business Process Management and refine their own business processes whilst digitalising their services. It offers the Government of Malta the ability to build and maintain eServices, automate back-office processes whilst integrating with all the eGovernment Shared Services to address all the key dimensions. The Workflow Automation Solution is a centralised platform, and thus it provides standardisation of eServices, in terms of UI and general functionality.

2. Benefits

- Standardised User Interface and eService Process, that will help the citizen when filling in and submitting for eServices.
- Use of all eGovernment Shared services, thus achieving a standard and harmonious level of interoperability.
- One technology offered by MITA across Government.
- Other technological advantages, such as:
 1. Creative Visual Modelling of Processes
 2. Citizen Centric Services
 3. Back-Office Dashboard and Reporting
 4. Mobile and Multilingual Features by Default
 5. Out of the Box Centralised Branding
 6. Data Pre-Population to adhere to the Once Only Principle
 7. Third-Party Integrations

3. Key success factors

- An opportunity for the Public Service and Public Sector to continue to digitalise all their processes and/or modernise current ones.
- The ability for the whole of Government to conduct Business Process Management and Process Reengineering, both before and during operation lifetime.
- Taking the Public Service to a whole new level with a modern tool that is constantly being kept current.

4. More information

More information can be found at:

<https://mita.gov.mt/portfolio/information-systems/workflow-automation-solution/>

Malta | Servizz.Gov Chatbox Pilot

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Regular Business Operations, Moving, Family

1. Good practice description

Government services are facilitated through the servizz.gov channels, namely: Freephone 153, its face-to-face hubs, and online assistance and information. During the COVID-19 pandemic, due to various restrictive measures, physical hubs had to be closed to the public, and thus service provision was limited to the use of telephones and online access. During this period, greater emphasis was placed on online services, to ensure that the public still had timely access to government services.

To be able to cater for a larger audience and still maintain adequate servicing time, it is imperative to properly divide the available resources, such that the human resource is used to tackle the more challenging queries, whilst the automated resources are used to tackle the most frequently asked questions, thus relieving resources from the former.

In this context, the servizz.gov's Chatbot offers horizontal collaboration with Ministries and economies of scale through delivery of autonomous digital interaction. Powered by a rule-based mechanism with an FAQ source and machine learning incremental process, user 'intents' are captured to train the model and improve bot answers through iteration and feedback. servizz.gov will continue developing its current chat infrastructure into a fully-fledged citizen chatbot, extending its knowledge base but also capable of integrating with third party systems.

2. Benefits

- The time taken to answer customer queries is drastically reduced.
- The number of resources dedicated to answering commonly asked queries is reduced.
- Chatbot will allow the automation of processes in the back end of the business, such as redirection to servizz.gov.mt.
- Always available 24/7 and does not rely on human intervention.
- To consolidate efforts by using one platform available for all Government of Malta ministries, which will allow for segmentation of the mini chatbots with specific content.
- Allows the collection and analysis of data from the customers.
- Allows for the creation of personalised chats.
- Can be implemented to support multiple languages.
- Will have Maltese NLP integration for native language intents.
- Can support sentiment analysis feedback from customers.
- Allows servizz.gov to achieve the omnichannel approach to the customer service for the citizens.

3. Key success factors

- The adoption of Chatbot across all government websites to improve the access to primary information.
- The platform will consolidate efforts across the Ministries thus extending the concept of servizz.gov's one-stop-shop.
- A prototype Maltese Natural Language Processing (NLP) was developed and integrated in the Chatbot platform to interpret text typed in the native language thus serving as an evolutionary model.

4. More information

More information can be found at: www.servizz.gov.mt

Malta | Remote Working

Relevant Key Dimension(s)

User Centricity

Life event

Regular Business Operations, Moving Family

1. Good practice description

The Public Service launched a remote working policy which will enable employees to work from anywhere. A pilot project was first triggered months before the pandemic struck. To enable this new paradigm, various solutions based on the lessons learnt from the pilot project were implemented to ensure the smooth transition from the traditional office-based employee to full mobility. Employees moving to remote and managers whose employees are eligible to apply for remote working must first follow a tailor-made training programme.

An electronic reverse auction procurement method was instigated for the first time in the Public Service to select the most advantageous data plan deal possible. The sim card is plugged into a high specification smart phone which every remote worker is entitled for. The phone is controlled by a tool that provides unified endpoint management. An internet telephony solution integrated with the Modern Workplace environment via Microsoft Teams has been applied to replace the customary desk phone.

The need for face-to-face meetings and for the time being, the need to print a document has been facilitated with the remote workspaces concept. This has been implemented through the opening of various outlets in strategic locations across the island where remote workers can book a desk or meeting room via an app. A tender for a central electronic document management system which will push the Public Service towards a paperless environment is in the pipeline and will eventually diminish the need for printing.

Remote workers log their output in a task management tool which has been developed on purpose to keep management continually updated with their staff work progress.

2. Benefits

- Increase the work life balance
- Mobility increases availability – a Public Service more available to the public

3. Key success factors

- Outcome from remote working pilot project
- Internet services across the whole country

4. More information

More information can be found at:

<https://publicservice.gov.mt/en/Pages/Remote-Working-Policy.aspx>

Montenegro | e-Enrollment in preschool, primary and secondary schools

Relevant Key Dimension(s)

User Centricity

Life event

Studying, Family

1. Good practice description

On the portal <https://upisi.edu.me/#/loginPage>, during 2020, three new applications have been set up through which a request can be submitted for the enrollment of children in preschool, primary and secondary school.

Service Upisi.edu.me enables electronic enrollment of children in preschool institutions (first enrollment), as well as students in the first grade of primary and secondary school based on data from the Montenegrin Education Information System (MEIS), the Central Population Register and the Social Welfare Information System.

