

# eGovernment Benchmark 2021

### **Entering a New Digital Government Era**

### BACKGROUND REPORT

Written by Capgemini, Sogeti, IDC and Politecnico di Milano for the European Commission Directorate-General for Communications Networks, Content and Technology October – 2021

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# eGovernment Benchmark 2021 Background Report

**Entering a New Digital Government Era** 

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## Glossary of Key Terminology

eGovernment: electronic government (also digital government).

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

- 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, eDocuments, authentic sources, digital post and security support secure 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 in 2020: Business Start-Up, Career, Studying and Family.
- Assessed 2019: Regular Business Operations, Starting a Small Claims Procedure, Owning and Driving a Car and Moving.

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**: an eGovernment website that gathers and provides information and services from multiple public administrations.
- National user: citizens and entrepreneurs that seek for information and services in their own country.
- Cross-border user: citizens or entrepreneurs that seek information and services in another European country 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 places the user journey and experience at the evaluators' centre of attention.
- **Automated tools**: online tests through which web address are entered and web sites assessed on a number of criteria.

# 1. Aspects of eGovernment

"We must now make this **Europe's Digital Decade** so that all citizens and businesses can access the very best the digital world can offer."

European Commission President, Ursula von der Leyen



## Aspects of eGovernment

### 1.1 A Deep-Dive into eGovernment Technologies and Policy Domains

As highlighted in the eGovernment Benchmark Insight Report, digital governments play a vital role in providing public services to citizens and businesses. Especially in times of the COVID-19 pandemic, digital governments made a difference.

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 know the following from A to Z:

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

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 analyst and solution integrators who analyse, build and implement digital government applications and services.

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

Chapters 3-6 dive into this year's Life Events of Business Start-Up, Career, Family and Studying.

Findings are particularly relevant for domain experts and policy makers in the field of economic affairs, employment services, social affairs and (higher) education.

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

Chapter 7 provides the Benchlearning Analysis in which relative performance of countries is explained. Findings are particularly relevant for policy makers responsible for eGovernent strategy and international cooperation.

 Lastly, we provide a repository of good practices from all participating countries in the Appendix. The appendix has its own table of contents.

Whereas the Insight Report mainly marks European trends, the Background Report takes a closer look into national perspectives. Concrete examples, good practices and success stories from various countries are presented throughout the report. These stories will bring the findings to life. Country rankings and service overviews are given to guide readers to 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. It serves both as a source of inspiration for strategy making as well as a more practical companion for government digitalisation.

**36** countries participated in the study. These countries are the 27 European Union (EU) Member States, European Free Trade Association (EFTA) countries, the United Kingdom and the European Union (EU) candidate countries. Throughout the report, these countries will be referred to as 'Europe' or the 'EU27+'.



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 in the overall country maturity score.

Under the eGovernment Benchmark, a mature digital government shows:

- User Centricity To what extent are services provided online? How mobile friendly are they? And what online support and feedback mechanisms are in place?
- Transparency Are public administrations providing clear, openly communicated information about how their services are delivered? Are they transparent about the responsibilities and performance of their public organisations, and 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, we analysed 93 services, across eight Life Events. Life Events are government domains, referring to a bundle of digital services that the average citizen or business is likely to require. In this way, we cover 2,625 distinct administrations (1,141 central, 353 regional and 1,130 local government bodies).

The assessment takes place annually, with data on the Life Events Business Start-Up, Career, Studying and Family collected in even years, whereas the

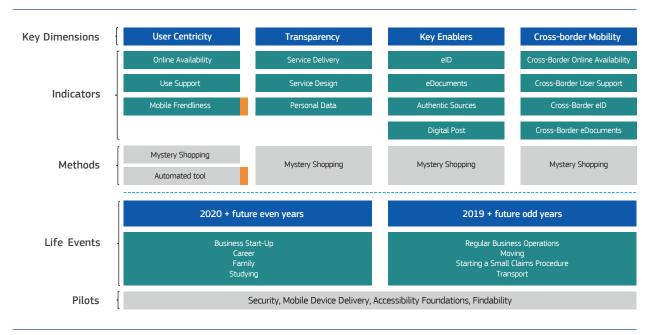


Figure 1.2 eGovernment Benchmark method framework

Life Events Regular Business Operations, Starting a Small Claims Procedure, Transport and Moving are assessed in odd years. This report presents the findings for data collected in 2019 and 2020.

To evaluate these Life Events, well-trained Mystery Shoppers – citizens from the participating countries – visited and evaluated 7,877 websites between August and September 2020: 5,193 websites from their own government, 1,257 cross-border websites from another government, 352 national portals, 350 cross-border portals, and 725 mobile apps/responsive websites.

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

Importantly, method changes limit historical comparisons to a subset of indicators and services. The number of services per Life Event was reduced and the Transparency of Public Organisations indicator (8 questions) was replaced for the Transparency of Service Design indicator (4 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. Moreover, all eGovernment Benchmark research data is openly available, free of charge and provided in a machine-readable format. The Commission's webpage also presents via visualisations the data collected in previous measurements.

### 1

### 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 into 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.
- 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

"Our digital transition will not be complete without the **digitalisation of public services**."

European Commission Executive Vice-President, 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. Each subsequent section addresses each of the key dimensions.

### 2.1 Overall maturity

The maturity of eGovernment is determined by averaging the score of the four key dimensions, *User Centricity, Transparency, Key Enablers* and *Cross-Border Services*. Figure 2.1 provides an overview of the overall maturity of each of the countries under evaluation and shows their ranking. **Malta is Europe's top performer in eGovernment** with a score of 96%, followed by Estonia at 92%. Following these countries is a cluster of ten that all score between 85% and 81%, including Denmark, Finland, Luxembourg, Austria, Iceland, Portugal, the Netherlands, Latvia, Norway and Lithuania.

Figure 2.2 shows the biennial average score of the EU27+ for each of the key dimensions and the averages per Life Event. Looking at the biennial

averages shows that *User Centricity* scores highest at 88%, indicating that Member States provide services with the user needs in mind. The scores for *Transparency* (64%) and *Key Enablers* (65%) show that governments can take further steps to clarify how they operate and that the implementation of digital government building blocks, such as eID and digital mailboxes is not yet where it could be. Lastly, the key dimension *Crossborder Services* shows room for improvement. This illustrates that countries are mainly aiming their digital government solutions at their national citizens, whereas non-nationals do not enjoy the same level of service delivery.

Looking at the differences between the Life Events it becomes clear that digital government for business owners (Life Events *Business Start-up* and *Regular Business Operations*) are

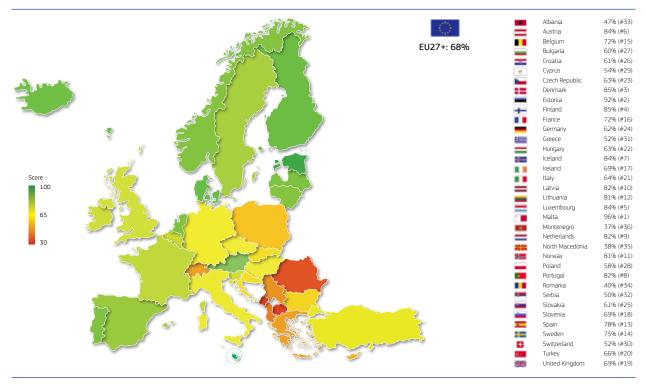


Figure 2.1 Country overall eGovernment performance

2

substantially more mature than the Life Events for citizens. This holds across all key dimensions. For *User Centricity*, Career and *Moving* Life Events are the most mature for citizens. When losing a job or moving, many of the required services can be done online easily. At the same time, this study finds that digital government in the Career domain and in the *Starting a Small Claims Procedure* domain lag behind greatly for *Cross-border Services*. Scores of 47% and 40%, respectively, show that cross-border digital government in these Life Events is still in its infancy. A positive note on *Cross-border Services* is that digital governments for students is at a relatively high level: with a maturity of 65% it's at the same level as the business Life Events, showing Europe's commitment to creating a well-educated and internationally oriented student population.

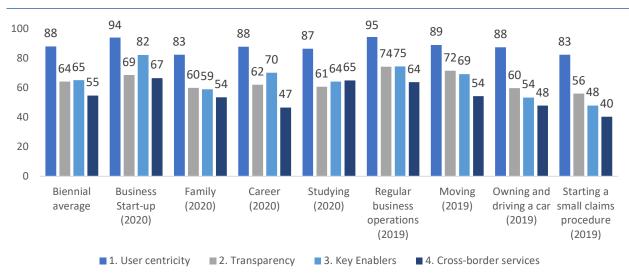
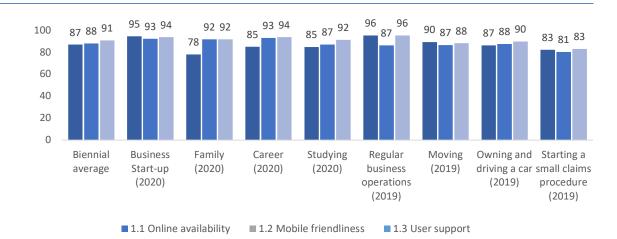


Figure 2.2 Overview of life events under assessment in 2012 – 2019

### 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 in which services are online. Mobile Friendliness assesses whether government web sites are compatible with mobile devices and lastly, User Support, assesses whether web portals provide sufficient help to users. Figure 2.3 shows the biennial average score of the EU27+ for each of the indicators of *User Centricity* and the EU27+ averages of the indicators per Life Event. Within the *User Centricity* key dimension, *User support* is the most mature indicator (91%). In almost all countries, citizens and business owners can visit government portal websites with sufficient functionalities to help them find their way. *Online Availability* and *Mobile Friendliness* also score excellent EU-wide with scores of 87% and 88%.



#### Figure 2.3 User Centricity indicator scores per Life Event

Mobile Friendliness shows an interesting trend: the scores for the 2019 Life Events lie within 81%-87%, whereas the scores for the 2020 Life Events are between 87%-93%. Some users prefer a desktop; others prefer their mobile device, such as smartphones and tablets. Although scores differ by the type of Life Event, European governments are adapting to mobile users.

Figure 2.4 shows the scores for *User Centricity* per country. As mentioned, most European countries perform well on this key dimension, with a European average of 88%. Malta stands out with a score of 99%, closely followed by Finland (98%), Portugal (98%) and Denmark (98%).

### Online Availability: Visiting the town hall is no longer a prerequisite

Governments that offer their services online enable people to arrange their lives anytime anywhere they like. Online services offer more flexibility. Online services forms also help to avoid incomplete or inaccurate form returns. In this study we make a distinction of three levels of online maturity:

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

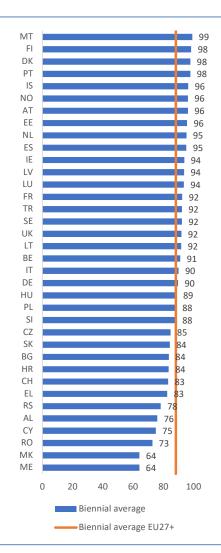


Figure 2.5 shows how each country fared in this regard. In 98% of the services measured across the 36 European countries partaking in this study

at information could be found online. For precisely half of the countries under evaluation, information could be found online for all services.

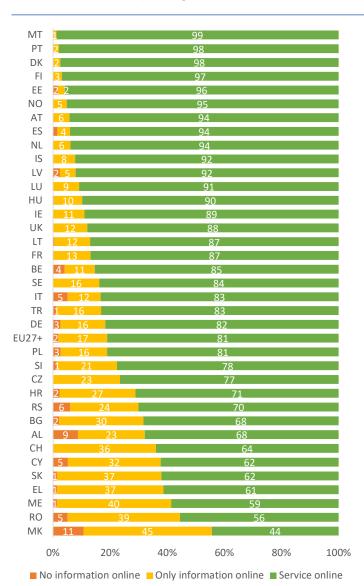


Figure 2.5 Service availability online per country

Whereas information is available for almost all services, this does not necessarily translate into being able to complete a service online. **Eight out of ten services measured could be completed online (81%)**. This question also shows large differences between countries: Portugal, Malta and Denmark facilitate citizens and businesses by providing almost all services completely online. On the other hand, seven countries in our sample have less than two-thirds of their services online.

Some governments provide services proactively. This means no action is required by users, as governments anticipate needs and automatically deliver services before they are demanded. Proactively delivering services is effortless for users and improves their experience. **Currently**, **6% of the examined government services are**  **delivered proactively**. In six European countries, the proactive services make up a share of only 2% or less of the service provision. By effectively reusing data, this can increase the coming years. Luxembourg is ahead and already delivers 18% of its services proactively.

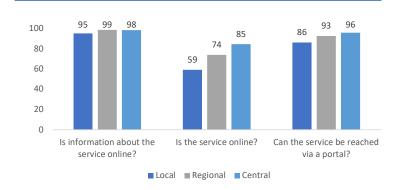


Figure 2.6 Service availability per government level

Figure 2.6 distinguishes between services delivered by central, regional and local governments. This study finds that all levels of government provide information online. However, regional (74%) and especially local governments (59%) lag behind central governments (85%). This means that people still need to visit a municipal or city office in four out of ten cases.

### User Support: help functionalities where you want them

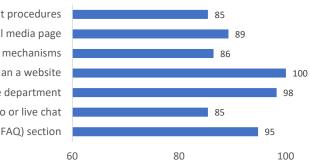
Even the most user-friendly system can require help. Sometimes, users have questions or want to make suggestions. User support channels help users to meet these demands. The *User support* indicator assesses the maturity of help functionalities on government portals. Specifically, seven features related to *User Support* were assessed for each government portal under evaluation. The biennial average for each of the features is presented in Figure 2.7.

This study found that 19 of 20 portals have a Frequently-Asked-Questions section (95%). Moreover, almost all government portals clearly show contact details (98%) and in all cases provide other channels to get help such as via email or phone (100%). In almost nine out of ten government portals, users can get help from discussion forums or social media pages, where they can communicate with government officials and other users (89%).

Feedback is a great way to find out what users like and want: **86% of the portals have a feedback section available.** Sometimes, things go wrong, and complaint forms come into play. **85% of the** government portals assessed for this exercise had a complaint form available online. Lastly, users are supported with demos and live chats, which are currently available on **85%** of the web sites under evaluation.

### Mobile: the government at your fingertips

While mobile devices, such as smartphones and tablets, give users flexibility on where and when they interact with government services, it has also become a norm for people who use a mobile device as their primary access point to the Internet. 85% of the internet users access the internet on their smartphone, while only 51% of the internet users do so on a laptop.<sup>1</sup> In this study, we assessed Mobile Government (sometimes



Complaint procedures Discussion fora or social media page Feedback mechanisms Possibility for other channels than a website Contact details resposible department Demo or live chat Frequently-Asked-Questions (FAQ) section

Figure 2.7 User Support indicator, scores per question

dubbed mGovernment) in two ways:

- Mobile Friendliness: in some cases, we only want to find information about a government service. If we visit government web sites, are those web sites optimised for mobile use?
- Mobile Service Delivery: in other cases, we want to use the service on a mobile device. This may mean downloading an app or filling in an online form on a mobile device—one without a physical keyboard and with less screen space. The Mobile service delivery indicator is still a pilot and therefore not scored.

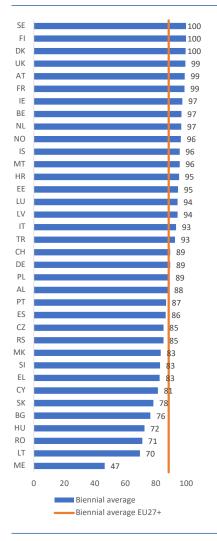


Figure 2.8 Mobile Friendliness per country

Almost nine out of ten government websites are mobile friendly. Still, large difference can be seen between countries. In Sweden, Finland and Denmark, all government websites evaluated are mobile friendly. In many other European countries, over 95% of the government web sites are mobile friendly. On the other hand, there is also a number of countries that have ample room for improvement. With more citizens and businesses using mobile devices, mobile friendliness in Europe should continue to improve.

For *Mobile service delivery* eight services were piloted. Figure 2.9 compares the experience of mobile and desktop users for the same set of services across all countries. Mobile government is not yet on par with digital government for desktop users. For each of the questions the average score for the desktop version is higher than the average score for the mobile app or mobile-friendly website.

	Ę	8880
Is information about the service available online?	100%	89%
Is the actual service available online?	79%	62%
Is it possible to identify oneself online?	78%	73%
Can you use a generic electronic identifier (e.g. a national eID) to identify yourself?	68%	61%
Is it possible for the user to submit or download official documents required for the service?	76%	72%
When applying for this service is personal data pre-filled by the service provider?	64%	60%

Figure 2.9 Mobile eGovernment compared to regular eGovernment

For instance, in all countries under evaluation, governments have information online about the eight services in the Mobile service delivery pilot, but one in ten mobile users cannot find this same information (89%), often due to a lack of mobile friendly web design. To actually use a service, the difference becomes starker: eight out of ten government services can be completed by desktop users (79%), compared to six out of ten for mobile

<sup>1</sup> More information can be found via the following link:

https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/89100

users (62%). This study also shows that eID can be used for six out of each ten services (61%), which is slightly lower than for desktop users. Prefilling personal information is something that is especially relevant for mobile users, since entering information is often easier with a keyboard than a touchscreen. In the data, we found that information is prefilled for almost as many mobile users as desktop users.