2. Benefits

- Only the child's unique ID number is required to apply for enrollment. All other data are collected from the specified information systems.
- In 2020, in this way, 87% of children are enrolled in preschool institutions, 85% in primary schools, and 89% in secondary schools.

3. Key success factors

- Great interest of students and parents.
- Great facilitation in the work of enrollment commissions and process automation.

4. More information

More information can be found at: <https://upisi.edu.me/#/loginPage>. A clearer picture of this portal can be obtained through the created video tutorial.

Netherlands | Improvement of combined registration for starting a Business

Relevant Key Dimension(s)

User Centricity

Life event

Business Start-Up

1. Good practice description

Companies have more ease in the process of the combined subscription with the tax service and the chamber of commerce. The amount of questions is reduced and can be digitally prefilled. The systems of the chamber of commerce and the tax service exchange data.

2. Benefits

- 200.000 entrepreneurs have an increased benefits of the subscription process (NPS of +59 and CES of 96%.)

3. Key success factors

- Continues improvement of services

4. More information

More information can be found at:

https://www.kvk.nl/informatiebank/vooraf-inschrijven-bij-kvk?gclid=EAlaIQobChMI0qvZ30yj8AIVTPgYCh01iAEuEAAAYASAAEgKPkVD_BwE

North Macedonia | The Catalogue of Public Services

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border Services, Digital by design, Digital by Default, Once only principle, Openness & transparency

Life event

Business Start-Up, Studying, Family, Career, Regular Business Operations, Moving, Transport, Starting a Small Claims Procedure

1. Good practice description

The core component of the National e-services Portal (uslugi.gov.mk) is the Catalogue of Public Services, whose data is published on the Portal. The Catalogue is a structured register for entry and management of data for all public services, such as: service description, type of users, category and life events, process documents, process of applying and deadlines, data on payments of fees and taxes and values for special groups, responsible authorities, legal grounds, legal remedies, conditions and proofs (provided ex-officio or owned by user), means for applying, contact points, etc. The Catalogue is available to authorised public authorities' personnel only. Prior to publication, data are entered, verified and approved by the competent authorities and MISA.

2. Benefits

- 789 out of the 1.336 services data entered into the Catalogue of Public Services are published on the National e-services Portal's public section.
- Easy to make various analysis of the services based on the entered data. Used as a base for optimization, guillotine and prioritization, as well as analysis for para-fiscal charges for businesses.
- A register that is independent of the platform (Portal) that presents the data.

3. Key success factors

- The process of filling in the register: entering data, verification of the data, approval by Portal administrative owner, translating data, publishing data.
- Inter and intra-institutional cooperation.
- User manual for the Catalogue published and available on the following link.

4. More information

More information can be found at: www.uslugi.gov.mk (for published data), www.admin.uslugi.gov.mk (the Catalogue)

Norway | DigiHoT

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Health

1. Good practice description

DigiHoT is working to digitalize provision of assistive devices or technology. The starting point is a system with many manual processes, systems that do not talk to each other and paper applications. DigiHoT's ambition is that it should be quick and easy to get the assistive technology when you need, and efficient for NAV (The national labour and welfare authority) and the municipality to process the applications and deliver the assistive devices to the inhabitant/user.

DigiHoT has so far provided solutions that make it possible to apply for the most commonly used assistive devices and services digitally. The applicant can follow the status of the application process and has digital access to information about their assistive devices.

2. Benefits

- The municipalities have reduced the time it takes to complete an application on behalf of the inhabitant/user from 19 minutes to 5 minutes
- The inhabitant/user gets his/hers assistive devices approx. 1 week faster

3. Key success factors

- Agile teams that are interdisciplinary, and with expertise in the assistive technology system well represented
- The team's work is governed by purpose, what problems need to be solved and value created, rather than a predetermined delivery plan. The teams choose how they best can solve the problem by exploring different hypotheses and initiating different initiatives
- Clear alignment for DigiHoT with a decided upon business transformation strategy for the assistive devices and services area of NAV, and corresponding ownership and buy-in with CEO and other key-members of the leadership

4. More information

More information can be found at:

<https://www.nav.no/no/nav-og-samfunn/samarbeid/hjelpemidler/digitalisering-av-hjelpemiddelomradet>

Norway | Sharing data from the Tax Administration to municipalities

The Norwegian Association of Local and Regional Authorities (KS) is the organisation for all local governments in Norway. KS has a collaboration with the Norwegian Tax Administration on sharing data. The project is called “Data sharing from the Tax Administration to the Municipality”.

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Health, Family

1. Good practice description

- The municipal sector has designated KS to represent municipalities and county municipalities before the Tax Administration. An agreement between KS and the Tax Administration from June 2020 formalizes collaboration to establish a digital information-sharing function between municipalities and county municipalities. Project “Data sharing from the Tax Administration to the Municipality” implements the segment responsibility agreement.
- The project will enable the municipalities to gain access to tax and revenue information from the Tax Administration. Currently, the Tax Administration does not provide digital access to municipalities, and residents of Norway are responsible for submitting this information themselves.
- The project will determine the municipal sector’s information needs in a variety of services and areas. Furthermore, the project evaluates the legality of the Tax Administration’s extradition and the municipal authority’s data collection in accordance with the privacy directive. Changes in regulation or interpretation may be necessary to ensure necessary access. The project then prepares a data set that compiles the municipality’s documented need for information (data) from the Tax Administration. The data is shared via APIs from the Tax Administration’s standardized sharing service.
- On a semantic level, considerable effort goes into mapping municipal and tax terms. Technical and functional possibilities and limitations are analyzed, and the project is constantly looking for opportunities within legal and technical constraints.
- KS also facilitates interfaces to the API on the municipal collaboration platform FIKS.

2. Benefits

- The once-only principle: sharing data from the Tax Administration with all municipalities and county municipalities for tax and income information, property information, and seriousness information.
- Includes all statutory services provided by municipalities to all Norwegian residents, such as reduced parental payment for daycare, municipal housing and housing support, or nursing homestays.
- Residents do not need to submit information to municipalities and county municipalities that they have already reported to the Tax Administration, and municipalities do not need to request and check documentation from residents.
- Financing: the Tax Administration provides its API free of charge to anyone who needs it to perform their legal duties.
- Coherent and user-centric digital services: using data sharing to create cohesive digital services with the citizen in mind.
- Service automation: Automation of services is possible when the Tax Administration shares tax and revenue information digitally, removing the need for municipalities and county municipalities to examine data.

3. Key success factors

- Collaboration across sectors based on the EIF model (European Interoperability Framework)
- Open data API
- User orientation - direct interaction with users through a service-oriented and user-needs-driven approach.

4. More information

More information can be found at: <https://www.skatteetaten.no/deling>, <https://www.skatteetaten.no/globalassets/deling/dokumenter/skatteetatens-policy-for-deling-av-opplysninger.pdf> and <https://www.ks.no/skattedeling>

The agreement between KS and the Tax Administration: PDF File (ks.no)

Poland | SEPIS - System of Records of the State Sanitary Inspection

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations

1. Good practice description

SEPIS is a system (registry) of cases from Citizens referred to sanitary and epidemiological stations related to an epidemiology area. In its current form it is intended to handle cases related to COVID-19 pandemic – it gathers all cases of this type.

SEPIS is currently crucial IT system used in Poland in the fight against SARS-CoV-2 infection built from the scratch for GIS (General Sanitary Inspectorate).

The basic functionalities include:

- the possibility of registering a case or suspicion of SARS-CoV-2 virus infection by phone or a dedicated online form (all channels available 24/7),
- automatic quarantine of people infected or in contact with infected,
- information about positive test results, cases history of each Citizen,
- integration with other systems, including key Ministry of Health registers,
- information on adverse post-vaccination reactions, handling epidemiological outbreaks, conducting epidemiological interviews,
- countrywide reporting.

All this is done in real time, on a platform secured by a Trusted Profile (Poland digital ID) and an individual account for employees of 344 stations of the State Sanitary Inspection. The system is constantly being developed and it is planned to include it to handle all matters in the area of General Sanitary Inspectorate operations, not only epidemiology.

2. Benefits

- a system with over 12,000 users;
- more than 2 million cases solved,
- nearly 20,000 reports closed daily, peaks as high as 50,000 per day;
- more efficient and faster handling of cases (most cases handled within 3 hours);
- possibility for Citizens to use the online service without calling the hotline;
- convenient 24/7 operation with the use of various tools (computer, tablet, as well as a smartphone-type mobile phone);
- data transparency;
- no need to log into other systems;
- full service in the area of COVID-19 Citizen support;
- data management in one place – employees do not have to rewrite data to different systems;
- efficient submission of reports and ongoing service.

3. Key success factors

- After launching SEPIS efficiency of GIS skyrocketed, even during third and largest wave of infections in Poland average case handling time per citizen support was below 3 hours);
- Equipping sanitary and epidemiological stations with computer equipment and complete digitization of epidemiological processes;
- Detailed reports in PowerBI allowing to monitor processes on an ongoing basis and make improvements;
- Switching from paper and manual processes to electronic and automatic;
- System open to digitization of other areas of GIS activity.

4. More information

More information can be found at: <https://www.gov.pl/web/gov/szukaj?query=sepis>

Portugal | Participa.gov

Relevant Key Dimension(s)

Transparency, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

Participa.gov is a central platform that supports all of Public Administration's participatory processes be it open to the general population or restricted to the public sector. It is a mechanism for participatory democracy, which gives citizens the power to not only make proposals but also vote on them.

The creation of Participa.gov contributes to the consolidation of a national participatory ecosystem that is intended to be increasingly broader and inclusive and an integral part of a new paradigm in the relationship between the government and its citizens.

2. Benefits

- Greater efficiency - Fewer acquisitions of participation platforms by the Public Administration, as it's a central platform that serves all entities;
- Single point of access to all participatory initiatives, that ensures consistency and wider recognition, and fosters a greater engagement in all areas of government.

3. Key success factors

- Secure eID mechanisms – by using the national eID schemes, it provides security and trust to users that register in the portal to submit proposals;
- Blockchain technology for voting – it ensures the process is not only secure, but also fully transparent and anonymous.

4. More information

More information can be found at: <https://participa.gov.pt/base/home>

Portugal | SNS 24 mobile app

Relevant Key Dimension(s)

User Centricity, Key enablers

Life event

Health

1. Good practice description

The SNS 24 is the citizens' health digital wallet, giving access to a wide range of digital health information and services.

Through this app, citizens can access their vaccines bulletin, COVID certificates, prescriptions or exam requests. In addition, it also allows registering specific health data, accessing teleconsultations or requesting regular prescriptions.

2. Benefits

- Instant access to key health information and services anytime, anywhere – from one single place.
- Possibility of direct contact with health practitioners.

3. Key success factors

- User centricity – designed with the citizens' needs in mind, the app is very user-friendly
- Secure and reliable – it uses authentic sources of information and requires safe authentication mechanisms for registration.