### Pilot studies into findable and accessible governments (Findability and Accessibility Foundations)

- Even prior to entering a portal website, users may search on Google, Bing, Yahoo! or other search engines where to obtain a service. Search Engine Optimisation (SEO) activities help users to quickly find the service they need. Based on the Moz Domain Authority Tool (link: https://moz. com/learn/seo/domain-authority) the SEO status of more than half of the government portals in Europe (57%) qualifies as 'good' or 'excellent', 26% as 'moderate' and only 17% as 'below moderate'.
- Moreover, digital services should be accessible to all types of eGovernment users. With the use of Axe (link: https://www.deque.com/axe/browser-extensions/) government websites were checked against 8 of the 50 international WCAG standard. Only 16% of the websites meet all 8 accessibility success criteria that have been measured. Especially criteria relevant to people with visual disabilities were violated since perceivable aspects like colour contrast and alternative text for explaining pictures were lacking. The criteria related to operable, understandable, and robust web content were met more often, benefitting people with cognitive and motor disabilities most.

### Good Practice Austria: Mobile App Digitales Amt

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

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

#### 1. Good practice description

With its 'Digitales Amt' mobile app project the Federal Government promotes user-oriented and secure access to services and decision-making processes.

Our society and economy has become digitally driven, and the Covid-19 pandemic has accelerated this trend, with the need to use services at all times and at all places. The device which is used primarily for going online is the mobile device. The smartphone has become the main communication tool nowadays. This is why Austria is pursuing a mobile first approach by enabling services, especially also government services, for mobile environments.

As a major step towards "mobile Government", Austria launched the platform "oesterreich.gv.at" which also includes the first comprehensive mobile app called "Digitales Amt" for comprehensive online administrative information and services.

### 2. Key success factors

m(obile)Government - dedicated "Digital Office App" to facilitate a centralised, mobile and easy access for citizens to the most important administrative services; an important step towards location- and time- independent use of eGovernment.

The 'Digitales Amt' app also helps to close the digital divide, improve participation opportunities for people in more remote areas of Austria and reduce traffic. The project also ensures nondiscriminatory access to public services and is in line with the underlying concept of 'leaving no one behind'.

### 3. More information

More information can be found at: https://www.oesterreich.gv.at/app-digitales-amt/fag/app\_digitales\_amt.html

### 2.3 Transparency

Transparency is vitally important for government accountability and building trust. Government can use digital solutions to enhance transparency, raise service effectiveness and to involve citizens and businesses in decision-making processes. To evaluate the transparency of digital governments, this dimension comprises 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 obtaining 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 2.10 presents the biennial averages for the *Transparency* indicators for Business Life Events Business *Start-Up* and *Regular Business Operations*, as well as the Citizen Life Events *Studying*, *Career, Family, Moving, Starting a Small Claims Procedure*, and *Owning and Driving a Car. Transparency of Service Delivery* is the least mature Transparency indicator with an EU27+ average score of 57%. *Transparency of Service Design* is slightly more mature at 62% and *Transparency of Personal Data* is the most mature indicator on this key dimension at 68%. All indicators demonstrate room for improvement in the coming years.

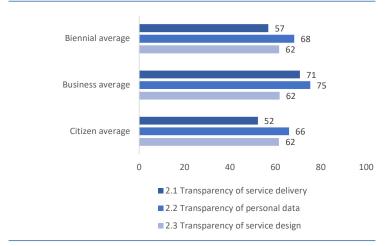


Figure 2.10 Transparency indicators, averages for citizen and business Life Events

# Substantial differences exist for transparency towards entrepreneurs and businesses vis-à-vis citizens.

According to the analysis, business users are better informed than citizens (a difference of 19 percentage points). Governments often provide businesses with information about timelines for service delivery and the possibility to save earlier work as a draft, whereas citizens lack these features. For Transparency of Service Design businesses and citizens are facilitated equally well, although the 62% score highlights that both user groups could be more involved with service design.

Which countries are performing well on the Transparency key dimension? In Figure 2.11, the biennial averages for all participating countries are presented. Malta has the most transparent digital government and obtains an excellent score of 99%. Other countries, such as Estonia (91%), Iceland (85%) and Lithuania (84%), also show high levels of transparency. The European biennial average stands at 64%, indicating that many countries in Europe can make their digital government more transparent. Indeed, seven countries currently score below 50%.

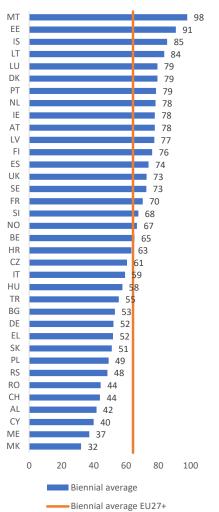


Figure 2.11 Biennial averages for the key dimension Transparency per country

### Transparency of Service Delivery: manage user expectations

When users start a digital government service, knowing what is expected from them and what they can expect from their government is highly important. That is what transparent service processes and delivery are all about. In the eGovernment Benchmark study, seven features are assessed to evaluate the transparency of the service process. The results are presented in Figure 2.12.

When obtaining a service online, users get a delivery notice upon completion in eight out of ten services (81%). When requesting the service

online, it is not always clear for users how long the remainder of the process will take. For instance, for six out of ten services, progress is tracked when requesting the service (62%), and in less than half of cases, users received an indication of how long the process would take (49%). Moreover, businesses and citizens could find greater clarity about delivery timelines. Currently, the delivery timelines were provided for 61% of services, and in 56% of cases, a maximum time limit for the delivery of the service is shown. In some cases, users would be greatly helped if they knew exactly when and how a service would be delivered, which is currently often not the case.

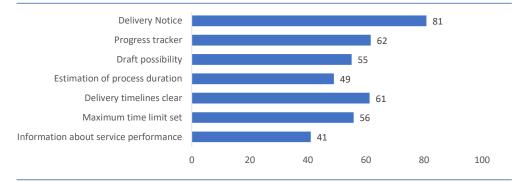


Figure 2.12 European averages for Transparency of Service Delivery features

### Transparency of Personal Data: stay in control of user data

Personal data, such as date of birth and address, are part of the user's digital fingerprint. Due to its confidential character users should be able to know what personal information the government stores and when data is used to provide a service. The European Commission further highlighted the importance of safe and secure handling of personal data with the General Data Protection Regulation (GDPR) in 2016.<sup>2</sup>

This study assesses *Transparency of Personal Data* on the most relevant government portals. Figure 2.13 shows that on more than eight out of ten government portals, users can notify the government if their data is incorrect (81%). While, on 77% of the assessed portals, citizens and businesses can file complaints when they think their data is being used inappropriately. Lastly, on almost three out of four cases, users can modify their personal data online, so they can correct inconsistencies or errors directly.

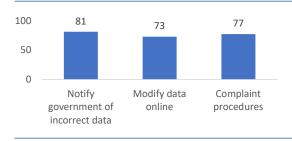
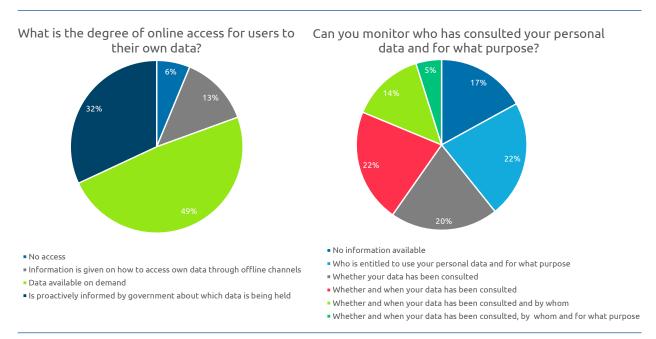
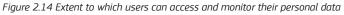


Figure 2.13 Scores per question for Transparency of Personal Data





To gain further insight into *Transparency of personal data*, the Mystery Shoppers were asked on the degree of online access to their own data and whether they could monitor who used their data and for what purpose. The results for these questions are presented in Figure 2.14.

On 6% of government portals, users could not access their personal data at all and in another 32%, users could not access their data online, but were given information how to access their data via offline channels (e.g. sending a letter to the responsible authority). On the positive side: a little more than six out of each ten countries made data online available, either on demand or by proactively informing users about what data was being held.

Users might also want to know who are using their data, and perhaps even more important: for what purpose? Currently, 17% of all European government portals provide no information whatsoever about the use of personal data by the government. Another 22% suffice with a general explanation of who is authorised to use personal data and for which purposes. A slight majority (61%) of government platforms display whether data has been consulted, with some offering more advanced transparency solutions: 20% report whether data was consulted; 22% whether and when data was consulted; 14% whether, when and by whom their data was consulted; and lastly, 5% offer users the full picture of whether, when and by whom their personal data was consulted and for which purpose.

### Transparency of Service Design: co-create digital services

To put the user at the heart of government activities, effective consultation and participation channels play a vital role. This helps citizens and entrepreneurs to understand policy and digital service design processes and allow them to have a say. Therefore, the eGovernment Benchmark report assesses to what extent citizens are involved in policy-making and the creation of services. Can they effectively contribute to the procedures their governments create? Can citizens share their ideas on how to build a better, more inclusive and effective government?

Figure 2.15 presents each of the functionalities assessed and the percentage of portals where they were available. The benchmark showed that governments were transparent in their policy-making processes: 96% of all government authorities had information about policy processes on their website. However, only half of

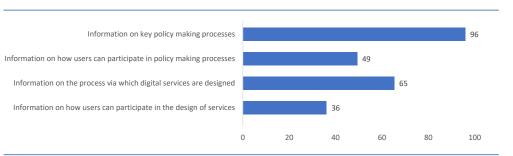
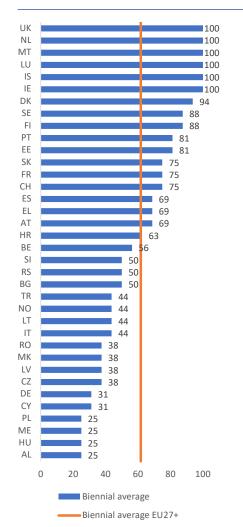
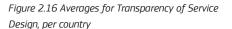


Figure 2.15 Transparency of service design, scores per question

the government bodies provided information on how users can participate in the policy-making processes, for instance by offering the opportunity to join focus groups. So, information is easily found, but participating and contributing to new policies remains difficult. To some extent, the same can be said about service design. On 65% of the government portals, users are informed about the process in which digital services are designed, but only on 36% of portals actually provide users with information on how they can help shape digital services.

Figure 2.16 shows that the United Kingdom, the Netherlands, Malta, Luxembourg, Iceland and Ireland are fully transparent with how they design services. On all portals that were evaluated, users were informed on how to participate in policy-making and service design processes. For many others, the maturity for *Transparency of Service Design* is still limited and improvements are warranted.





### Good practice Italy: ANPR



Life Event(s): Family

### 1. Good practice description

ANPR is an integrated system that allows municipalities to carry out registry services, consult or extract data, monitor activities and generate statistics. With ANPR administrations and service providers will be able to have a single and reliable source for citizens' data.

Approximately 7,500 municipalities and 14 metropolitan cities are already using ANPR (almost 94% of the total municipalities); full integration is expected by 2021.

This project aims to ensure full adoption of ANPR by increasing and improving the services available to citizens whose municipalities are already using or will use ANPR.

### 2. Benefits

The ANPR is a strategic project in the digital agenda that opens the way to new scenarios for digital public services, since a national database allows to standardize and automate the procedures relating to personal data, guaranteeing the certainty and confidentiality of the data.

With ANPR, administrations will be able to communicate efficiently with each other, having a single and certain source for data, without having to request them from citizens every time.

The advantages for the State are attributable to: considerable savings in hours / year of work; automatic and centralized access to timely and synchronized personal data; facilitation of verification and assessment activities; increased security on law enforcement controls.

ANPR will also allow citizens immediate benefits, such as the possibility of requesting personal certificates in all municipalities, obtaining a change of residence in a simpler and more immediate way, accessing their data in real time, requesting certificates from a single portal. Each update will be direct and immediate, being automatically communicated to other bodies such as INAIL, ISTAT (Italian National Institute of Statistics), the Revenue Agency, the civil motorization, health companies.

### 3. Key success factors

Collaboration between the Ministry of the Interior and the Department for digital transformation through the signing, since 2017, of specific Agreements as well as through the establishment within the Department of a Program Office, which has provided technical and operational support in implementation activities of the ANPR, provided for in the contracts between the Ministry of the Interior and Sogei SpA.

### 4. More information

More information can be found at: www.anpr.interno.it and www.innovazione.gov.it

### 2.4 Key Enablers

Key enablers are the fundamental building blocks supporting efficient, safe and easy eGovernment services. For the *Key Enablers* key dimension, this study assessed four indicators that together provide the maturity for a country for key enablers. The four indicators are

- *eID* (electronic identification) is, in the context of this study, a government-issued document for online identification, and authentication.
- eDocuments (electronic documents) are documents which have been authenticated by the issuer using any means recognised under

applicable national law, specifically through the use of electronic signatures, e.g. not a regular pdf or word document.

- Authentic Sources are base registries used by governments to automatically validate or fetch data relating to citizens or businesses.
- Digital Post refers to the option to receive communications digitally only, through e.g. personal mailboxes or other Digital Post solutions.

Figure 2.17 shows how mature Europe is for each of the four *Key Enablers* indicators and for each of the eight Life Events.

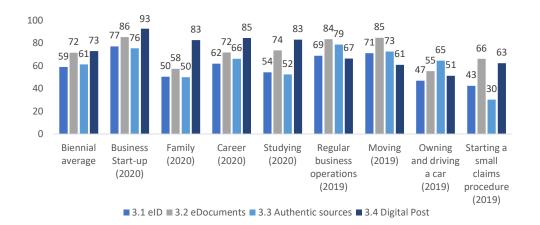
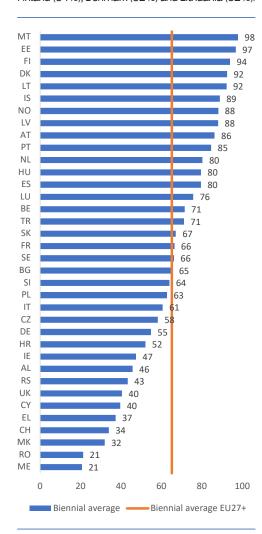


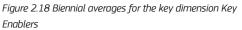
Figure 2.17 Scores of the indicators of the Key Enablers key dimension per Life Event

The biennial average for the **eDocuments** indicator is 72%, which means that users could submit or download eDocuments for seven out of ten services under evaluation. The Business Life Events offer users the option for downloading or submitting eDocuments most frequently: around 85% of the services facilitated use of eDocuments in these domains. Citizens that are moving houses can also download and submit eDocuments at 84% of the services in that Life Event.

Pre-filling of personal information is not yet the norm in Europe. In 61% of the services personal information was pre-filled from **authentic sources**. However, large differences exist between the Life Events. For instance, when *Starting a Small Claims Procedure* personal information is prefilled for just three out of ten services. Users applying for services relates to *Studying* and *Family*, also find their personal information prefilled for around half of the services. Entrepreneurs are facilitated better in this regard: while starting up their business, they find that their personal information is prefilled for three out of four services (76%) and while performing their regular duties, information is prefilled for 79% of services.

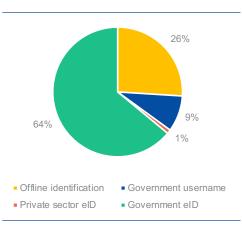
73% of the government portal websites offered users the possibility to communicate with their government via a **digital mailbox**. Especially aspiring business owners can often choose to have their communications with the government online (93%). Similarly, Career portals frequently have a digital mailbox, facilitating interaction between recently unemployed citizens and the responsible government authority. In Figure 2.18 the biennial average for the key dimension *Key Enablers* are presented. The average maturity for Europe for this indicator is 65%, implying that consistent use of key enablers to secure and solidify eGovernment is not yet the norm. Nevertheless, five countries score above 90% on this key dimension, namely: Malta (98%), Estonia (97%), Finland (94%), Denmark (92%) and Lithuania (92%).

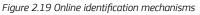




#### elDs

Electronic identification solutions or eIDs are like an online passport. Citizens can use their eID to prove their identity online. In a secure way, eIDs make it safer, faster and easier to access government services.





To start with, 91% of the services across Europe require any type of identification (either offline or online). Out of the services that require identification, 26% require to provide identification card in person, while 74% allow for online identification of any form. Depending on the country and administration different types of online identification mechanisms can be used. The percentage of online identification builds up the following specific online identification mechanisms:

- 64% allow for using an official national eID.
- 9% allow for using other online government mechanisms (e.g. organisation-specific account and password, matricule number).
- 1% allow for using private sector mechanisms (e.g. eBanking token),

Whenever logged online, **less than half of the services (44%) that require identification allow for single sign on** when switching between the websites of different competent authorities within one Life Event journey.

Europe's eID frontrunners are Malta, where 98% of the services can be accessed using the Maltese eID, followed by Iceland (97%), Estonia (96%), Finland (96%), Denmark (93%) and Norway (91%). The group of leaders is complemented by Portugal (89%), Lithuania (89%), Latvia (86%), the Netherlands (86%) and Austria (85%).

### Good Practice Portugal: Id.gov.pt

Relevant Key Dimensions: User Centricity, Key Enablers Life Events: Business Start-Up, Studying, Family, Career, Regular Business Operations, Moving, Transport, Starting a Small Claims Procedure

### 1. Good practice description

ID.GOV.PT is a pioneering digital wallet that allows citizens to use their smartphones to view, save and share certified versions of their identification documents, such as the national ID or the driving license. Its activation is secure and straightforward, based on an authentication with the Portuguese mobile eID, the eIDAS-compliant Digital Mobile Key (notified with a high level of assurance).

The digital documents generated by ID.GV.PT have the same legal validity as the original ones and can be validated through a QR code available on the app.

### 2. Benefits

- The possibility to generate and share digital documents with legal validity allows ID.GOV.PT's users to simplify their relationship with the State, through the convenience of a mobile device, while preventing the constraints of forgetting physical identification cards.
- Furthermore, the use of electronic identification solutions such as ID.GOV.PT has a positive impact at economic and environmental levels, considering the reduction of costs (e.g., administrative procedures, work/travel hours), the greater convenience, and the paper/energy savings.

### 3. Key success factors

- Having a strong eID ecosystem, supported by an interoperability platform that ensures secure data exchanged and reliable authentic sources of information as their basis.
- Taking advantage of the growing demand for mobile public services, allowing citizens a simpler and more convenient relationship with the State, further enhanced by a responsive, easy-to-use and minimalist design to optimize the user experience.

### 4. More information

More information can be found at: https://id.gov.pt/

### 2.5 Cross-Border Services

The key dimension *Cross-border Services* comprises four indicators: *Cross-border Online Availability, Cross-border User Support, Cross-border eID*, and *Cross-border eDocuments.* Taken together, these indicators paint a comprehensive picture of digital government services for cross-border users.<sup>3</sup> How well are users served in countiries that they do not have the identity of?<sup>4</sup> Figure 2.20 presents the biennial averages for the *Cross-border Services* key dimension. The EU27+ average is just 55%, meaning that cross-border users encounter a multitude of problems when trying to obtain government services or support online. Fifteen countries obtained a score lower than 50%. Nevertheless, there are a couple of notable exceptions: Malta scores 90%, followed by Luxembourg (89%) and Estonia (83%). In these countries, cross-border citizens are rarely

<sup>&</sup>lt;sup>3</sup> With cross-border users we mean users that try to obtain a service in a country that they are not a national citizen of. This does not mean that the user is still living in another country. The cross-border user could have lived in their 'new' country for years, but just not have the national identity of the new country.

<sup>&</sup>lt;sup>4</sup> After the method update, the top-level benchmarks Business Mobility and Citizen Mobility were combined into the key dimension Cross-border Services.

constrained by their nationality in their dealings with government authorities online. Diving into specific questions provides a clearer question of the difference in service delivery towards crossborder users and national users.

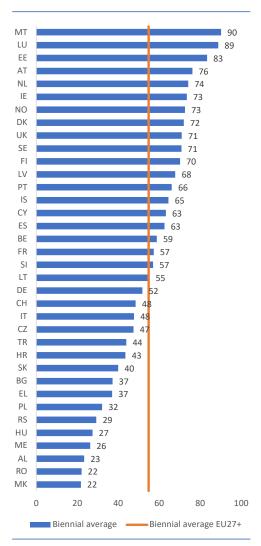


Figure 2.20 Biennial averages for Cross-border services, per country

Figure 2.21 compares the questions for national users with cross-border users. **Only 75% cross-border users can find information about government services online**, compared to 98% for national users. Moreover, 81% of the government services under evaluation could be completed online, compared to just 45% of cross-border services.

			-8
-	Is information about the service available online?	98%	75%
$\odot$	Is the actual service available online?	81%	43%
ዲ <sub>6</sub>	Are complaint procedures available for users?	85%	56%
	Can you use your national eID to identify yourself?	64%	24%
æ	Is it possible for the user to submit or download official documents required for the service?	72%	46%

Figure 2.21 Differences in service delivery for national and cross-border eGovernment

### Receiving international user support

When users want to notify their government of certain problems, an online complaint procedure is a valuable tool. However, only 56% government portals provide such a complaint procedure for cross-border users, whereas national users can access complaint procedure 85% of the time.

#### **Completing Services Cross-border**

Cross-border users want to complete services online, as 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 large burden, especially for relatively common and easy services. Figure 2.22 shows for each country which percentage of their services is 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 differences between online services for nationals compared to online services for non-nationals are substantial: for just five countries (Malta, Estonia, Luxembourg, Sweden and Ireland) the difference in services online for national users and cross-border users is less than 20 p.p. 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

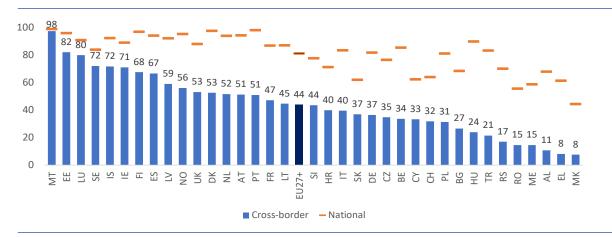


Figure 2.22 Possibility to complete service online, national and cross-border

### Using your eID in other countries

Ideally, someone's national eID does not only give access to online services in their own country. It should also provide a means to identity oneself to 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 of a passport. Specifically, already in 2014, the Commission launched the eIDAS regulation<sup>5</sup> on electronic identification and trust services for electronic transactions in the European Single Market.

Figure 2.23 presents the adaptation of eID in Europe. For all cross-border services where authentication is required, only in one out of four

(24%) cross-border services it was possible to login with an eID from another country. It seems that cross-border eID is not yet the norm in Europe. Even top-performing countries, such as Malta and Estonia, facilitate the use of non-national eID in less than 65% of their services. As it stands, the eID is not yet the digital passport it will hopefully become in the future.

### Providing and obtaining documentation across borders

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%).

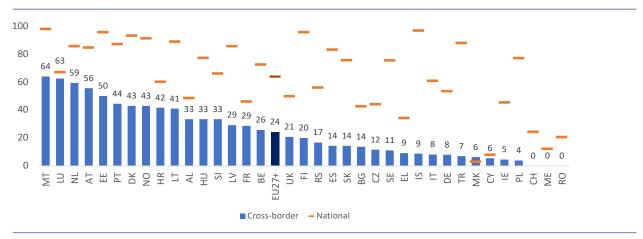


Figure 2.23 Possibility to authenticate with eID, national and cross-border

<sup>5</sup> More information can be found via the following link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:0J.L\_.2014.257.01.0073.01.ENG

### Good Practice Serbia: Living in Serbia

Relevant Key Dimensions: Cross-Border Services, Key Enablers, User Centricity, Transparency Life Events: Moving, Business Start-Up

### 1. Good practice description

The Living in Serbia service on the eGovernment Portal enables a foreigner to electronically submit a request for approval / extension of temporary residence in the Republic of Serbia. The foreigner is registered on the Portal using a secure means issued under the scheme of electronic identification compliant with eIDAS regulations). The request includes the basis on which the person seeks residence (schooling, employment, family reunification, etc.). The Ministry of the Interior, ex officio, checks the relevant facts electronically and determines the basis for the residence permit in a reliable and fast manner. If the reason for the stay is work in the Republic of Serbia, the decision on the request for obtaining a work permit is made at the same time (one stop shop). In that way, the residence permit is combined with the work permit. Upon approval, the person receives the foreigner registration number, which enables him or her to use other electronic services and thus exercise other rights in the Republic of Serbia.

#### 2. Benefits

- Submitting requests and monitoring status online (without physically coming to the institution)
- Waiting for a residence permit in the person's country, outside of Serbia (without the cost of staying in the Republic of Serbia and waiting for the finalization of the procedure which could last up to two months)
- Establishing facts ex officio in a reliable and secure manner that makes the procedure more efficient and transparent
- Applying online for other rights using e-services

#### **3**. Key success factors

- Electronically connecting official records
- Enabling registration and authentication of foreigners using eIDAS compliant means of
  electronic identification on the national eGovernment Portal

### 4. More information

More information can be found at: https://livinginserbia.gov.rs/

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

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 insights and results from the eGovernment Benchmark feed into the European Commission's Digital Economy and Society Index (DESI). The DESI tracks the progress the European countries make with their digital transformation and comprises indicators across four dimensions for digital transformation: Human Capital, Connectivity, Integration of Digital Technology and Digital Public Services.<sup>6</sup> Selected data from the eGovernment Benchmarks is captured in the Digital Public Services dimension. The following DESI indicators use data from the eGovernment Benchmark.

Pre-Filled Forms: 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 Citizens: 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 indicator measures to what extent services or information concerning services for citizens are provided online, and via a government portal.
- Digital Public Services for Businesses: this DESI indicator is based on the biennial average from the eGovernment Benchmark indicator 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 citizens are provided online, and via a government portal.

Figure 2.24 shows the results for the DESI Pre-Filled Forms indicator, with an EU27+ average of 61%. Estonia, Finland and Malta lead with 97% of all online forms that require personal information are pre-filled with the user's personal data. From a user perspective this is helpful, as it reduces the chances of errors and improves the process of completing online forms.

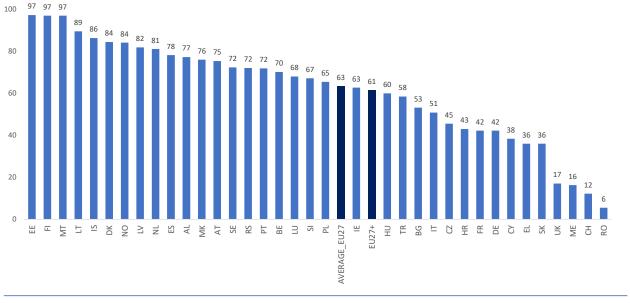


Figure 2.24 EU27+ scores for the DESI Pre-filled Forms indicator

<sup>&</sup>lt;sup>5</sup> https://digital-strategy.ec.europa.eu/en/policies/desi

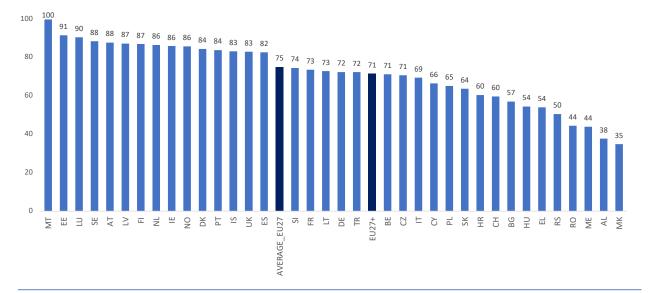
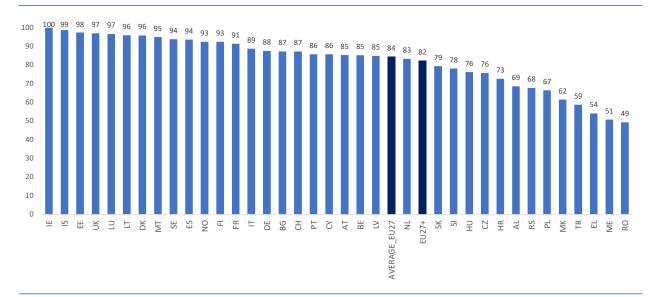


Figure 2.25 EU27+ Scores for the DESI Digital Public Services for Citizens indicator

Figure 2.25 shows the results for the DESI Digital score for the EU27+ is 71%, with Malta as a leader with 100%, followed by Estonia and Luxembourg with 91 and 90%. This means that all or nearly all services targeting citizens can be completed online in these countries, allowing users to fulfil the majority of their government requests digitally.

Figure 2.26 shows the results for the DESI Digital

average stands at 82%. The highest performing countries in this area are Ireland with 100%, closely followed by Iceland and Estonia with 99% and 98%. In these countries all business government services can be complete online in principle. Interestingly, Ireland and Iceland scored higher in this area than for the Digital Public Services for Citizens indicator. Services for starting a business and handling or declaring corporate taxes and VAT are particularly advanced in these countries.



Public Services for Businesses indicator. The EU27+

## Public Services for Citizens indicator. The average

36

Figure 2.26 EU27+ Scores for the DESI Digital Public Services for Businesses indicator

2

# **3. Business Start-Up**

"I want Europe to be a place where innovators can thrive. A place where **start-ups** can grow into giants ."

European Commission President, Ursula von der Leyen



# 3 Business start-up

Small and Medium sized Enterprises (SMEs) play a pivotal role in the European economy. In total, SME's make up over half of the European economy, they employ around 100 million people and they represent 99% of all European enterprises.<sup>7</sup> Moreover, SMEs drive innovation in many fields, such a sustainability and digitalisation.

Given the importance of SME's, facilitating them in their businesses, becomes a knife that cuts in both ways: business owners can optimise their enterprises, whereas governments reap the benefits from economic growth, spurred by the businesses. In this light, digital government for business owners is a key component of a thriving digital economy.

The eGovernment Benchmark study evaluates two Life Events for businesses: *Business Start-up* and *Regular Business Operations*. The *Business Start-up* Life Event is evaluated each odd year since 2013, whereas the *Regular business operations* Life Event was evaluated in the even years, starting from 2012. In a methodology

### Shortened Persona Business start-up

Carl, 45 years, is starting his own restaurant. He has found information online to create a business plan and to help him prepare to set up his business. He made sure to obtain necessary administrative requirements online. Furthermore, Carl has found out that his business must comply with environmental regulation concerning handling of waste. Applying for this permit is easily possible through the website of the local community. Carl's restaurant is going well, and he wants to hire new staff. Luckily, information and the necessary actions needed as regards taxes and employment services are available online. After a successful first year, Carl wants to open a new restaurant in his favourite holiday destination. He does not encounter any barriers, such as languae or authentiation problems, in doing so.

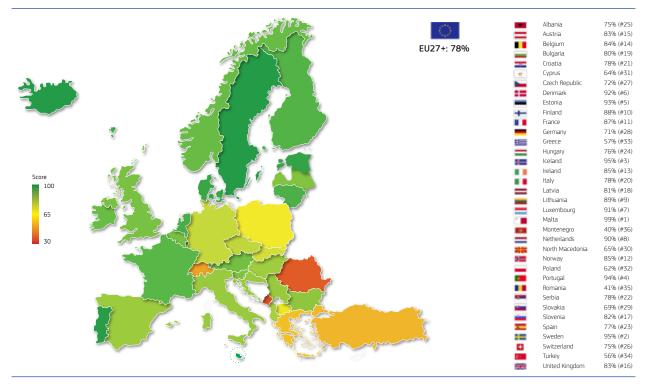


Figure 3.1 Scores for the Life Event Business Start-up, based on average of all four key dimensions

update from 2020, the services evaluated in the Life Events changed substantially, limiting comparability with earlier years.

Figure 3.1 shows how each country scored for the Life Event *Business Start-up*. The EU27+ average lies at 78%, showing that most European countries already facilitate aspiring business owners online. The most matured European countries in this Life Event are Malta (99%), Iceland (95%), Sweden (95%) and Portugal (94%). Moreover, another five countries score above 90% for this Life Event, showing Europe's maturity in this field.

### 3.1 User Centricity

The User Centricity key dimension focusses 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 Business start-up Life Event.

### **Online availability**

The score for the indicator *Online Availability* is 95%. The score of this indicator is based on the availability of information about a service online, the possibility to complete the service online and the possibility to find the website via a government portal.

Figure 3.2 shows the online availability of information and the actual service, and the mobile friendliness per service in the *Business Start-up* Life Event. Looking at the average of the *Business Start-up* Life Event shows that Europeans can complete more than nine out of ten services for starting a business online (91%). For the services that are currently not online, starting business owners can at least find information online about how the services can be requested in person (9%). The number of services where European entrepreneurs could not complete the service, nor find information about the service is negligible.

The services that are most often online are *Get* guidance with how to arrange healthcare insurance and Register your company as an employer. Both are important and interesting services. Especially

#### Online Availability



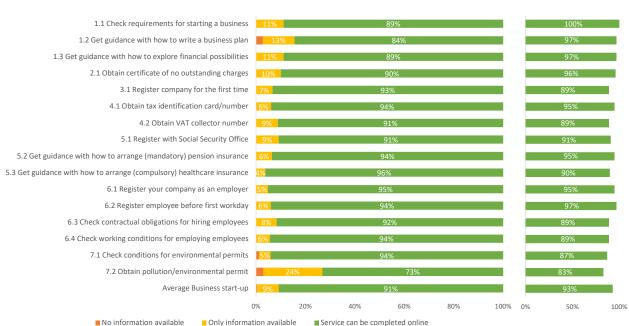


Figure 3.2 Online availability and Mobile Friendliness per services for the Business Start-up life event

during the past year, being fully insured for medical problems seems vital. And, registering yourself as an employer is a key-service for a growing business. By enabling entrepreneurs to complete these services online, governments help to save entrepreneurs' valuable time.

In the *Business Start-up* Life Event, there is one service that could substantially benefit from improvements in digital government in the following years. In one out of four countries, it is currently not possible to obtain an environmental permit (e.g. for waste handling) online. Moreover, in 3% of the countries, information about how to request an environmental permit is not yet available.

### **Mobile Friendliness**

Nine out of ten government websites for *Business Start-up* are optimised for use with smartphones. Impressively, in all countries the website with requirements for starting a business is available on a mobile friendly website. This study finds that websites related to environmental websites are least mobile friendly.

### **User Support**

The average score for the *User Support* on portals evaluated for the *Business Start-up* life event is 94%. Notable is that 94% of the portals in this life event offered had feedback mechanisms available, which is higher than any of the other life events.

### 3.2 Transparency

Transparency comprises the 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**

Figure 3.3 show how often service websites provide users features that make the service process more transparent and understandable. More than nine out of ten services in the *Business Start-up* Life Event send users a delivery notice upon completion of the service. Moreover, in three out of four cases service websites provide a progress tracker, which helps users to know how many steps they still need to complete. Entrepreneurs are sometimes kept in the dark about the estimated time of the process duration (available on 59% of websites). Moreover, information about actual service performance, such as a satisfaction score, is available on less than half of the websites.