4. More information

More information can be found at: <https://www.sns24.gov.pt/servico/utilizar-a-aplicacao-movel-sns-24/>

Portugal | Portuguese Observatory of Web Accessibility

Relevant Key Dimension(s)

User Centricity

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The Portuguese Observatory of Web Accessibility assesses the accessibility and usability of websites and mobile applications, taking into account national and international guidelines.

It monitors and displays statistics on the level of accessibility and usability, in particular on public sector websites and mobile applications.

Usability analysis uses expert evaluation and tests with a pre-defined panel of citizens, which includes users with special needs.

2. Benefits

- Provides an accurate state-of-play of public Portuguese websites and mobile apps, helping all stakeholders identify opportunities for improvement;
- Generates awareness, supports learning and alerts public sector decision-makers, contributing to more inclusive digital services and a better user experience.

3. Key success factors

- All information is displayed with different levels of granularity, allowing both decision-makers and citizens/businesses to see in as much detail as they choose how the website/app is fairing;
- Leads by example, conforming with the best national and international practices on the subject and reaching a perfect score.

4. More information

More information can be found at: <https://observatorio.acessibilidade.gov.pt/>

Romania | The Administrative Code and Telescopes to Commercial European TELESCOPES to COMMERCIAL EUROPEAN CIRCUITES

Relevant Key Dimension(s)

The ROSA Agency in Romania The Administrative Code is the major Administrative Entity to sustain THE MARKET. The Scientific Community Promoted with the Coordination of The MINISTRY of Research, Innovation and Digitalization is recognizing Life Events to contribute to European MARKETS. WebSites are mainly Informational to Research Community. Services will be developed to support future needs. Cross Border Services will be available.

Life event

Research has to support Regular Business Operations in National Institutes with results that are increasing Business Sections in Economy. Secured WebSite with European connections in maps with links would promote products and services that are available in Romania The Administrative Code. Researchers develop sections with Products that have to be introduced in EUROPEAN Exhibitions. Moving to these events should be protected – even with ELECTRONIC SERVICES.

Transport in Events and Products mean Member States that collaborate with legal Agreements. European Cards to Researchers have to be available in Member States with support in secured Views and Transactions in aspects with details in Health PROTECTION.

When Products are exhibited the general public have to test them. Incidents should be reported in Small Claims Procedures with a different Value to protect INNOVATION. Business Start-Up are developed with Products that bring benefit to European Economy. In the meantime Students to Study new technology would attend such Events. Understanding new technology represents new Human Resources in Institutes and Business. Family Event is part of Healthy Societies. Children need Researchers as Parents also. Their Protection is relevant to Societies. Career means selection to achieve success. Professional Profiles should be protected electronically.

Electronic Services to these Life Events have to be developed more than the Informational ones. In Romania, The Administrative Code.

1. Good practice description

Articles in Promoting PRODUCTS represent a manner to introduce Research and Innovation into Electronic Formats. Links in WebSites would develop future portals. Fees to Author Right would be paid to Romania The Administrative Code and to The Autor in Researches – the Values reflect quality. Websites do not include these eServices in this moment.

2. Benefits

- Innovation benefits Economy
- Protection in Electronic Services would be evaluated in number of users with ELECTRONIC PAYMENTS

3. Key success factors

- Products achieve in National Institutes represent a DIFFERENT MARKET
- Their Value support ECONOMY

4. More information

More information can be found at: <https://www.rosa.ro/index.php/en/> and <https://www.rosa.ro/index.php/ro/strategie-spatiala/comunitate-stiintifica>

Serbia | Social Card Register

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-border services

Life event

Family, Health, Career, Moving

1. Good practice description

The Republic of Serbia adopted the Law on the Social Card in February 2021 with the purpose of establishment and implementation of the Social Card Register that should achieve a fairer and simplified distribution of funds for socially vulnerable groups in the country. Social Card Register increases social visibility of the underprivileged so that they can more easily exercise their right to social transfers in a timely and efficient manner. By introducing the Social Card Register, Ministry of Labor, Employment, Veterans and Social Affairs is implementing reform activities in public administration not only to protect the right to social assistance, but also to facilitate access to information as to enable beneficiaries to claim their rights quickly and in an efficient manner. This reform is related to digitization of social protection service delivery.

2. Benefits

- Ensures data and data processing in order to determine the facts necessary for the exercise of rights and services in the field of social protection, and for other purposes;
- More efficient exercise of social protection rights and services;
- Fairer distribution of social assistance;
- Improving the proactivity of the work of public authorities in the field of social protection;
- Providing support in defining and shaping social policy and monitoring the overall impact of social protection measures;
- Providing up-to-date information on persons from socially endangered and vulnerable groups in case of emergency.

3. Key success factors

- Official databases connected electronically;
- Raising the quality of data in the social protection system through the development of the Social Card Register as a single and centralized records in the social sector in order to improve services in the field of social protection.

4. More information

More information can be found at: <https://www.minrzs.gov.rs/sr/projekti/prioriteti/socijalne-karte>.

Serbia | eParking permit for people with disabilities

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Transport, Family, Health

1. Good practice description

Serbia recently introduced the first e-service exclusively for people with disabilities, which significantly improved their quality of life and enabled easier mobility in cities and municipalities across the country.

Persons with disabilities are now able to complete the entire procedure for obtaining a parking permit for privileged parking online.

Previously, it was necessary to physically visit several institutions in order to obtain a series of documents every year. The new e-service enables users to submit a request fully online in just a few minutes, and receive a parking permit sticker by mail at their home address.

2. Benefits

- Significant reduction in time and great simplification of the process for around 18.000 users of the parking permit for people with disabilities, since all data is obtained through official records and the short application is submitted completely online through the national eGovernment portal eUprava.
- By simplifying the procedure, more people who qualify for the permit will apply, which will enhance the mobility and inclusion of the people with disabilities.

3. Key success factors

- All data necessary for deciding can be obtained by the municipality electronically, through the central register or other institutions
- The e-service was developed, tested and implemented in close cooperation with people with disabilities, cities and municipalities and parking association. The collaboration enabled an optimal design of the e-service.
- Portal eUprava already has a significant visibility in Serbia, which increased the awareness of the new e-service

4. More information

More information can be found at: <https://euprava.gov.rs/usluge/7075>

Serbia | My info for banks

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Business Start-Up, Career, Family, Regular Business Operations, Transport, Moving, Studying

1. Good practice description

My info for banks enables a completely paperless application for banking products, that is saving citizens more than 20 million visits to the public institutions counters, yearly. Upon user's consent, the data is retrieved from various public databases and sent instantly to the chosen bank for the purpose of applying for a cash loan.

Banks are also qualified to issue national eID for citizens, so instant onboarding and application is possible when people come to the bank physically, which also increased the number of eCitizens overall.

2. Benefits

- Until now, if a citizen wanted to receive an offer for a cash loan in a bank where he did not have an open account, it was necessary to physically collect documents from 5-10 different institutions and bring them to the bank. Considering that citizens apply for about 2 million cash loans a year, this could lead to a saving in time of 10-20 million of hours for citizens.

3. Key success factors

- Central Population Register, the unique and centralized database enables data to be retrieved from various public databases. With the user's consent, data is then securely sent to the chosen bank
- My info for banks is the first e-service in Serbia jointly developed between the Government and the private sector

4. More information

More information can be found at: <https://euprava.gov.rs/usluge/6678>

Slovakia | Removal of paper certificates for pension and sickness social benefit

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Business Start-Up, Studying, Family

1. Good practice description

During the year 2020 Ministry of Investments, Regional Development and Informatization of the Slovak Republic ("MIRRI") had provided access to structured data concerning pension and sickness benefits from the information system of the Social Insurance Agency of the Slovak Republic to other relevant public administration institutions (public authorities) in Slovakia which are authorised to process these data. This access to data was granted through the process integration and data integration module including its add-on portal OverSi.gov.sk. These data concerned e.g. old-age, invalid, orphan's, widow's / widower's pensions, nursing allowances, incapacity benefits, maternity allowances, compensatory benefits, etc.

Thanks to the automated access of public authorities to these data (under the Act No. 177/2018 Coll. Against bureaucracy), citizens and entrepreneurs no longer have to submit various paper certificates in relation to their official proceedings, but the authorities concerned share them automatically between themselves.

2. Benefits

Since citizens and businesses do not have to obtain certain certificates issued by the Social Insurance Agency of the Slovak Republic and bring them to other public authorities in our country, they save thousands of hours of time (approx. 20,000 hours per month) and money due to lower transportation costs.

Citizens in Slovakia do not need to attach certificates issued by the Social Insurance Agency of the Slovak Republic to request social benefits from the Central Office of Labour, Social Affairs and Family of the Slovak Republic (e.g. children allowances, allowance for the support of alternative care, applications for allowances for material need, inclusion and exclusion from the register of job seekers, etc.).

Another example is that citizens do not need to attach certificates issued by the Social Insurance Agency of the Slovak Republic when sending various requests to communities/villages, national public television, veterinaries, tax offices, etc. These certificates are used for various purposes, for example to request remission of various local and administrative charges, to request tax reductions, (tax for waste, concession fees, veterinarian treatment, reduction of the tax base, etc.).

3. Key success factors

The basic prerequisite for successful realisation of removal of this unnecessary administrative burden for citizens and business was cooperation between MIRRI and the Social Insurance Agency of the Slovak Republic, which resulted into broad legal analysis that identified the most common procedures when citizens and business had to submit the most frequently issued certificates by the Social Insurance Agency. Another step was to identify necessary changes that had to be done, analysis of the source of data, their structure, availability and quality. After that it was necessary to modify the services of source registers and electronic services and to ensure their publication in relation to the centrally used solutions in the MIRRI administration, such as IS CSRÚ and its portal OverSi. Finally, MIRRI informed the most frequent users of these data that it is necessary to connect to newly available way of gaining these data instead of asking them from citizens and business (e.g. municipalities, Financial Office, Central Office of Labour, Social Affairs and Family, etc.).

4. More information

More information can be found at: <https://stopbyrokracii.sk/wp-content/uploads/MUD.pdf>

Slovenia | IQ Justice project

Relevant Key Dimension(s)

User Centricity, Transparency

Life event

Starting a Small Claims Procedure

1. Good practice description

In the scope of the IQ justice project, two main problematic areas have been identified by the Supreme Court: the quality of judicial work (skills and transfer of knowledge) and the low trust in the judiciary. The latter was addressed by the project group for procedural justice, which aims first to give court users the perception of respect, impartiality, inclusion and the opportunity to be heard and contribute to the general trust in courts and the judiciary. Among the deliverables, an informative website was published, containing general and practical information regarding courts and court procedures in plain and simple language. In the long run, this and similar improvements should lead to a better satisfaction with court services and higher trust in judges and courts.

See: <https://nasodiscu.si>, <https://www.eu-drzavljan.si/>

2. Benefits

The desired effect of the procedural justice part of the IQ Justice project is a better understanding of court procedures and the nature of judicial work among the general public, accompanied by higher awareness of judges and court staff as to questions concerning respect, dignity, right to be heard, impartiality, etc.