Websites where business owners can obtain a tax identification number are the most transparent. To

Services	Delivery Notice	Progress tracker	Draft possibility	Estimation of process duration	Delivery timelines clear	MAximum time limit set	Information about service performance
2.1 Obtain certificate of no outstanding charges	97	58	54	58	82	80	35
3.1 Register company for the first time	96	78	75	61	86	80	77
4.1 Obtain tax identification card/number	100	88	82	83	86	80	77
4.2 Obtain VAT collector number	97	79	79	65	76	74	65
5.1 Register with Social Security Office	93	75	72	64	70	76	48
6.1 Register your company as an employer	97	77	71	52	76	70	45
6.2 Register employee before first workday	96	81	74	56	81	70	41
7.2 Obtain pollution/environmental permit	72	62	57	38	51	48	29
Average Business start-up	93	75	71	59	76	71	47
Highest score Lowest score							

Figure 3.3 European averages for features for transparent service delivery throughout Europe

name a couple of the features of such websites: in all countries entrepreneurs receive a delivery notice upon completion of their request for a tax identification number and in more than five out of each four countries work can be saved as a draft for this service, meaning that entrepreneurs can return to their work on a later moment. 71% of all government websites for business services have a draft possibility on their websites.

Service websites where business owners can obtain an environmental permit are often lacking features that make the service process more transparent. For instance, in only four out of ten countries, users a provided with an estimation of the process duration and in just half of the countries the delivery timelines between the request and the delivery of the permit are made clear.

### **Transparency of Personal Data**

The *Business Start-up* portals score 75% for the *Transparency of Personal Data* indicator. Moreover, looking at the underlying questions, entrepreneurs can modify their personal data online in nine out of ten countries (89%), showing that governments enable entrepreneurs to be in control of their own data.

#### Transparency of Service Design

The *Transparency of Service Design* indicator for the *Business Start-up* Life Event scores 62%. Entrepreneuers are often informed about the policy making process (97%) and the service design process (63%), but information on how to participate in the policy making process (50%) or the service design process is often lacking (36%).

### 3.3 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.

### elD

Figure 3.4 shows to what extent entrepreneurs are able to use their eID for services in the *Business start-up* Life Event. In eight out of ten services business owners can use their national eID to request a service online (82%), whereas in another 8% of the services, online authentication is possible, albeit not with an eID. In this case, think for instance about a municipality where a separate account needs to be registered. In one out of ten services for this Life Event, no online authentication was possible, meaning that the user needs to go to a government office to authenticate in person.



Figure 3.4 Authentication possibilities for services in the Business start-up Life Event if authentication is required

A number of services have the possibility of authentication with eID in almost all European countries. The services *Obtain a tax identification number, Register your company as an employer* and *Register employee before first workday* facilitate eID use in over 85% of the countries. Moreover, to register an employee online needs physical authentication in 4% of the countries.

Even within the *Business start up* Life Event, there are services where eID uptake can be improved. For instance, the service *Obtain certificate of no outstanding taxes* requires online authentication, but not with eID in 21% of the countries. Such online authentication is often less secure than a national eID. For the service *Obtain environmental permit*, business owners needed to visit the city council most often: in 1 out of 5 countries no online authentication was possible.

### eDocuments & Authentic Sources

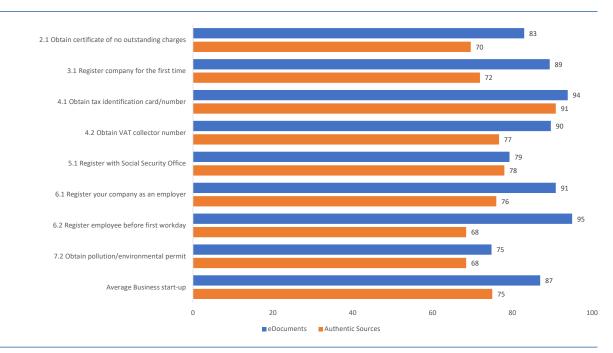
Figure 3.5 shows the score per service for the indicators *eDocuments* and *Authentic Sources*. For 86% of the *Business Start-up* services users can submit or download eDocuments that are required for the service. Three out of four services facilitate entrepreneurs by prefilling personal information, saving business owners valuable time.

Submitting and downloading eDocuments is especially easy for business owners when they need to obtain a tax identification number or when an employee needs to be registered for his or her first workday. In 94% and respectively 95% of the countries, such a functionality exists. When obtaining an environmental permit, this option is available for three out of four countries, meaning that entrepreneurs in a quarter of the countries still need to deviate to non-digital means.

Business-owners enjoy that personal information is prefilled in 91% of European countries, when obtaining a tax identification number. Nevertheless, in a number of countries in Europe entrepreneurs still have to provide all information themselves. Especially when registering a new employee, or when obtaining an environmental permit, users are left to themselves. In seven out of ten countries personal information is prefilled for these services.

### **Digital Post**

Entrepreneurs can use their digital mailbox to safely communicate with their governments in 93% of the countries for this Life Event. Especially when discussing private matters, such as tax declarations, a digital mailbox offers clear benefits.



*Figure 3.5 eDocument and Authentic Sources per service for the Business Start-up life event* 

### 3.4 Cross-border Servicess

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: Online Availability of cross-border services, User Support on cross-border portals, Cross-border eID and Cross-border eDocuments. These indicators measure if services are available online, if there is sufficient User Support and if key enablers like eID and eDocuments work for people living or coming from abroad.

### Online Availability of Cross-border services

Figure 3.6 shows to what extent cross-border services are made available for the Business Start-up Life Event. Cross-border users can complete half of the services under evaluation online. For another quarter of the services foreign entrepreneurs can find information about a service, but completion of the entire service is not possible. For the last quarter of the evaluated services, the service cannot be completed online, nor is any information about the service provided in English or another language than the official language of the country. A lack of information in English and services being only available for login with a national eID are named often as barriers towards cross-border service completion.

A number of services are available for crossborder users in a lot of countries: the services *Obtain tax identification number, Obtain VAT collection number,* and *Register with Social Security Office* can all be completed online in more than two third off all countries.

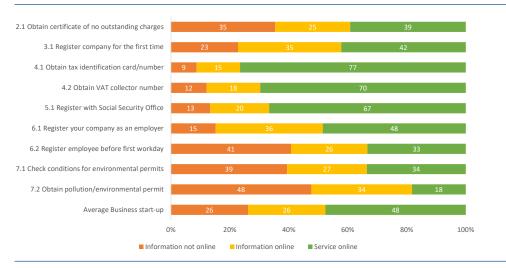


Figure 3.6 Cross-border online availability of Business Start-up services

Entrepreneurs that need to register an employee are often less fortunate: only one in three countries has made this service only available. The environmental permit services are also often not online. For these services a physical visit is still required.

#### **Cross-border User Support**

User support for non-national users is at a very high level for aspiring entrepreneurs. The score

for the *Cross-border User Support* indicator is 88%. Moreover, all countries have a help functionality available for citizens from other countries, to help them set up a business.

### Cross-border eID and eDocuments

Figure 3.7 shows how often entrepreneurs can use an eID for *Business Start-up* services, both from a national<sup>8</sup> as well as a cross-border perspective.

<sup>&</sup>lt;sup>8</sup> For national eID the score to question "F3: if it is possible to authenticate online, can you use your eID?" was taken instead of the score of the indicator, to ensure a valid comparison. The indicator score for national eID is a composite indicator of online authentication, eID and Single Sign On (SSO). For cross-border eID we used question I2: If an authentication is needed for a cross-border service, is it possible to authenticate online using your national eID.

Authentication with eID per service		-E
2.1 Obtain certificate of no outstanding charges	71%	29%
3.1 Register company for the first time	81%	23%
4.1 Obtain tax identification card/number	89%	81%
4.2 Obtain VAT collector number	82%	64%
5.1 Register with Social Security Office	85%	55%
6.1 Register your company as an employer	87%	33%
6.2 Register employee before first workday	88%	6%
7.2 Obtain pollution/environmental permit	73%	7%
Business Start-up Average	82%	37%

Figure 3.7 Comparison eID for Business Start-up services, national and cross-border

On average, almost twice the services offer authentication with national eID compared to Cross-border eID. Moreover, for the services *Register employee before first workday* and *Obtain environmental permit the use of cross-border* eID is still very much in its infancy. For both services, less than 10% of the countries facilitated use of non-national eIDs. On the other hand, when obtaining a tax identification number, or a VAT collector number, foreign entrepreneurs seem to be able to use their cross-border eID.

Figure 3.8 illustrates to what extent users can submit or download eDocuments from both a cross-border and a national perspective. The differences between national and cross-border possibilities for eDocuments is substantially smaller than for *Cross-border eID* and *Crossborder Online Availability*. For 87% of the national services eDocuments could be downloaded or submitted, vis-à-vis 63% of the cross-border services. One of the first steps for starting a business in another country is to *Register your company for the first time.* It seems that this service is a stumbling block as regards eDocuments. Only in half of the countries aspiring business-owners could download or submit eDocuments. This result is remarkable given that the option is available in nine out of ten countries for national users. Cross-border users that want to *Register an employee before their first workday* are even less likely to be able to download or submit the required documents: entrepreneurs could find this option in just 45% of the countries.

Opportunity to submit or download eDocuments, per service		-0
2.1 Obtain certificate of no outstanding charges	83%	56%
3.1 Register company for the first time	89%	50%
4.1 Obtain tax identification card/number	94%	87%
4.2 Obtain VAT collector number	90%	84%
5.1 Register with Social Security Office	79%	78%
6.1 Register your company as an employer	91%	58%
6.2 Register employee before first workday	95%	45%
7.2 Obtain pollution/environmental permit	75%	48%
Business Start-up Average	87%	63%

Figure 3.8 Comparison eDocuments for Business Start-up services, national and cross-border

### 3

### Good Practice Lithuania: Online pre-acceleration program "Startup Guide"

Relevant Key Dimensions: User Centricity, Key Enablers Life Events: Business Start-Up, Studying, Career

### 1. Good practice description

Free of charge online pre-acceleration program, launched by national startup ecosystem facilitator "Startup Lithuania" (Enterprise Lithuania) to encourage create global innovative businesses (startups), offering basic information, video lessons and templates needed from idea to investment attraction and going to market.

### 2. Benefits

- Accessible for everyone anytime.
- 500 students in 10 months.

### 3. Key success factors

- Demand for such information in Lithuania (based on the questions that Startup Lithuania receive from potential and existing startup founders).
- Actual, structured content.

### 4. More information

More information can be found at: https://startupguide.startuplithuania.com/



### " We must focus our efforts on skills and training to adapt to the post-COVID-19 **labour market**."

Nicolas Schmit, Commissioner for Jobs and Social Rights



## 4 Career

Having a job is a source of financial stability for many people. Consequently, getting fired, or stopping with work for another reason can be challenging. Finding a new job is not always easy. This Life Event assesses the extent to which citizens are facilitated by their governments throughout the journey of becoming unemployed, applying for unemployment benefits and finding a new job.

*Career* is one of the six Life Events the eGovernment Benchmark assesses for citizens. The *Career* Life Event was first measured in 2012 and reported on in 2013. This year, however, is the first year when services from the *Career* Life Event are also evaluated from a cross-border perspective. Is it just as easy to apply for unemployment benefits when someone does not speak the native language? Or do not have a national eID?

Figure 4.1 shows the average of all four key dimensions of all of the countries under evaluation. The average maturity of the EU27+ countries is 67%, which makes it more mature than Family, but less mature than Business Start-up and Studying.

### **Shortened Persona Career**

Marc, 29 years, lost his job recently. He registers himself as unemployed and he applies for unemployment benefits. He wonders how much benefits he is entitled to and for how long, and searches for this information in his personalised file.

He finds out there are several possibilities to get help and support from the government for his regular costs on housing and he also applies to receive additional benefits to cover other expenses. Marc obtains information about the labour market and information on recruitment fairs. To increase his chances, he seeks help for assistance by a public officer.

As Marc lives close to the border, he is also looking for work across the border, where he tries to obtain similar services as in his home country. At the same time, Marc's mom reaches the entitled age for receiving her pension. After being in contact with government himself, Marc decided to help her applying for her pension.

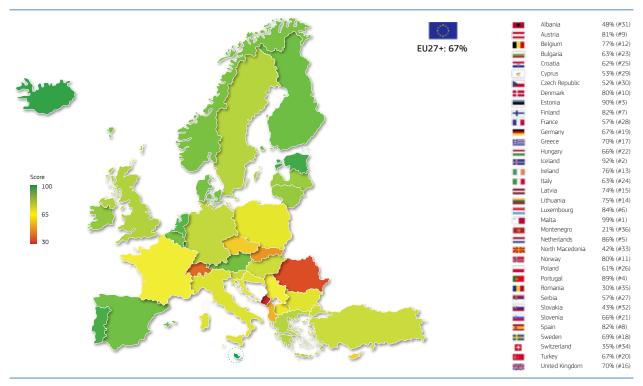


Figure 4.1 Country averages of all key dimensions for the Career Life Event

Malta has the most mature eGovernment for *Career* services, with a near perfect score of 99%. Other countries that are performing well in this domain are Iceland (92%), Estonia (90%) and Portugal (89%). In these three countries, recently unemployed citizens can complete most of their interactions with the government safely online.

### 4.1 User centricity

The User Centricity key dimension focusses 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 Career Life Event.

### **Online Availability**

Figure 4.2 shows the extent to which services in the *Career* Life Event are available online for national citizens and whether the websites are optimised for use with mobile phone.

Three out of four services evaluated for this Life Event can be completed online (76%), showing that most Europeans that become unemployed do not have to visit an employment agency or municipality office. Of the services that cannot be completed online, government often do provide information on how to complete the service. There was no information online available for just 3% of the services evaluated in this Life Event.

Income taxes can be declared online in 94% of European countries, which is one of the services that is digitalised across Europe most often. Also, when Europeans are nearing their retirement, they are facilitated well online by their governments. In 93% of the European countries, citizens can find the exact height of the future pensions. Moreover, in more than eight out of ten European countries citizens can apply for their pension online.

Unemployed Europeans often encounter digital barriers when they need to fulfil certain tasks to keep their unemployment benefits. For instance, in most European countries, unemployed citizens need to submit evidence that they are looking for work regularly. However, in just half of the countries (52%), this evidence can be submitted online. When unemployed citizens are not in the position to look for work, for instance because they are currently ill, then they need to register why they did not look for work. This service is also offline in half of the European countries where this service

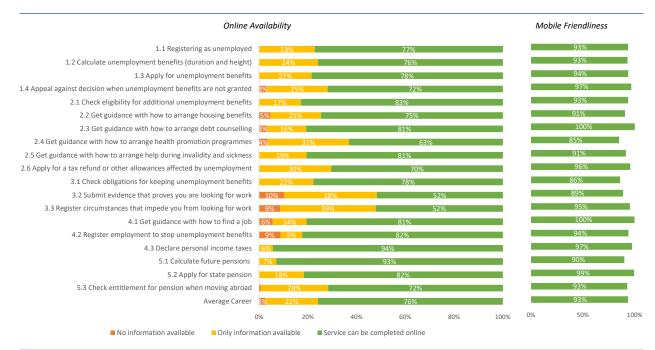


Figure 4.2 Online availability and mobile friendliness of services in the Career Life Event

is relevant. In short, unemployed citizens could be facilitated better in their digital interaction with the government to keep their unemployment benefits.

### Mobile Friendliness

Figure 4.2 also showes the *Mobile Friendliness* of all services in the Career Life Event. 93% of the services for people that are losing and finding jobs in Europe can be considered mobile friendly.

Get guidance with how to arrange debt counselling was a mobile-responsive website in all countries. People in need for financial help, can take the first steps on their mobile phone. People who need help in finding a new job are also well facilitated on their mobile phone. In all European countries, citizens can use their smartphones to look for guidance on how to find a job.

#### **User Support**

Government portal websites for the unemployed have may support functionalities. The *User Support* indicator for this life event has the highest score (94%) of the four life events under evaluation this year. Moreover, almost all countries (97%) have a social media page available via their portal, which users can use for extra information.

### 4.2 Transparency

Transparency comprises the 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**

Figure 4.3 shows how often service websites in the *Career* domain provide users features that make the service process more transparent and understandable. In more than nine out of ten services, users obtain a delivery notice, ensuring them that their request was completed. However, many of the other features that make the service process transparent are often lacking. For instance, just half of the services (52%) make the delivery timelines clear. And less than half of the services (48%) provide users information about a maximum time limit set for delivery. Furthermore, less than one in three *Career* services provide information about the performance (e.g. a satisfaction score) of the service itself.

Two services are relatively transparent across Europe in terms of transparent services delivery. 89% of the countries provide citizens that are doing their personal income taxes with a progress tracker to show how many steps they still need to take towards completion. Additionally, 83% of the European countries give citizens the opportunity to continue their income declaration on a later point

Services	Delivery Notice	Progress tracker	Draft possibility	Estimation of process duration	Delivery timelines clear	MAximum time limit set	Information about service performance
1.1 Registering as unemployed	99	75	61	57	65	57	37
1.3 Apply for unemployment benefits	900	66	58	47	62	53	31
1.4 Appeal against decision when unemployment benefits are not granted	85	37	39	31	53	47	25
2.6 Apply for a tax refund or other allowances affected by unemployment	89	61	57	40	56	52	52
3.2 Submit evidence that proves you are looking for work	100	43	48	28	41	31	24
3.3 Register circumstances that impede you from looking for work	91	41	41	22	30	30	9
4.2 Register employment to stop unemployment benefits	92	66	59	41	53	41	26
4.3 Declare personal income taxes	97	89	83	36	56	69	39
5.2 Apply for state pension	86	63	68	36	47	50	28
Average Business start-up	92	60	57	38	52	48	30

Figure 4.3 European averages for features for transparent service delivery for services in the Career Life Event

in time, by offering the possibility to save work as a draft. *Registering as an unemployed* is also relatively transparent; in two out of three countries the delivery timelines are made clear (65%) and in 57% of the countries an estimation of the duration of the request of the service is provided. Although these numbers leave ample room for improvement, they are also substantially higher than the average of this life even.

When appealing against a decision when unemployment benefits are not granted, citizens do often not get to see a progress tracker to find where they are in the process (39%) and in less than four out of ten countries it is not possible to save your work as a draft (37%). For citizens that need to register circumstances that impede them from looking for work, only 22% of European countries provide an estimation of the duration of this process, which shows a real possibility for improvement.