Tangible effects can already be seen through different satisfaction surveys. The trust in courts, according to the survey of the Supreme Court, increased from 2015 to 2017 (from 4,2/10 to 4,9), stayed roughly the same in 2019 and increased in 2021 (from 4,8 to 5,8). The improvement in public trust is evident also from the European Semester Country Report Slovenia 2019 of the European Commission, where it is expressly stated (p. 41) that "The 2019 EU Justice Scoreboard shows improvements in the perception of judicial independence".

The number of views for informative webpages nasodiscu.si and www.eu-drzavljan.si is increasing; in 2021 there were over 111.000 visits (sessions) (increase by more than 50% from 2020). Over 900 visitors participated in the survey on usefulness of content, with 88% rating information as useful.

3. Key success factors

- Inclusion of all stakeholders in preparation process for informative tools (and other deliverables).
- User centred approach in preparing products/deliverables (i.e. research of users need, service design).
- Use of in-house knowledge for preparation activities and informative tools and contents.

4. More information

More information can be found at: <https://www.coe.int/en/web/cepej/2019-crystal-scales-of-justice-prize>

Spain | Senda – Perfilado automático (Servicio Público de Empleo Estatal)

Relevant Key Dimension(s)

User Centricity

Life event

Career

1. Good practice description

The European Union has established recommendations on Active Employment Policies within the framework of the Europe 2020 Strategy, in which the need for public employment services to improve the job search assistance.

This tool, Senda, offers support to counselors in advising job seekers. The tool provides, based on applicant data, statistical information to the counselor, in relation to how the characteristics of the application and its possible modification affect the improvement of their employability.

2. Benefits

- A common tool with the potential to be used by regional governments.
- Leveraging a large amount of data from various sources and typology to make suggestions
- Thanks to the tools we are planning new training needs detection services.

3. Key success factors

- The Senda application is used by counselors from the employment offices of the autonomous communities to make recommendations based on objective data and adjusted to the profiles of job seekers
- Identifying and comparing the subjects with the attitudes that have caused the access to the labor market of the workers with this “algorithm” are giving good results.

4. More information

More information can be found at: <https://youtu.be/V89oF0Ty5T4>

Spain | IA en el Hospitalario Universitario Ntra. Sra. de la Candelaria (Gobierno de Canarias)

Relevant Key Dimension(s)

User Centricity

Life event

Health

1. Good practice description

Development of a tool for the artificial generation of 12-lead electrocardiogram (ECG) with real pathology, in order to generate synthetic DataSets for the subsequent training of deep convolutional neural networks and automate the diagnosis of different heart rhythm disturbances on digitalized ECG images of real patients online.

Artificial Intelligence is used for ECG interpretation. It is an automatic diagnostic tool that is also used for the automatic generation of extensive sets of pathological and healthy electrocardiograms that are then used for training the neural network.

Technology in general and artificial intelligence at the service of healthcare systems is one of the disruptive alternatives needed by healthcare systems around the world to gain efficiency and democratize healthcare.

2. Benefits

- Get the self-learning system to automatically interpret an ECG and incorporate it into daily clinical activity as screening or diagnostic methods. A significant improvement in global health systems.
- The system generates on demand extensive sets of electrocardiograms with various pathologies that serve to train the neural network.
- Efficiency and cost reduction are clear and direct, with a simple Internet connection, an automatic interpretation can be made 24 hours a day of an electrocardiogram of all the pathologies with which the network has been trained with the same or higher quality. than a cardiologist.

3. Key success factors

- Make the ECG generation tool available to universities around the world so that it can serve as a training tool for future specialists
- This Artificial Intelligence tool could be used, after its training, for the automatic classification of electros

4. More information

More information can be found at:

<https://www.europapress.es/islas-canarias/noticia-hospital-candelaria-aplica-inteligencia-artificial-detectar-retinopatia-diabetica-20190530120034.html> and

https://www.vademecum.es/noticia-200720-novartis%2C+la+fundaci+o+ver+salud+y+el+hospital+universitario+nuestra+se+ntilde+ora+de+la+candelaria+se+unen+para+mejorar+el+cribado+de+la+retinopat+i+diab+e+trav+e+de+la+inteligencia+artificial_14480

Sweden | Digital mailbox (Digimail, eBoks, Kivra and Min myndighetspost)

Relevant Key Dimension(s)

Key enablers

Life event

Business Start-Up, Studying, Family, Career, Regular Business Operations, Moving, Transport, Starting a Small Claims Procedure

1. Good practice description

As per March 2021, more than 4,500,000 individual citizens and business representatives use the Swedish digital mailbox for their communication exchanges with the public sector. This means, nearly half of the population in Sweden receives its official government mail in a digital mailbox solution (Digimail, eBoks, Kivra and Min myndighetspost). More than 4.3 million (96%) of the 4.5 million digital mailboxes belong to individual citizens, the remainder belong to business entities.

2. Benefits

- 52.7 million messages were sent in 2020, saving substantial paper mail.
- The solution creates coherence and overview: all messages are gathered in one place.
- The mail is sent securely and can be opened anywhere and anytime by the person authorised, using electronic identification.

3. Key success factors

- Large coverage of public sector entities: the solution integrates the mail from almost 170 authorities, municipalities and regions.

4. More information

More information can be found at:

<https://www.digg.se/om-oss/nyheter/2021/snart-tar-halva-sverige-emot-sin-myndighetspost-i-en-digital-brevlada>

Switzerland | Map viewer of the Federal Geoportal

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Transport

1. Good practice description

The Federal Office of Topography swisstopo provides its standard digital products, such as digital maps, aerial photographs and landscape models online, free of charge and for open access use since March 1 2021.

Access to data is provided via the data.geo.admin.ch STAC (Spatial Temporal Asset Catalog) API of the Federal Spatial Data Infrastructure (geo.admin.ch). Data is additionally accessible via geospatial web services (such as OGC WMS, WMTS and a REST API) and can be previewed via the map viewer of the Federal Spatial Data Infrastructure map.geo.admin.ch.

The intense and sometimes thundery precipitation in the month of July led to storms, high water on rivers and flooding on lakes in many places in Switzerland. At the same time, statistics show increased activity on map.geo.admin.ch - as a result of the storm events, the federal map viewer reached an all-time record in "visits" figures with a quarter of a million visits in a single day.

2. Benefits

- The demand for information about possible dangers and current warnings was correspondingly high. Consequently, an astonishingly high number of visitors to www.map.geo.admin.ch was recorded during the severe weather events.
- On 16.07.2021, the number of "visits" to map.geo.admin.ch finally reached the record level of around 250,000 visits.

3. Key success factors

- Thanks to the timely collection and provision of geodata for event management and documentation - in this specific case in the area of precipitation and flooding - visitors were able to access many helpful real-time datasets.
- Legal framework as a key enabler

4. More information

More information can be found at: <https://www.swisstopo.admin.ch/en/swisstopo/free-geodata.html> and <https://www.geo.admin.ch/en/geo-services/geo-services/download-services/stac-api.html> and also at [Hochwasser im Juli 2021: Allzeit Rekord in der Nutzung der Bundes Geodaten-Infrastruktur \(BGDI\) \(admin.ch\)](https://www.bfs.admin.ch/bfs/portal/en/topics/water-and-climate/water/water-records/water-records-2021-07-16-17-18-19-2021.html).

Switzerland | Air quality in Zurich

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Starting a Small Claims Procedure, Business Start-Up, Studying, Family, Career

1. Good practice description

The city of Zurich has been publishing data in the Open Data catalogue since 2012. From 3D city models to data on air quality in real time, data sets on a wide variety of topics from the administration are offered in the catalogue. These data sets may be used and reused by anyone without restrictions. Since 1 September 2021, the principle of “Open by Default” has applied in the city of Zurich.

2. Benefits

- This means that existing data sets of the city administration will be made freely available to the public by default if they do not contain any content that requires protection.
- The regulations bring clarity, for example by clearly defining the conditions under which open administrative data can be made freely available. It also regulates the necessary processes as well as the competences and responsibilities in dealing with open administrative data.

3. Key success factors

- Broad-based feedback

4. More information

More information can be found at: Offene Verwaltungsdaten jetzt «Open by Default» - Stadt Zürich (stadt-zuerich.ch)

Switzerland | Covid Certificate

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Studying, Family, Career

1. Good practice description

The COVID certificate is a way of documenting that you have had a COVID-19 vaccination, have had the disease or have a negative test result. You can request the COVID certificate on paper or as a PDF document with a QR code.

Together with the Federal Office of Public Health, the Federal Office of Information Technology, Systems and Telecommunication has implemented the complex joint project COVID certificate in just three weeks. The Covid Certificate as an APP was a first productive solution for issuing Covid Certificates for vaccinated, recovered and negatively tested persons. In developing the "Covid certificate", the federal government relied on open source and reused existing code modules where it made sense to do so.

The cantons are responsible for the issuing of COVID certificates.

The COVID certificate is issued at the following locations:

- Vaccination centres
- Medical practices
- Hospitals
- Pharmacies
- Test centres
- Laboratories
- Cantonal authorities

The Swiss Covid Certificate was able to snatch the prize for best contribution to short-term crisis management at this year's eGovernment competition organized by Bearingpoint and Cisco.

2. Benefits

- Other states, such as Austria, were able to profit from the work.
- Certificates can be delivered on the spot, online (on the internet), direct to the COVID Certificate app or in special cases by post.

3. Key success factors

- The project was successful because forces were bundled: All 26 cantons, as well as companies and numerous vaccination and testing centers, joined forces for the project.

4. More information

More information can be found at: Where and how to get a COVID certificate ([admin.ch](#)) and The COVID certificate basics ([admin.ch](#))

Switzerland | SwissCovid app

Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

Life event

Regular Business Operations, Moving, Transport, Health, Studying, Family, Career

1. Good practice description

Contact tracing identifies people who have had close contact with people who have been infected with the coronavirus. The SwissCovid app supports this process, establishing whether close contact has taken place and giving rapid notification if there is a potential risk of infection.

The SwissCovid app for mobile phones (Android/iPhone) is helping to contain the coronavirus. It complements the conventional contact tracing carried out by cantonal authorities to track new infections. The SwissCovid app is available in the Apple Store and Google Play Store.

2. Benefits

- Chains of transmission can thus be broken more quickly.

3. Key success factors

- Use of the SwissCovid app is voluntary and free of charge. The more people who install and use the app, the more effectively the app can help us to combat the new coronavirus.

4. More information

More information can be found at: [SwissCovid app \(admin.ch\)](https://www.admin.ch)

Türkiye | My Residence

Relevant Key Dimension(s)

User Centricity, Transparency, Key Enablers

Life event

Moving, Health, Family

1. Good practice description

Many services related to the residence address of e-Government users are offered via e-Government Gateway by 7 central government institutions and also municipalities and utility companies. These services are integrated under “My Residence” service with the coordination of Digital Transformation Office. “My Residence” service allows the users to easily access the integrated services that are related with the residence address from a single point rather than accessing each of the service separately. This service was launched on 9th March 2021 at the e-Government Gateway. This integrated service includes the following offerings:

- Changing the residence address
- Local services offered by the district/provincial units located in the address of residence of the user
- Subscription based utility services (e.g. electricity, water, gas)
- Inquiry and change of family doctor
- Student transfer operations (for primary and secondary school students)
- Inquiry of voter registration
- Measurement information of base stations
- Community policing
- Inquiry of emergency assembly area
- Receiving residence documents without visiting the office of the neighbourhood unit and using the documents in all official procedures since they contain barcode.