### **Transparency of Personal Data**

The *Career* Life Event obtains the second highest score (74%) of this year's life events for the *Transparency of Personal Data* indicator. Portals for the *Career* Life Event often have a complaint procedure available for users that are concerned that their personal data is used in an inappropriate way (86%).

#### Transparency of Service Design

Portals for the *Career* Life Event obtain an average score of 63% for the *Transparency of Service Design* indicator. Again, a stark difference arises between providing information about policy making and service design, and actually enabling citizens to participate in policy making and service design.

### 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.

### elD

Figure 4.4 shows the authentication possibilities for services in the *Career* Life Event. For almost three out of ten services in the Career domain, users still need to authenticate offline (27%), meaning that they have to bring their passport to a government building. On the other hand, in two out of three services, citizens can use their eID to authenticate safely and securely online.

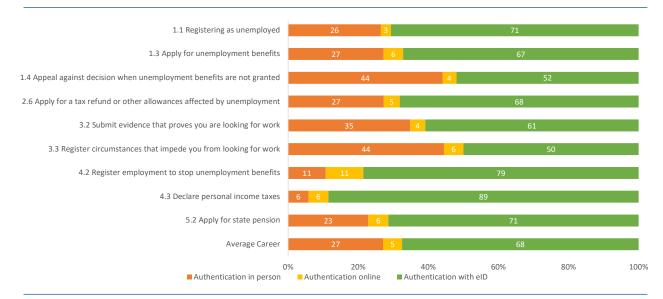


Figure 4.4 Authentication possibilities for services in the Career Life Event if authentication is required

In nine out of ten countries citizens can use their eID when declaring personal income taxes. Also, when ending unemployment benefits, users can often use their eID to authenticate for the service (79%).

For other *Career* services online authentication is not yet the norm in Europe. When appealing against a decision when unemployment benefits were not granted, or when registering circumstances that impede from looking for work, users still need show their passport in person in almost half of European countries.

### eDocuments & Authentic Sources

Figure 4.5 shows for which services in the *Career* Life Event the possibility exists to submit or download eDocuments that are required for a service and how often personal information for users is prefilled.

Citizens could submit or obtain eDocuments online in seven out of ten (70%) in this Life Event where such documentation was required. For the services where eDocuments could not be uploaded or downloaded, users were left with sending or receiving the relevant documents via regular mail.

Users could submit or download eDocuments in 93% of the countries when doing their personal income taxes. Other services that often facilitated

eDocuments are *Registering as unemployed* and *Apply for a tax refund or other allowances affected by unemployment* (both 74%).

However, for many other services, the current state-of-play is not as bright. Especially services that enable citizens to keep their unemployment benefits, being *Submit evidence that you are looking for work* (60%) and *Register circumstances that impede you from looking for work* (42%) often do not provide users with a website feature where important documents can be submitted or downloaded.

For 68% of the services in the *Career* domain, personal information is prefilled via authentic sources. Especially for services where large amounts of personal information are required, prefilling of information is a worthwhile exercise. An example of such a service is *Declare personal income taxes*. In 88% of the countries at least some of the personal information is prefilled while obtaining this service. Citizens who recently found a new job are also well supported in this regard: in more than eight out of ten countries information was prefilled for citizens when they registered employment to stop their unemployment benefits.



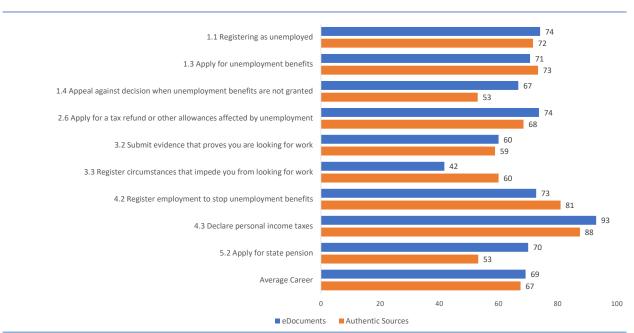


Figure 4.5 Average indicator scores for eDocuments and Authentic Sources per Career service

53

unemployment benefits users had to often enter all of their personal information themselves: in around half of the countries information was prefilled for this service (53%). Citizens that want to apply for their pensions also often need to find all their information themselves. In 53% of the countries no information is prefilled when applying for a state pension. It seems that information sharing between government bodies responsible for working citizen and government bodies responsible for elderly citizens can be improved to enable reuse of personal information.

### **Digital Post**

For 85% of the countries under evaluation, users can choose to receive all their communications with the government related to the services in the *Career* life event digitally.

### 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: Online Availability of cross-border services, User Support on cross-border portals, Cross-border eID and Cross-border eDocuments. These indicators measure if services are available online, if there is sufficient User Support and if key enablers like eID and eDocuments work for people living or coming from abroad. Cross-border User Support is not assessed in this deep dive into the Life Event, as this indicator refers to the policies and websites not directly related to or embedded in the service delivery.

### **Online Availability of Cross-border Services**

Figure 4.6 shows whether non-national citizens can obtain the same services online as nationals. It seems that a visit to the city council or municipality office is a regular trip when becoming unemployed in a foreign country, since one out of four services in the *Career* domain could be completed online. This means that seven out of ten services could not be completed online. Around half of the services that could not be completed online did offer information in a nonnative language about how the service could be obtained. For the other 35% the service could not be completed online, nor was any information in a nonnative language offered.

In four out of ten countries, cross-border users can complete their income tax declaration online (42%). Moreover, in 48% of the countries, cross-borders users could calculate the height and duration of their unemployment benefits, providing them an indication of their financial wellbeing in the coming months. However, after calculating the height and duration of unemployment benefits, non-national citizens can rarely apply for the unemployment benefits online, only in 17% of the countries.

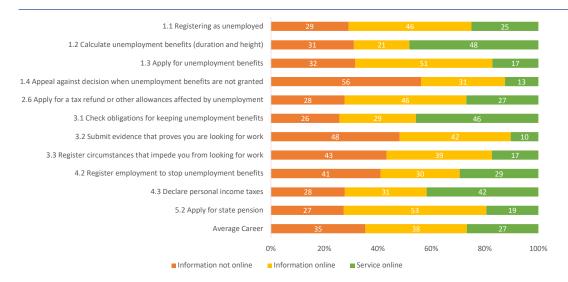


Figure 4.6 Cross-border online availability of Career services

Authentication with eID per service	俞	-0
1.1 Registering as unemployed	71%	9%
1.3 Apply for unemployment benefits	67%	15%
1.4 Appeal against decision when unemployment benefits are not granted	52%	15%
2.6 Apply for a tax refund or other allowances affected by unemployment	68%	39%
3.2 Submit evidence that proves you are looking for work	61%	20%
3.3 Register circumstances that impede you from looking for work	44%	20%
4.2 Register employment to stop unemployment benefits	79%	43%
4.3 Declare personal income taxes	89%	34%
5.2 Apply for state pension	71%	15%
Average Career	67%	23%

Figure 4.7 Comparison eID for Career services, national and cross-border

#### Cross-border User Support

User Support functionalities for cross-border users are not yet on the same level as for the national portals. Unemployed persons that do not have the national identity and do not speak the national language often encounter issues online. The score for the *Cross-border User Support* indicator for the Career Life Event is 60%.

### Cross-border eID and eDocuments

The use of non-national eIDs is still relatively uncommon for Career related services. Figure 4.7 shows that in online authentication with eID for cross-border users was available for 23% of the services, compared to 67% for national users.

This study finds that the service *Apply for a tax refund* has a cross-border eID functionality in four out of ten countries, more than any other service. This could indicate that services where tax authorities come into play, often have advanced eGovernment functionalities. For citizens that just

lost their job and want to register as unemployed, less than one out of ten countries made crossborder eID possible. 15% of the countries enabled citizens to use a cross-border eID when applying for unemployment benefits.

In Figure 4.8 presents how often cross-border users could download or submit eDocuments. Around half of the services offered a functionality for cross-border users where eDocuments could be submitted or downloaded when required. For national users, this functionality exists on 72% of services in the Career domain.

Non-national citizens could often submit or download eDocuments while declaring their income taxes (68%), which makes that services substantially easier. Currently, in only one out of five countries cross-border users can submit eDocuments while appealing against a decision about unemployment benefits, which leaves ample room for improvement. Improvement is also warranted for Europeans that want to retire cross-border: only 15% of the countries facilitate

Opportunity to submit or download eDocuments, per service		-8
1.1 Registering as unemployed	74%	31%
1.3 Apply for unemployment benefits	71%	37%
1.4 Appeal against decision when unemployment benefits are not granted	67%	20%
2.6 Apply for a tax refund or other allowances affected by unemployment	74%	46%
3.2 Submit evidence that proves you are looking for work	60%	22%
3.3 Register circumstances that impede you from looking for work	42%	33%
4.2 Register employment to stop unemployment benefits	77%	64%
4.3 Declare personal income taxes	93%	68%
5.2 Apply for state pension	70%	29%
Average Career	72%	46%

Figure 4.8 Comparison eDocuments for Career services, national and cross-border

authentication with cross-border eID and 29% facilitate submitting and downloading eDocuments for citizens applying for a state pension.

### Good Practice Estonia: Decision Support for the Unemployment Insurance Fund (OTT)

### Relevant Key Dimensions: User Centricity, Key Enablers Life Event: Career

### 1. Good practice description

As people turn to the Unemployment Office for support, OTT is a tool used by civil servants to improve the understanding of the clients' needs. It is an AI system that employs more than 100 000 client records to estimate the probabilities of different employment pathways, systematizes clients to provide support where it is most needed, and distributes the workload between civil servants.

### 2. Benefits

- The AI helps us to understand the probability of finding a job for the unemployed.
- The tool that estimates the probabilities of different employment pathways.
- Systematizes clients to provide support where it is most needed.
- · Distributes the workload between civil servants.

### 3. Key success factors

- The better usage of available data.
- · Continuous improvement of the system.
- Cooperation between the public and private sector.
- Problem-solving-oriented way of thinking.

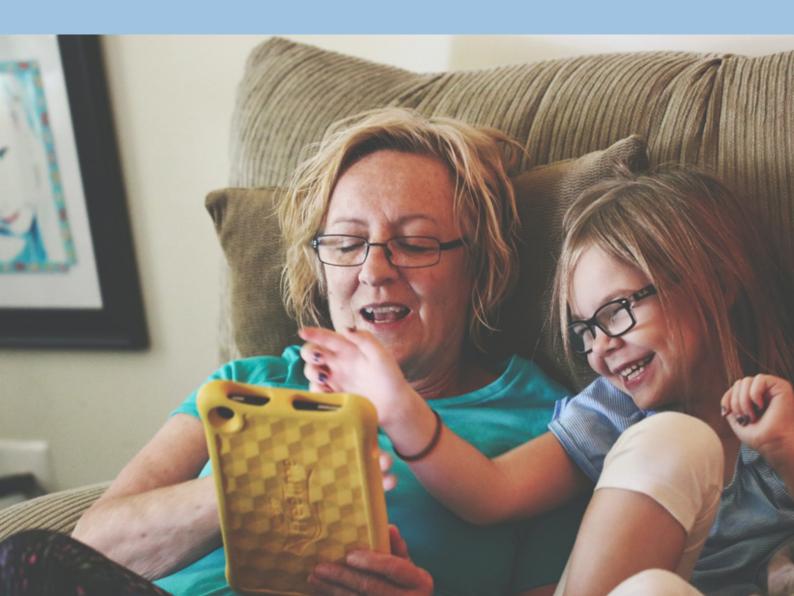
### 4. More information

More information can be found at: https://e-estonia.com/ai-to-help-serve-the-estonian-unemployed/ 4



### "The politics of today and tomorrow are made both for and together with our **children**."

Vice-President for Democracy and Demography, Dubravka Šuica



# 5 Family

This Life Event assesses services that citizens encounter in the personal sphere during their life. Think for example about giving birth, getting married, registering a divorce, and arranging a funeral. To what extent can citizens interact with their governments online for these services? The *Family* Life Event has been in the eGovernment Benchmark since the data collection of 2016, of which the report was published in 2017. The data is collected in the even years. This is the first year that the *Family* Life Event is assessed from a cross-border perspective.

### Shortened Persona Family

Fiona, 34, has just found out that she is pregnant and she and her partner Peter are over the moon. Fiona wants to know the practicalities of the pregnancy. For instance, how much maternity leave will she will get and whether it is paid or unpaid.

7 months later Fiona gives birth to a healthy boy, Steven. Fiona researches the amount of child allowance she will obtain and applies for the allowance. Fiona and Peter aren't married, and therefore Peter has not obtained parental authority when little Steven was registered. He therefore applies for parental authority.

Peter proposes Fiona to marry him, she accepts and they plan their wedding. On honeymoon, they realise they lost their child's birth certificate. They request a new certificate in order to get a passport for Steven. Fiona also realises that her passport is about to expire, so she applies for a new one.

Then suddenly, Fiona's dad passes away. Fiona must start arranging the funeral and necessary administrative processes.

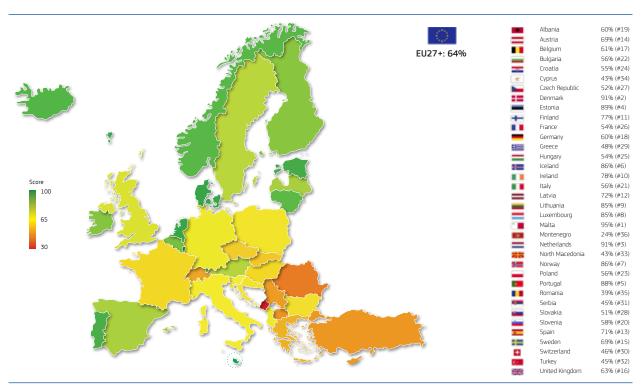


Figure 5.1 Country averages of all key dimensions for the Family Life Event

Figure 5.1 shows the maturity of each country for the *Family* Life Event. The European average is 64%, which makes it the least mature Life Event in this year's evaluation. Malta is the most mature country in this domain, with an average score of 95%. Denmark and the Netherlands are the runners-up, with 91% each. In these three countries citizens are facilitated well by eGovernment, meaning that personal services can be obtained easily, transparently and safely, for national users as well as for cross-border users. Eight countries score below 50% for this Life Event, which indicates that a visit to a government building is often required to obtain these services from the government.

### 5.1 User Centricity

**Online Availability** 

The User Centricity key dimension focusses 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 Family Life Event.

Figure 5.2 shows the extent to which services are

### online available and whether the service websites are mobile friendly for the *Family* Life Event.

63% of all services under evaluation in this domain could be completed online. For another 36% of the services, information could be found online, but completion of the services was not possible. For just 1 percent of the services in the *Family* Life Event neither was possible.

In nine out of ten countries, European citizens can obtain a birth certificate for their children online (89%), making this service the easiest to come by. Moreover in 86% of the countries, citizens could easily obtain a European Heath Insurance Card and find information and conditions for parental leave in their specific situation. Another service that is often online is *Apply for child allowance*. This service is delivered proactively in 25% of the countries (in Figure 5.2 this belongs under "service can be completed online"). Proactive child allowance means that as soon as a parent register their new-born child, they automatically receive child allowance.

Services that are currently not online in many European countries are *Register parental authority* 

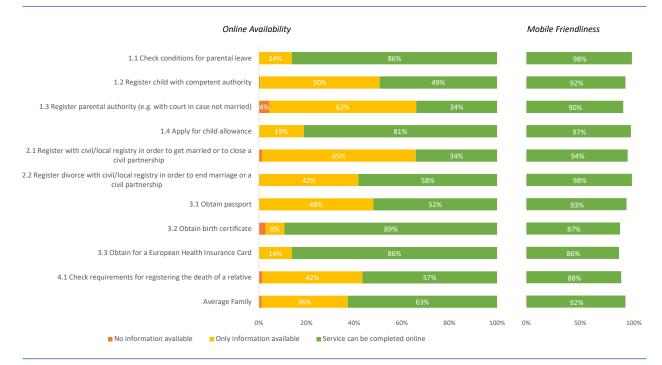


Figure 5.2 Online availability and mobile friendliness of services in the Family Life Event

and *Register in order to get married*. Both services are online in just one out of three countries (34%). Apparently, many countries still require a physical visit for such services.

### Mobile Friendliness

In most countries, users can comfortably use their smartphone to access government websites: more than nine out of ten websites for family related services are considered mobile friendly (92%). Especially the websites where soon-to-be parents can check conditions for parental leave and websites where citizens can register a divorce are mobile friendly. Obtaining a European Health Insurance Card is the most challenging service in this Life Event with a smartphone. In 86% of the countries the website for this service was optimised for mobile use.

### **User Support**

The government portals of the *Family* Life Event offer a range of functionalities to users to ask for help, contact officials, or voice their opinion. The score for the *User Support* indicator is 92%. Portals in the *Family* Life Event can be improved by offering more demo videos and instruction manuals. In 89% of the countries such a functionality is available, which is the lowest among this year's Life Events.

### 5.2 Transparency

Transparency comprises the 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

Figure 5.3 shows for each of the transactional services in the *Family* Life Event which features are made available to users to make the service process more transparent.

For eight out of ten services in this Life Event, users received a delivery notice upon completion (79%). Moreover, for 56% of the services delivery timelines was made clear, so users knew how much time it would take before the service was delivered. All other functionalities that enhance transparency of the service process were provided on less than half of the service websites. What is especially lacking is the possibility to save work as a draft and the availability of information about the performance of the service.