2. Benefits

- “My Residence” service was used for 14,227,171 times in total in 2021.
- Service providers make savings from the number of personnel who should be in charge of issuing the requested documents and finalize the applications and from other public funding.
- The number of transactions of “notification of change of address” service was about 11 million in 2021. With the delivery of the service through the e-Government Gateway, applicants saved about 949 million TRY from the application cost and 22.3 million hours of time.
- The number of transactions of “receiving barcoded residence document” service was about 55 million in 2021. With the delivery of the service via e-Government Gateway, applicants saved about 4.7 billion TRY from the application cost and 110.1 million hours of time.

3. Key success factors

- Türkiye’s population and address registration system infrastructure is widespread and strong even in the smallest administrative units.
- 69% of Türkiye’s population (about 84.7 million) are e-Government Gateway users (about 58.6 million).

4. More information

More information can be found at <https://www.turkiye.gov.tr/adrese-bagli-hizmetler>

Türkiye | My Vehicles

Relevant Key Dimension(s)

User Centricity, Key Enablers

Life event

Transport

1. Good practice description

Many services related to the vehicles of the users are offered via e-Government Gateway by 9 central government institutions and also highway companies. These services are integrated under “My Vehicles” service with the coordination of Digital Transformation Office. “My Vehicles” service allows the users to easily access the integrated services for their vehicles from a single point rather than accessing each of the service separately. This service was launched on 9th June 2021 at the e-Government Gateway. Both the citizens and legal entities can benefit from this service. This integrated service includes the following offerings:

- Viewing the information of the vehicle
- Inquiry for and payment of taxes
- Making and inquiring appointment for vehicle inspection
- Vehicle policy/insurance information
- Expert assignment status inquiry in motor vehicle insurance
- Fast Pass System (HGS) account information and loading balance
- Inquiry for parking information where the vehicle was towed
- Inquiry for and payment of fines
- Accessing the highway pass information (inquiry for information regarding highway pass, bridges and fines for violations)

2. Benefits

- “My Vehicles” service was used for 143,631,728 times in 2021.
- Number of users paying their vehicle taxes (motor vehicle tax)/ fines/ high way pass fee via this service was about 4.2 million in 2021. With the delivery of the service via e-Government Gateway, the applicants saved about 347.4 million TRY from the application costs and 8.5 million hours of time.

3. Key success factors

- Elimination of the notice period
- Accessing all the single services integrated into one service from a single point
- Availability of alternative e-payment channels

4. More information

More information can be found at <https://www.turkiye.gov.tr/araclarim>
<https://cbddo.gov.tr/en/news/4786/e-devlet-kapisi-nin-ilk-butunlesik-hizmeti-araclarim-kullanima-acildi->

Türkiye | e-Nabız Personal Health System

Relevant Key Dimension(s)

User Centricity, Transparency, Key Enablers

Life event

Health

1. Good practice description

e-Nabız is a personal health record system that Turkish Ministry of Health integrated all the information systems of all health institutions. e-Nabız is standalone portal but it has SSO integration to e-Government Gateway. Via e-Nabız, people can access their lab results, medical images, prescription and medication details, emergency information, diagnosis details, reports and health records containing all details of the examinations via smartphones, tablet PCs and PCs on 24/7 basis. People can also share their medical records with their doctor(s) and relatives within specific regulations. People can get medical appointments, report their claim to be blood donor and be an organ donor. Besides, via the wearable technologies infrastructure of e-Nabız, people can enter data manually via smart wristbands, blood pressure and blood sugar monitors with wireless features.

As the milestone for combat against COVID-19 pandemics, e-Nabız provided services such as accessing COVID-19 test results and getting vaccine appointments.

2. Benefits

- Number of e-Nabız users is about 57 million citizens as of 31.12.2021.
- Citizens managing their own health data and deciding which personal health data will be shared with which institutions and relatives.
- Via the data sharing feature of e-Nabız, elimination of repeating medical imaging procedures, therefore savings in healthcare spending and less working hours for healthcare staff.
- Elimination of the procedural cost (one page of report and a CD which cost 0,25 USD per examination) of about 47.3 million Computerized Tomography (CT) images (for 2020 and 2021), equal to about 11.8 million USD, which constitutes half of the investment cost of e-Nabız.
- Elimination of the traditional service provision cost (one page of report and MRI hard copy) of about 27 million Magnetic Resonance Imaging (MRI) examinations (for 2020 and 2021), equal to about 2.690 trees saved (based on the calculation that one single tree produces 10.000 sheets of paper).
- Number of users getting medical appointment via e-Nabız was about 155.5 million in 2021. With the delivery of the service via e-Nabız, the applicants saved about 12.8 billion TRY from the application costs and 310.9 million hours of time.
- 820k organ donation statements are submitted for about 12.4 million organs; which displays the social benefits of e-Nabız in a holistic aspect.

3. Key success factors

- e-Nabız is constantly updated with new features and is reshaped upon the actual and proactive needs of people and the healthcare workforce.
- Effective change management strategies have been adopted to manage the transition period in a fruitful way which include effective project planning, capacity building activities, field studies, meetings with stakeholders and a pilot application in Istanbul with 18 hospitals.

4. More information

More information can be found at:

<https://enabiz.gov.tr/Yardim/Index?lang=en> https://www.youtube.com/watch?v=F4XW_x9o01o

GETTING IN TOUCH WITH THE EU

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