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 child with competent authority	70	34	35	48	49	40	22
1.3 Register parental authority (e.g. with court in case not married)	74	20	15	30	44	40	19
1.4 Apply for child allowance	96	75	67	52	60	60	42
2.1 Register to get married or to close a civil partnership	50	25	21	40	43	37	21
2.2 Register divorce with civil/local registry	81	47	54	43	50	59	30
3.1 Obtain passport	85	50	35	50	67	51	14
3.2 Obtain birth certificate	85	58	34	46	71	57	33
3.3 Obtain a European Health Insurance Card	92	52	46	38	66	45	17
Average Business start-up	79	45	38	43	56	48	25
Highest score Lowest score							

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

Europeans citizens are most happy with the digital service *Apply for child allowance*. In three out of four countries, this service enables them to track their progress with a progress tracker and in two out of three services they can save their work as a draft. *Obtain birth certificate* is the service where countries are most clear about delivery timelines: in 71% of the countries, citizens were told when they would receive their birth certificate after they requested it online.

*Register parental authority* is the least transparent service. In just one out of five countries, this service website had a progress tracker and in three out of ten countries users were informed how long the process of requesting the service would take. Getting married is also a service that many European countries can digitalise further. In particular, users would like to be better informed about when their request will be processed, and their marriage is registered. Currently, 43% of the countries make delivery timelines clear and just 37% of the countries provide citizens with a maximum time limit before the marriage needs to be registered by the government.

#### **Transparency of Personal Data**

The score of the *Transparency of Personal Data* indicator for the portals in the *Family* Life Event is 71%, which is above the biennial average of 68%. Users can often notify their government that their data is incomplete or incorrect (89%), but they still often unable modify their personal

data online themselves (72%).

### **Transparency of Service Design**

Portals in the *Family* Life Event have the best performance for *Transparency of Service Design*, but further improvement is warranted, given the score of 65%.

### 5.3 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.

### elD

Figure 5.4 shows for each of the transactional services in the *Family* Life Event how citizens could authenticate. For around half of the services in this Life Event, users could use their national eID (54%). Additionally, for another 4% of the services, users could authenticate online, but not with their national eID. For 42% of the services online authentication was not possible at all, meaning that citizens are supposed to take their passport to the municipality office for a visit in person.

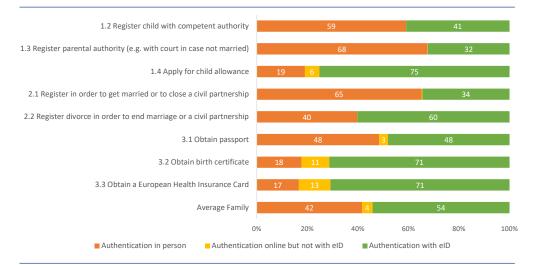


Figure 5.4 Authentication possibilities for services in the Family Life Event if authentication is required

Citizens in more than seven out of ten countries that are applying for child allowance, obtaining a birth certificate, or obtaining a European Health Insurance Card are enabled to use their eID, while requesting these services.

eID authentication (and online authentication in general) is far from the norm currently in services that people encounter in their personal lives. For instance, for less than one in three countries (32%) European citizens can authenticate online when registering for parental authority. Similar barriers with online authentication exist for citizens that wat to register to get married (34%) and for citizens that are registering their child with a competent authority.

### eDocuments & Authentic Sources

Figure 5.5 shows for each of the *Family* services how often users could download and submit eDocuments, and how often personal information was prefilled.

For six out of ten services in this Life Event, users could either submit or download eDocuments, when such documentation was required (58%). As such, citizens are still required to print out documents themselves and send them by mail to their governments. Citizens that need to request a birth certificate or need to apply for child allowance have to resort to non-digital means least often: in 79% and respectively 85% of the countries, eDocuments could be downloaded or submitted for this service. When registering in order to get married, citizens are not so lucky: in just 23% of the countries eDocuments could be submitted online for this service.

Information is prefilled for precisely half of the services evaluated for his Life Event. Government bodies could make better use of authentic sources to help citizens complete personal information. This spares time for citizens and reduces the chance of errors for governments.

Parents that apply for child allowance find that some of their personal information is prefilled in two out of three countries. People looking for a European Health Insurance Card can also often suffice with filling in a limited amount of information: for this service 58% of the countries prefill some of the personal information for their citizens.

### **Digital Post**

Citizens can choose to communicate with their governments digitally only for their family related services in eight out of ten countries in

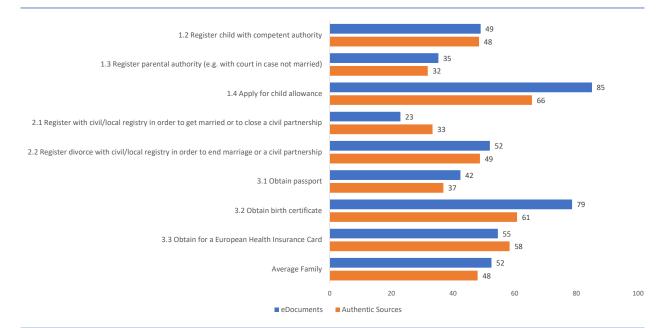


Figure 5.5 Average indicator scores for eDocuments and Authentic Sources per Family service

63

Europe (83%). Since the *Family* Life Event has many services that are provided by local service provided (city councils, municipalities, etc.), the score indicates that portals from local service providers are also implementing digital mailbox solutions frequently.

### 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: Online Availability of cross-border services, User Support on cross-border portals, Cross-border eID and Cross-border eDocuments. These indicators measure if services are available online, if there is sufficient User Support and if key enablers like eID and eDocuments work for people living or coming from abroad.

### **Online Availability of Cross-border Services**

For the *Family* Life Event, just two services are evaluated from a cross-border user perspective: *Apply for child allowance* and *Obtain a European Health Insurance Card*.

Figure 5.6 shows the extent to which these two services are made available online. 38% of the cross-border services evaluated in this Life Event could be completed online and for 42% the service could not be completed online, but non-nationals could find information about the service online in another language than the national language. For two out of ten services, cross-border citizens could neither complete the information, nor find information about the service online, making it a substantial challenge for non-national to request said service.

When applying for a child allowance, cross-border citizens miss out entirely in 23% of the countries under evaluation, compared to 17% of non-nationals that want to obtain a European Health Insurance Card.

### Cross-border User Support

Non-national citizens often find that there is a lack of support functionalities when visiting government portals of the *Family* Life Event. The *Cross-border User Support* indicator has a score of 60%. The availability of complaint procedures has the most room for improvement. Just one in three portals has a complaint procedures available that is easily accessbile for non-nationals.

### Cross-border eID and eDocuments

Figure 5.7 shows how often citizens could use national and cross-border eID for services in the *Family* Life Event. On average, users could authenticate with an eID 54% of the times for national services, compared to 42% of the services for cross-border users. For the services *Apply for child allowance* and *Obtain a European Health Insurance Card*, the difference is substantial: national eID could be used in more than seven out of ten countries, whereas cross-border eID was an option in less than half of the countries assessed.

On average, cross-border users could more frequently submit or download eDocuments if the entire sample of national services is chosen, as shown in Figure 5.8. When applying for child

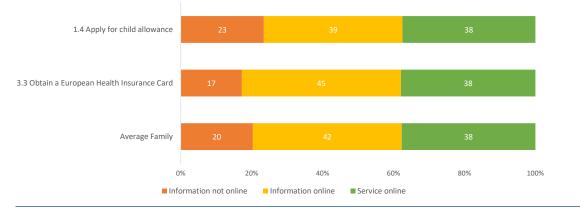


Figure 5.6 Cross-border online availability of Family services

Authentication with eID per service		-8
1.4 Apply for child allowance	75%	47%
3.3 Obtain a European Health Insurance Card	71%	36%
Average Family	54%	42%

Figure 5.7 Comparison eID for Family services, national and cross-border

allowance, non-national citizens could submit or download eDocuments in three out of four countries (74%), which is slightly lower than for national citizens. On the other hand, for the service *Obtain a European Health Insurance Card*, cross-border users have more possibilities to download and submit eDocuments than their national counterparts. A possible explanation could be that many countries already have a system in place for national citizens to obtain a national health insurance card (or equivalent) and that the service for a European Health Insurance Card is aimed predominantly at foreigners.

Opportunity to submit or download eDocuments, per service		-0
1.4 Apply for child allowance	85%	74%
3.3 Obtain a European Health Insurance Card	55%	64%
Average Family	52%	69%

Figure 5.8 Comparison eDocuments for Family services, national and cross-border

### Good Practice Germany: Express-Digitization of health- and crisis-related administrative services

Relevant Key Dimensions: User Centricity, Key Enablers Life Events: Family, Regular Business Operations

### 1. Good practice description

Germany is currently implementing the Online Access Act (OAA), a program responsible for digitizing all administrative services. The Federal Ministry of the Interior coordinates the implementation at federal level, the aim is to make public administration digital, more efficient, user-friendly and safe to use.

Due to Covid-19, in the beginning of April the digitization of health- and crisis-related services was prioritized and their digitization has been accelerated, e.g.:

- Remote Express-Laboratory: online-application for the reimbursement for loss of earnings due to quarantine or closing of schools/kindergarten because of Covid-19 (German Infection Protection Act), development and implementation in only 36 days: https://www.ifsg-online.de
- Development of an online-application for a "Covid-19 bridging aid" for small and mediumsized businesses in only three weeks: https://www.ueberbrueckungshilfe-unternehmen.de/
- Express digitization of "Unemployment Benefit II" for municipal job centers (the application is implemented in the portal of the respective municipalities, e.g. in Wiesbaden: https://portalciv-brd.ekom21.de/civ-brd.public/start.html?oe=00.00.ALGII.JCWI&mode=cc&cc\_key=ALGII

One part of the OAA-program is the work in digitization labs to develop the most user-friendly applications possible, together with (potential) users themselves. In spite of Covid-19, digitization labs with users are still made possible, but take place only in a virtual environment.

### 2. Benefits

Examples for the online-application for the reimbursement for loss of earnings due to quarantine or closing of schools/kindergarten because of Covid-19:

- In 2019 there were less than 200 applications per year, due to the pandemic, there are more than 1.3 million eligible applicants per year. For them, the online application saves time and resources.
- In the first four weeks alone, 16,000 applications were submitted online
- With the online application, over 8,000 working hours in the administration per year can be saved due to faster processing.

### 3. Key success factors

- Agile methods in digitization labs allow for flexibility. Planning in iterations, including several stakeholders, using dynamic structures make it possible, to react to uncertainties and change courses when unexpected things happen – like with this pandemic.
- The "One for All"-approach: That means that every solution in the OAA-implementation is developed only once by one federal state and every other state uses this solution afterwards, too. That was also done with the express development: one federal state, in this case Nordrhine-Westphalia, developed the service with the Federal Ministry of the Interior and operates it centrally. Twelve other federal states are now connected to and also use the existing solution. As a result, the federal states have not only saved time in implementation, but also financial resources.

### 4. More information

More information can be found at: www.onlinezugangsgesetz.de

### 5



### "The European Education Area is a vision of **learning without barriers** and working together across the continent."

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

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# 6 Studying

Providing citizens with good education increases their chances on the labour market and contributes to the economic wellbeing of the larger society. Over seventeen million tertiary education students currently live in the European Union<sup>9</sup>. Many of them spend periods of their studies in other counties to discover new cultures, to get to know new people and to broaden their horizons.' The *Studying Life* Event has been part of the eGovernment Benchmark since the report from 2013 and has been assessed each odd year since then. This Life Event assesses how well students are helped by their digital governments. Is it possible to register for a degree online? How can students apply for grants? Moreover, can students find information about going abroad for a semester?

### Shortened Persona Studying

Maria, 20 years old, wants to enrol in a Business Administration degree in her country. She searches online for information about possible study programmes. In order to be self-supporting, she depends on student finance and complementary social benefits. Insight into her financials is hence important for her.

She tracks her progress on her personal page which enables her to look up their grades online and register for additional courses and exams. The university also provides information for students who want to study abroad or want to apply for an internship.

After two years, Maria wants to study abroad. She searches for general information about possible destination countries and wants to know what is required for enrolment. She needs a clear understanding of what she can expect when studying abroad, and whether she can keep her student finance.

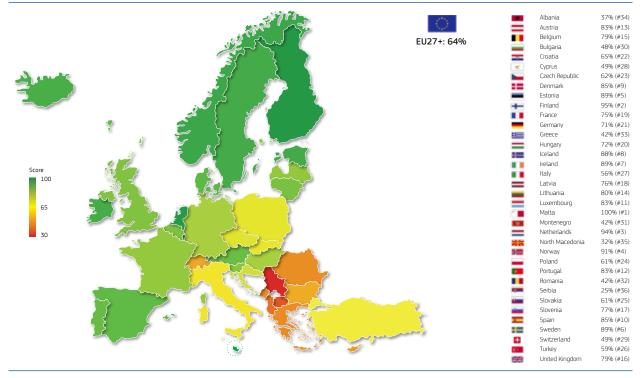


Figure 6.1 Country averages of all key dimensions for the Studying Life Event

<sup>9</sup> https://ec.europa.eu/eurostat/statistics-explained/index.php/Tertiary\_education\_statistics

Figure 6.1 shows the average of all key dimensions per country for the Life Event *Studying*. The average maturity for this Life Event is 69%, which makes it the most mature Life Event of the citizen Life Events in the data collection for this report.

Malta provides Maltese students and visiting students from other countries with the most mature eGovernment. Students can expect excellent delivery across all key dimensions. Students may also be pleased with their digital services in Finland (95%), the Netherlands (94%) and Norway (93%).

### 6.1 User Centricity

The User Centricity key dimension focusses 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 Studying Life Event.

### **Online availability**

Figure 6.2 shows for the *Online Availability* and *Mobile Friendliness* for the services in the *Studying* Life Event.

More than eight out of ten services for students could be completed entirely online (83%). For 15% of the services, students could find information online, but for completion of these services a visit to the university or a government organisation is required. For 2% of the services students could not complete the service online, nor find any information about the service.

Students can easily find information about study programmes online (94%) and subsequently check the requirements for enrolment (96%). Moreover, students can monitor their grades (97%) online and find guidance for studying abroad (97%).

In 83% of the countries, aspiring students can enrol for their study online. Many countries offer student grants to support them financially. In close to three out of four countries, students could apply for student grants online.

Some students can apply for additional (financial) benefits. In two out of three countries, online application for such benefits is possible. The least frequent online service is *Apply for portability of student grant*, which can be completed online in 56% of the countries. European countries can

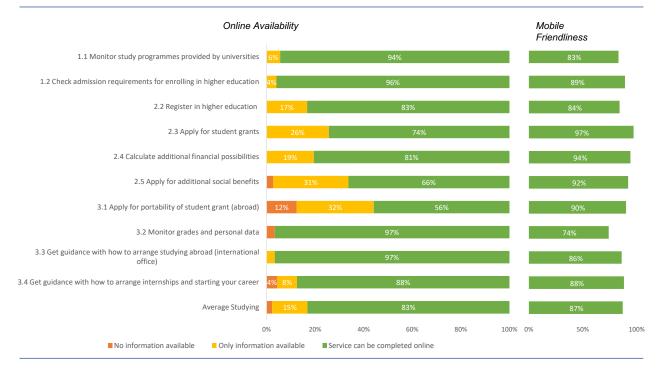


Figure 6.2 Online availability and mobile friendliness of services in the Studying Life Event

thus enable a next step in cross-border studying by making this service online available.

### Mobile Friendliness

88% of the websites assessed in the *Studying* Life Event can be considered mobile friendly. *Studying* is the least mobile friendly Life Event in this year's assessment.

There seems to be a stark difference in mobile friendliness between government websites and university websites. For instance, *Apply for student grants*, is often provided by a government authority and is optimised for smartphone use in 97% of the countries, but *Monitor study programmes* is only mobile friendly in 83% of the countries. Moreover, in just 74% of the countries the personal page where students can monitor their grades can be considered mobile friendly. Students would prefer that such websites are mobile friendly, so they can quickly check their grades on their smartphone.

### **User Support**

When students encounter issues while trying to obtain certain online services, they would like to also have some online help functionalities. The score for the *User Support* indicator for students is 92%. Portals for students perform well on the availability of a social media page, where students can find additional information. Portals in 94% of the countries have such a social media page.

### 6.2 Transparency

Transparency comprises the 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

Figure 6.3 shows how often certain features to enhance transparency of the service process are present on the service websites for students. Two out of three services have a progress tracker, enabling users to know how many steps they have to take before completion. Moreover, six out of ten service websites clarify what the delivery timelines are (61%) and subsequently what the maximum time limit is before delivery (56%). Students can be better informed about the duration of the process of requesting the service: less than half of the websites offered this information (45%). Also, currently lacking is information about service performance. Student can be better informed about the performance of the service they are about to use.

Soon-to-be students are informed well about the service process when they are registering in higher education. In eight out of ten countries, students can track their progress while registering. Moreover,

Services	Delivery Notice	Progress tracker	Draft possibility	Estimation of process duration	Delivery timelines clear	MAximum time limit set	Information about service performance
2.2 Register in higher education	94	80	68	63	75	71	45
2.3 Apply for student grants	82	67	54	46	61	59	44
2.5 Apply for additional social benefits	78	54	46	32	54	47	37
3.1 Apply for portability of student grant (abroad)	95	62	51	38	55	48	31
Average Business start-up	87	66	55	45	61	56	39
Highest score Lowest score							·

in almost seven out of ten countries, work can be saved as a draft, so the aspiring student can return to the service in a later stage. Most countries are also clear about the delivery timelines: in three out of four countries, users know when their request for registration at the university is accepted or declined.

Students facing financial hardship, who are eligible for additional social benefits, encounter a relatively non-transparent service process. Only three out of ten countries provide an estimation of the duration of the process of requesting the additional benefits (32%). Moreover, in less than half of the countries, users can save their work as a draft or find the maximum time limit government agencies may take to deliver the service. Improving this service is worthwhile: European countries would help promising young students that are currently struggling to remain financially stable.

### **Transparency of Personal Data**

Online portals for students are relatively transparent compared to other life events. The score for *Transparency of Personal Data* indicator for the *Studying* life event is 71%, which is higher than the biennial average 68%.

### Transparency of Service Design

The Studying Life Event has the lowest score for the Transparency of Service Design indicator (58%). Although information about the policy making process is often available (92%), students lack information about the process of service design in 42% of the countries.

### 6.3 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.

### elD

Figure 6.4 show how often (soon-to-be) students can authenticate online. For close to six out of ten services users can authenticate with their national eID (58%). In the *Studying* Life Event there exists a considerable amount of services where online authentication is possible, but not with an eID. Many universities ask students to make online university accounts for which an eID cannot be used. For one out of five studying services online authentication was not possible (21%).

64% of the countries enable users to authenticate with their national eID for the service *Register in higher education*. Therefore, this is among the services where online authentication was most often available: in just 12% of the countries a user had to visit the university or government building for authentication.

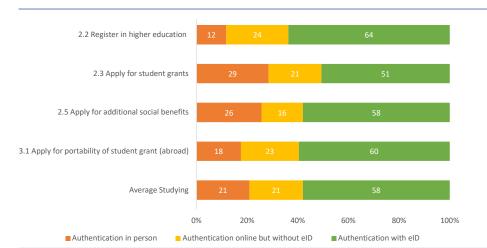


Figure 6.4 Authentication possibilities for services in the Studying Life Event if authentication is required

When students need to apply for student grants, they still have to show their face regularly: in around half of the countries, students could log in with eID and in almost three out of ten countries, students could not authenticate online at all.

### eDocuments & Authentic Sources

Figure 6.5 shows how often students could submit or download required official eDocuments and how frequent they would find that some of their personal information was prefilled.

For three out of four services in the *Studying* domain, students could upload or download official documents online, making regular mail redundant in those instances. Especially when registering in higher education, soon-to-be students where often enabled to upload all required official documents for registration with their new university online.

In a little more than half off all services in the *Studying* Life Event personal information was prefilled. Hence, students could be further facilitated during this process, sparing them time. Personal information was most often prefilled when requesting student grants or when applying for additional benefits. For these services, information was prefilled in 64 and respectively 65% of the countries.

### **Digital Post**

Student can choose to do all of their communications online via a dedicated mailbox in eight out of ten countries (83%). This is higher than the biennial average of 73%. Cross-border Services.

### 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: Online Availability of cross-border services, User Support on cross-border portals, Cross-border eID and Cross-border eDocuments. These indicators measure if services are available online, if there is sufficient User Support and if key enablers like eID and eDocuments work for people living or coming from abroad.

### **Online Availability of Cross-border Services**

Figure 6.6 shows how often non-national students can obtain services online. 57% of the services evaluated in this domain could be completed entirely online. Moreover, for 26% of the services, universities and government bodies did offer

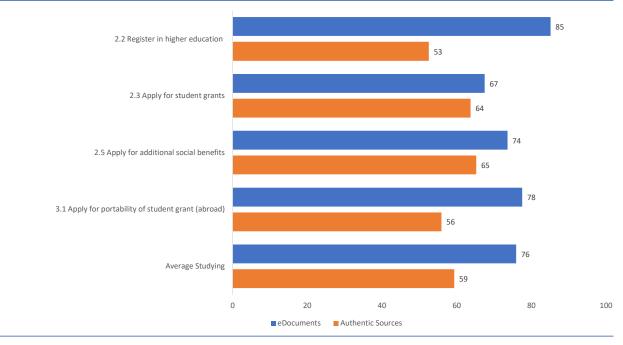


Figure 6.5 Average indicator scores for eDocuments and Authentic Sources per Studying service

information about in multiple languages, which enables students to complete the service via nondigital means. For 17% of the student services, foreign students were left in the dark: they could not complete the service online, nor find information on how to complete the service in person.

In two out of three countries, students could register for higher education online (68%) and in 65% of the countries, students could obtain recognition of the merits of their diplomas and certificates online.

In half of the countries, students could apply for student benefits online, providing them with basic financial support (50%). For students that require

a bit more financial assistance, a physical visit is still required in many countries: in 44% of the countries applying for additional social benefits was possible online and in almost one out of four countries (23%) students could not find information about the service online, minimising the chance that they are aware of the possibility of additional benefits.

#### **Cross-border User Support**

Students that want to study in another country and are looking for help with government services online are well supported. The average of the EU27+ is 81% for this indicator. Notable is that almost all countries (97%) have a help functionality available for foreing students on their portal websites.

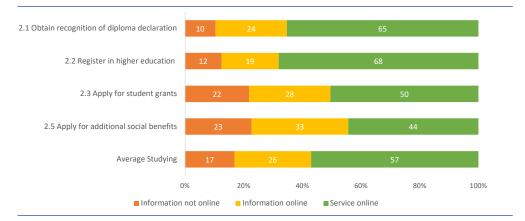


Figure 6.6 Cross-border online availability of Studying services

#### Cross-border eID and eDocuments

Figure 6.7 presents how often cross-border users could use their eID and how frequently users could download or submit eDocuments.<sup>10</sup>

Students studying abroad could only use their national eID in one out of five services that were assessed. For comparison: national students could use their eID for three out of five services. Apparently, smooth interoperability of electronic authentication between countries is not yet the norm for students.

Especially when registering for their programmes, students cannot use their national eID in another country (11%). Although a mitigating circumstance might be that some universities offer students the opportunity to log in with a university account.

Authentication with eID per service		-8
2.1 Obtain recognition of diploma declaration		9%
2.2 Register in higher education	64%	11%
2.3 Apply for student grants	51%	24%
2.5 Apply for additional social benefits	58%	37%
Average Studying	58%	20%



For six out of ten services under evaluation foreign students were able to submit or download eDocuments. This is only a little less frequent than for national citizens (76%). Moreover, when registering in higher education, users could submit or download official documents 69% of the time, making it easy for aspiring students to upload all documents that are required to start their new study programme.

Opportunity to submit or download eDocuments, per service	<b>^</b> -	-8
2.1 Obtain recognition of diploma declaration	1.1	66%
2.2 Register in higher education	85%	69%
2.3 Apply for student grants	67%	61%
2.5 Apply for additional social benefits	74%	46%
Average Studying	76%	61%

Figure 6.8 Comparison eDocuments for Studying services, national and cross-border

<sup>&</sup>lt;sup>10</sup> Note that service "Obtain recognition of diploma declaration is only measures from a cross-border perspective. Hence, no score exists for national users.

## Good Practice Montenegro: Digital School Concept (primary and secondary schools)

#### Relevant Key Dimension: User Centricity Life Event: Studying

#### 1. Good practice description

Ministry of Education, Science, Culture and Sports, in cooperation with the UNICEF Office in Montenegro, was implemented the Project "Application of tools for online collaboration and learning (Office 365) and improvement of the Education Information System (MEIS) - electronic services". Within the Project:

- a set of trainings for the use of the Microsoft Teams application in teaching was launched, which included a number of teachers from all primary and secondary schools in Montenegro
- The document "Digital School" was created, which represents the concept and framework through which schools can, with the help of Microsoft 365 (Office 365) software package, realize all school activities through an adequate digital environment and which you can download here
- and finally, as a form of support, web page http://www.digitalnaskola.edu.me/ with video instructions for using Microsoft Teams tools was created.

#### 2. Benefits

- During 2020 and 2021, the Office365 training program was attended by over 4,200 employees in educational institutions.
- Online teaching in primary and secondary schools is mostly based on this concept.

#### 3. Key success factors

- Good cooperation with school management.
- Great motivation of teachers.

#### 4. More information

More information can be found at: http://www.digitalnaskola.edu.me/

### 6

# 7. The Explorative Benchlearning Perspective

"When we act **together**, we are able to act fast."

European Commission President, Ursula von der Leyen



## 7 The Explorative Benchlearning Perspective

#### 7.1 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. In this way, the eGoverment benchlearning approach adds to the dissemination of best practices. 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 years was considered mature and widely consolidated, hence it was preserved for the 2021 report.<sup>11</sup>

The 2021 benchlearning analysis covers the EU Member States (27 out of the 36 countries that participated in the eGovernment Benchmark), as the necessary data is available for these countries. 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.<sup>12</sup>

### 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**.

#### 7.2 Step 1: Measuring Country Performance through the Absolute Indicators

#### Penetration

The Penetration indicator captures the extent to which online channels are used for obtaining government services. 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 understand eGovernment

Indicator	Composed variables	Data source
Penetration	eGovernment users: Percentage of individuals who submitted online forms (last 12 months)	Digital Economy and Society Index (DESI)

Figure 7.1 Design of the Penetration indicator

<sup>&</sup>lt;sup>11</sup> 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.

<sup>&</sup>lt;sup>12</sup> More information about the Digital Economy and Society Index (DESI) can be found at: https://digital-strategy.ec.europa.eu/en/policies/desi.

maturity. To this end, the Penetration indicator obtained from the DESI data on eGovernment users and exhibits the percentage of Individuals who used the internet, in the last 12 months, for interaction with public authorities.<sup>13</sup> Figure 7.1 shows the design of the Penetration indicator.

Figure 7.2 shows the Penetration indicator for each country<sup>14</sup>. The 27 countries score 67% on average, which means that two thirds of the internet users interacted with their their government online in the last 12 months. There is a broad range in scores, with two countries scoring a percentage below 40% (Italy, with 36% and Romania, with 16%). Eight countries reach a percentage above 80%, with more than four out of five persons considered to be eGovernment users (Austria, Denmark, Estonia, Finland, France, 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, and raising awareness about eGovernment services. Data sharing and data integration could be used to simplify and automate administrative procedures.

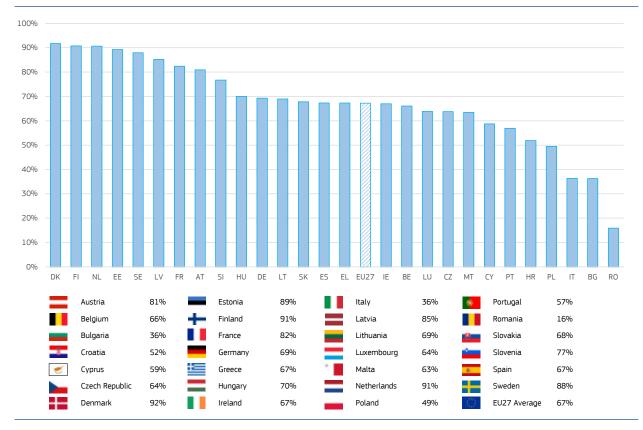


Figure 7.2 Penetration scores

<sup>13</sup> In the 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, the 2021 Penetration indicator is based on the DESI data without any correction or recalculation and can be found at: https://digital-strategy.ec.europa.eu/en/policies/desi.

<sup>&</sup>lt;sup>14</sup> Because of unavailability of data for the current year's report, the Penetration value of France for 2021 is given by the performance of eGovernment Users registered in last year (2020 DESI data).

#### 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 7.3). 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 **8 life events**. The eight life events are measured in a biennial cycle (four each year) through biennial average.

Indicator	Composed variables	Data source
Digitalisation	Average of: • User Centricity • Transparency • Key Enablers • Cross-Border Services	eGovernment Benchmark - Mystery Shopping

Figure 7.3 Design of the Digitalisation indicator

The biennial European average is 71%.<sup>15</sup> Results for the Digitalisation indicator as observed in Figure 7.4. show less variability than the ones for the Penetration indicator. Except for Romania, European countries scored 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).

#### **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. Penetration and Digitalisation performances identify four different scenarios of eGovernment according to different levels of Penetration and Digitalisation (Nonconsolidated, Unexploited, Expandable, and Fruitful).

<sup>&</sup>lt;sup>15</sup> Please note that this chapter refers to the EU27 countries (71%), whereas the previous chapters on digital service provision also include non-EU Member States, the EU27+ countries (68%).

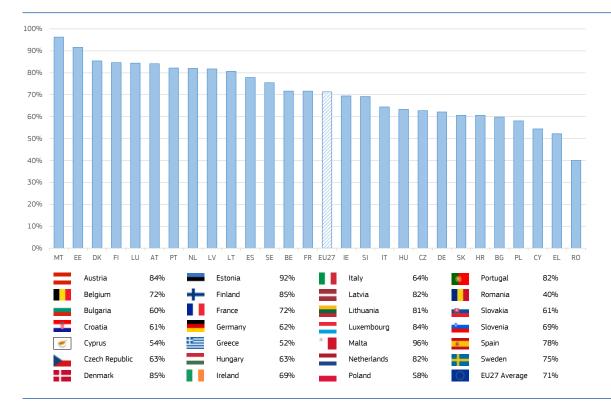


Figure 7.4 Digitalisation scores

Figure 7.5 depicts the four scenarios with different levels of Penetration and Digitalisation:

- Non-consolidated eGovernment: this scenario contains lower levels of Digitalisation (below 71%) and lower levels of Penetration (below 67%). A government in this scenario 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 scenario contains lower levels of Digitalisation (below 71%) combined with higher levels of Penetration (above 67%). A government in this scenario is enhancing its digital transformation process, but already has a large number of citizens and businesses using eGovernment services. Countries in this scenario could optimise efficiencies in managing their resources and might have room to leverage high online use of eGovernment services.
- Expandable eGovernment: this scenario contains higher levels of Digitalisation (above 71%) and lower levels of Penetration (below 67%). A government in this scenario innovates its public services effectively. By seeking greater citizen trust, expanding the number of online users would contribute to unfolding more potential benefits.
- Fruitful eGovernment: this scenario contains high levels of both Digitalisation (above 71%) and Penetration (above 67%). A government in this scenario achieved innovative digital services with many users. This helps to deliver public services in an efficient and effective way.

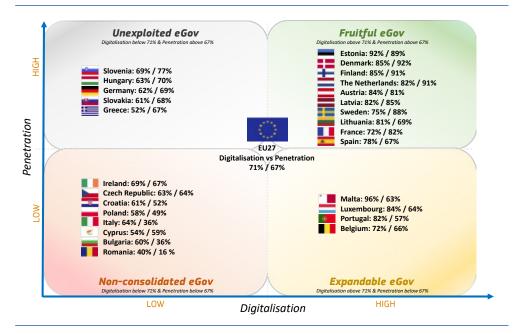


Figure 7.5: Penetration and Digitalisation scenarios

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

- Non-consolidated eGovernment: Eight countries fall within this scenario (Bulgaria, Croatia, Cyprus, Czech Republic, Ireland, Italy, Poland, 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 scenario have a level of Digitalisation below the European average, but a high level of Penetration. Five countries fall in this category: Germany, Greece, Hungary, Slovakia and Slovenia. 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 scenario, there is high Digitalisation but low Penetration. Four countries fall within this scenario: Belgium, Luxembourg, Malta, and Portugal. Although the provision of digital services is above the European trend, these countries would welcome further uptake of their eGovernment.
- Fruitful eGovernment: This scenario 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. Ten countries fall within this scenario: Austria, Denmark, Estonia, Finland, France, Latvia, Lithuania, Netherlands, Spain, Sweden.

A *positive linear correlation* can be found between the Penetration and Digitalisation indicators as depicted in Figure 7.6. 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 European eGovernment situation, each scenario is divided into four blocks. These 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 7.6.

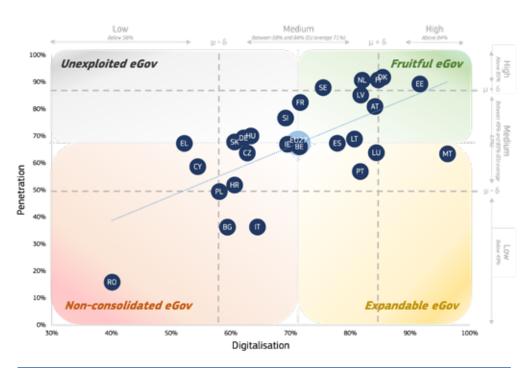


Figure 7.6: Penetration versus Digitalisation

Two lines are drawn, one corresponding with the *European average plus the standard deviation* ( $\mu$ + $\delta$ ), and one corresponding with the *European average minus the standard deviation* ( $\mu$ - $\delta$ ). When countries' Digitalisation or Penetration levels fall outside the plotted lines, performance is considered either low (below  $\mu$ - $\delta$ ) or high (above  $\mu$ + $\delta$ ). The standard deviation ( $\delta$ ) for Digitalisation is 13%, whilst for Penetration it is 18%.<sup>16</sup>

Even within the same scenario, there are still considerable differences between countries. For some countries, the performance is close to the European average, while the performance of other countries in the same scenario strongly diverges from the European average. To illustrate: within the Expandable eGovernment scenario, Belgium's performance is the closest to the European average, while large differences in the EU average can be found in Romania (Non-consolidated eGovernment scenario), Greece (Unexploited eGovernment scenario), and Malta (Expandable eGovernment scenario). Romania has both the lowest Penetration level (16%), and Digitalisation level (40%). Greece has a medium Penetration level (67%), combined with the second lowest level of Digitalisation (52%). Malta clearly exceeds the European average, having the highest level of Digitalisation (96%).

<sup>16</sup> Standard deviations are used to determine whether a country score can be statistically considered high or low. For Penetration, scores of one standard deviation (18%) above the EU average (67%) are considered high, thus 85% or higher. Scores of one standard deviation (18%) below the EU average (67%) are considered low, thus 49% or lower. 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.

#### 7.3 Step 2: Understanding the Impact of Context-Specific Variables on Performances

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 countries' 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 7.7 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	Digital Economy and Society	
Government characteristics	Quality	<ul> <li>Regulatory Quality</li> <li>Rule of Law</li> <li>Government Effectiveness</li> <li>Reputation</li> </ul>	World Bank World Bank World Bank Transparency International	
	Openness	<ul><li> Open Data</li><li> Voice and Accountability</li></ul>	Digital Economy and Society Index (DESI) World Bank	
Digital context characteristics	Connectivity	• Connectivity	Digital Economy and Society Index (DESI)	
	Digital in private sector	<ul> <li>Integration of Digital Technology</li> </ul>	Digital Economy and Society Index (DESI)	

Figure 7.7: Definitions of relative indicators

## Users' characteristics that Influence eGovernment performance

User's characteristics indicator 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<sup>17</sup>. In the 2021 report, User's characteristics is captured only by the following indicator:

Digital skills<sup>18</sup>: The Human Capital dimension from the Digital Economy and Society Index (DESI) measures internet user skills as well as advanced skills and development. These skills are 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 government characteristics indicators reflect on the way public organisations act and are organised could affect eGovernment performance. In our analysis, it is measured through the following indicators:

- Quality: this indicator aims at summarising in one number a proxy of governments' perceived performances taking into account different perspectives. Indeed, its components are:
  - Regulatory quality<sup>19</sup>: 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<sup>20</sup>: 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<sup>21</sup>: 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<sup>22</sup>: 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<sup>23</sup>: 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.

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

- <sup>22</sup> Transparency International Data on Reputation: https://www.transparency.org/cpi2020
- <sup>23</sup> European Data Portal data on Open Data Maturity: https://data.europa.eu/en/dashboard/2020

<sup>&</sup>lt;sup>17</sup> Until last year's report, this dimension was composed by two indicators Digital Skills and ICT Usage. Nonetheless, the ICT

Usage dimension no longer exists in the 2021 DESI, and it is consequently removed from the analysis

<sup>&</sup>lt;sup>19</sup> 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 <sup>20</sup> World Bank data on rule of law:

https://datacatalog.worldbank.org/search?search\_api\_views\_fulltext\_op=AND&query=RLEST&nid=&sort\_by=search\_api\_relevance&sort\_by=search\_api\_relevance<sup>21</sup> 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\_by=search\_api\_relevance

Voice and Accountability<sup>24</sup>: 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.

## Context Characteristics that Influence eGovernment Performance

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

- Connectivity<sup>25</sup>: (DESI) measures the deployment of broadband infrastructure and its quality. Access to fast broadband-enabled services is a necessary condition for competitiveness.
- Digital in private sector<sup>26</sup>: the Integration of Digital Technology dimension (from the DESI) 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 7.8 is a geographical mapping of each relative indicator showing the three categories described above.

#### 7.4 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 (analysing the combined correlation of multiple relative indicators on Penetration and Digitalisation). In the upcoming paragraphs, the term 'positive correlation' is therefore to be interpreted in a releative 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', more than 20% to 'medium positive correlation' and more than 35% to 'high positive correlation'.

<sup>24</sup> World Bank data on Voice and Accountability:

<sup>25</sup> DESI data on Connectivity: https://digital-strategy.ec.europa.eu/en/policies/desi

https://datacatalog.worldbank.org/search?search\_api\_views\_fulltext\_op=AND&query=VA.EST&nid=&sort\_by=search\_api\_relevance&sort\_order=DESC

<sup>&</sup>lt;sup>26</sup> DESI data on Integration of Digital Technology: https://digital-strategy.ec.europa.eu/en/policies/desi

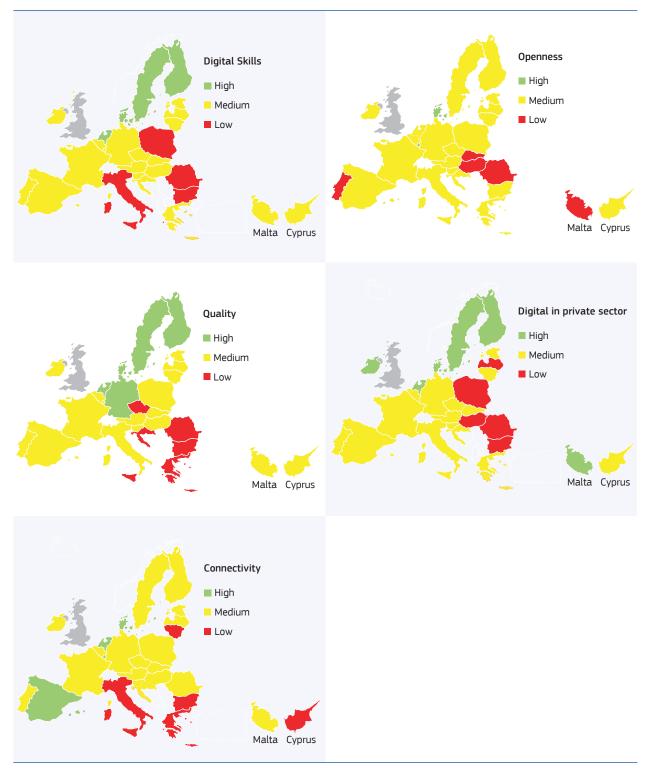
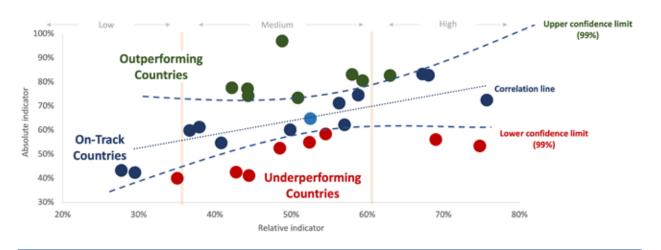


Figure 7.8: Map of relative indicators



#### Figure 7.9: Visualisation of the performance clusters based on confidence intervals

Depending on a country's score for a relative and absolute indicator it can be considered to be "Underperforming", "On-track" or "Overperforming".

To distinguish between "Underperforming", "Ontrack" and "Overperforming" countries, confidence intervals were identified. A confidence level measures the probability that a parameter falls within a specified range of values, defined by confidence intervals, in this analysis of 99%. Thus, if a country score falls outside the interval lines, we are 99% sure there is something particular about it, causing it to perform better or worse than other countries. Such a country does not fit the linear correlation model. It performs distinct from the European trend, the correlation line.

A country may perform lower than one would expect (Underperforming country, below the lower bound of the confidence interval) or may perform higher than one would expect (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. 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 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 7.10 shows the strength of the correlation, calculated considering the coefficient of determination (R^2).

When we consider the Penetration indicator, the correlation is strongest with the relative indicators for Digital Skills and Quality (Figure 7.10). In general, it seems that countries with a high usage of

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

R^2	
< 10 %	
10 % - 20 %	
20 % - 35 %	
> 35 %	

Figure 7.10: Correlations among absolute and relative indicators

eGovernment services are the countries with skilful citizens. Unfortunately, we cannot make causal statements based on the benchlearning exercise. However, our results provide some indications that it might be worthwhile to invest in awarenessraising 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 e-ID and e-Documents 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 7.11 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

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

Figure 7.11: Countries' eGovernment performance related to their relative indicators

"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. 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 3 out of 5 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 five 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 7.10.

Estonia and Latvia are overperforming countries in both Digitalisation and Penetration. Hungary and France are overperforming in Penetration, while performing on average on Digitalisation. Austria, Lithuania, Malta, Portugal and Spain are overperforming in Digitalisation and show on-track performance in Penetration. Belgium, Bulgaria, Denmark, Finland, Greece, Luxembourg, the Netherlands, Poland, Slovakia, Slovenia and Sweden perform in line with relative indicators, as their performance matches expectations based on their county characteristics. Croatia, 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, Germany and Ireland 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 7.11 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, Germany and Romania are also underperforming in three dimensions that compose the Digitalisation indicator. This suggests that these countries are not exploiting the full potential coming from their country context in most of the fields associated to the eGovernment provision. They can find room for improvement in each dimension by looking at the policies put in place by other countries with similar characteristics. Ireland is an underperforming country with only one underperforming dimension (Key Enablers), that seems to be strongly preventing the effective eGovernment provision. Moreover, "On-track" countries are taken into consideration. Belgium, Bulgaria, Denmark, Finland, Italy, the Netherlands, Slovenia, and Sweden perform on track both for the overall Digitalisation indicator as well as for the underlying User Centricity, Transparency, Key Enablers and Cross-Border Services separately. France and Luxembourg, instead, exhibit room for becoming an "Overperforming" country as they already overperform in User Centricity and Cross-Border Services respectively. Hence their priority should be to focus on the other dimensions. Compared to countries with a similar context, Hungary underperforms with respect to Cross-Border Services but overperforms in Key Enablers. Greece, Poland and Slovakia underperform in only one Digitalisation dimension, respectively, Key Enablers, Cross-Border Services and Transparency, suggesting the need for better consolidation of their Digitalisation level in relation to all other areas. On the opposite, Croatia is overall labelled as an "On-track" country despite being underperforming in User Centricity, Key Enablers and Cross-Border Services. Thus, a strong commitment in the eGovernment provision is required in order to avoid falling into "Underperforming" countries in the next future.

To conclude, among the "Overperforming" countries in Digitalisation, Latvia, Malta and Portugal are also overperforming in User Centricity, Transparency, Key Enablers and Cross-Border Services, highlighting the excellent performances with respect to the characteristics they exhibit in terms of relative indicators. Austria and Estonia achieved overperformance in most Digitalisation dimensions with respect to their country characteristics, while performing on-track in the remaining one (respectively, Austria has an on-track Transparency level, and Estonia an ontrack User Centricity level). Lithuania and Spain are comprehensively assigned to overperforming countries, yet they overperform in only two dimensions (respectively, Transparency and Key Enablers, and User Centricity and Key Enablers). Such configuration suggests particular attention since in the next future they might return on average performances level if they do not manage to sustain their growth in terms of Digitalisation.

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#### Albania | The 2020 digital revolution of public services

#### **Relevant Key Dimensions**

User Centricity, Transparency

#### Life event

Business Start-Up, Family, Regular Business Operations, Transport

#### 1. Good practice description

**e-Albania**, **the national e-Gov portal**, acts as a front-end point for government institutions to deliver their services, thus operating as a one stop single access point to citizens 24/7. The portal, which currently provides 1207 **e-services**, is connected to the **Government Interoperability Platform** that is the underlying and core architecture allowing the interaction between **55 electronic** systems of public institutions. The Government Interoperability Platform enables 66% of the application forms are pre-filled automatically by the interaction and exchange of data between these registers in real time. A major part of the services offered on the portal are 100% re-engineered hence offering a completely paperless service.

Found in a long wave of digitalisation processes, which have started since 2013, Albania is currently undergoing one of the most important transformation processes in its history of public services digitalisation. The government is determined to turn institutions into full service to citizens and has completely focused its attention on transforming physical counters into online ones.

From January 1, 2020, a new process for public services began, that providing 472 public service applications to citizens and businesses exclusively online. Also, from June 30, 2020 more than 395 other services were offered through e-Albania portal. Citizens and businesses apply only online through the e-Albania platform and it is the public administration employees who are required to provide all the associated state documents. All governmental data and documents are now being used and reused within the administration, relieving citizens of the burden of collecting them physically in hard-copy at the state counters.

As of January 1, 2020, all state documents that were previously required to be gathered by citizens are not being required to them anymore. It is the civic employees who secure these documents on behalf of the citizen, either by downloading their e-sealed version from the e-Albania platform or by requesting them to the providing institution through a dedicated electronic system we developed only for this purpose.

Following this approach, all e-services whose applications are only available online from January 1 have been completely changed in their format by dividing the list of associated documents into:

- The left-side documents which are simply listed but are not the responsibility of the citizen to provide
- The right-side documents which include only self-declarations and private documents and should be provided by the citizen himself.

A dedicated system (e-Signed Documents Circulation System) has been set up for the interaction of all institutions, with the aim of exchanging all enclosed documents of the citizen's file in electronic form, paperless and bearing electronic signature. This reduces the burden on citizens and businesses in institutions and the only documents they need to upload are self-declarations and documents that they receive from private entities.

Through this system, employees request the documents needed by institutions that generate them, and the latter process the request for said document. After being electronically signed by the institution's head, the document is sent back through the system to the employee who made the request. In the end, the public administration official completes the applicant's file with administrative documents issued by state institutions, and then provides the citizen with the requested public service.

More than **3200 civic employees** working in counters have been trained during the first months of 2020, on how to:

- Assist citizens who will come at the counters, to apply online on e-Albania.
- Provide the enclosed documents generated by the state by receiving them through the Electronic Signature Distribution System.

In order to reduce as much as possible, the bureaucracies associated to public services also underwent a deregulation process with the aim of:

- Reducing the number of associated documents required to citizens/businesses;
- **Re-engineering** the whole process of their provision, in order to reduce processing steps, digitalize internal processes thus reducing bureaucracies, costs and time for citizens.

In order for the government as transparent as possible, after completing the online application, the citizen is equipped with a unique number that enables him to track the status of his application. He has also the option to upload additional documents through his unique application number if needed or requested later by the institution.

As for short-term goals, NAIS, in collaboration with all public institutions had developed an action plan for 2020 regarding the online-only public service applications, which was divided into three phases:

- The first phase (January 1st) marked only the first step of transitioning 472 applications of public services to online-only.
- The second phase (in process) marked the second phase with 395 public service applications to online-only and
- The third phase was in December 2020, when we had 1207 service applications online-only, which are total make up over 95% of all public services.

#### 2. Benefits

- 1,969,965 registered users (1,836,853 citizens and 133,112 businesses).
- 5,091,119 applications for public services.
- 1.319.014 citizens and businesses served.
- **356** years in time saved.
- 1.39 million euros saved from the removal of taxes and tariffs for services and documents.

#### 3. Key success factors

- The Albanian government, as a promoter of the transformation of physical services into online services, turned the e-Albania governmental platform into a success story, managed to build a serious image of the state and restore citizens' trust in public institutions.
- Following the rapid development of the e-Albania platform, during 2019 the Prime Minister of the Republic of Albania set in motion all state institutions to take the most important and historic step in transforming more than 95% of public services' applications from offline to online-only, through the e-Albania platform.

#### 4. More information

More information can be found at: www.e-albania.al

#### Albania | ICT Initiatives during the COVID-19 pandemic emergency situation

#### **Relevant Key Dimensions**

User Centricity, Transparency

#### 1. Good practice description

The unusual situation of the COVID-19 pandemic has justified all the efforts made throughout the years, which have enabled hundreds of online public services and their deregulation through technology improvements. During the time when the administration counters were closed, e-Albania withstood all the requests of citizens and businesses for public services. During the difficult quarantine months, the provision of e-services was over two to three times higher than usual. But not only that. E-Albania was the only window that successfully regulated, through its e-services:

- 1 The movement of citizens during the pandemic time with planned permissions to leave the house;
- 2 The movement of businesses and their employees.

These services, in the end, guaranteed a successful management of the first phase of the pandemic, through controlled movements of citizens, which was undoubtedly reflected in the lower spread of the coronavirus in our country during the first months. More than 6 million applications for permissions on e-Albania were registered.

- Permission to leave the house for grocery shopping, pharmacies

To reduce the spread of COVID-19, during the pandemic emergency situation, *all citizens leaving the house for grocery shopping, pharmacies were required to obtain a special permission from the e-Albania platform.* Considering that citizens are now familiar with the platform and its usage, it was easier for them to use the specific e-services developed exclusively during the pandemic period.

Interoperability ensured that:

- Only one person per family certificate could apply in one day
- Retired people were not able to apply (they were advised to stay home)

After the real-time validation, the permission was sent immediately electronically to the citizen via email/SMS and the QR code ensured the authenticity of the permission when showed to the police officers.

#### - Permission to leave the house for working

After enabling the movement of citizens leaving the house for grocery shopping, pharmacies via the dedicated online service on the e-Albania platform, another **e-service facilitating the movement of citizens via personal vehicles and motorcycles** was made available on the platform. This weekly permission was valid only for the citizens, who still went to work during the pandemic situation and had to follow a strict itinerary: *Home-Work-Home*. The permission request could be made only by employees of the businesses allowed to exercise their activity according to the normative acts, or by the employees of the public administration. Interoperability ensured that:

- Only employees of the businesses allowed to exercise their activity, according to the normative acts, were able to apply;
- The online form with personal vehicle data already prefilled was provided to the citizens who own a vehicle and have it registered under their name. In this case, the only action they did is click the 'Submit button';

For citizens who did not have the vehicle they would be using registered in their name, the online form allowed to fill out manually the vehicle's license plate and its unique identification number. After the real-time validation, the permission was sent immediately electronically to the citizen via email/SMS and the QR code ensured the authenticity of the permission when showed to the police officers.

#### - Permission to leave the house for health reasons

This e-service was made available to individuals who were chronically ill or had other health problems and needed to see a doctor. They could apply for a permit within the official schedule from 05.00 to 17.30, every day of the week, only

for the route: *home-medical center-home*. This permit did not apply to emergencies, which did not require any type of permit. The patient could only be accompanied by another person and had to have with him a medical document, which confirmed his health issue.

#### - Business permission

The e-service "Business permission" was added to e-Albania, aiming to facilitate the movement of employees in open businesses during the COVID-19 situation, according to the 3 specifics concerning the type of service that the business offers.

- 1. *"Transportation permit for staff"* provided a weekly permit for the circulation of vehicles (buses/vans) of private companies that performed the transport of employees according to the itinerary: house-work-home.
- 2. *"Permit for business' needs"* enabled the provision of weekly permits at any time within the official time band: 05.00 in the morning until 17.30 in the afternoon for receiving various private or public services.
- 3. *"Permit for business' services"* enabled the provision of unlimited weekly permits for those businesses, which provided service 24/7.

#### - Attestation of Open Economic Activity

With the opening of businesses, a new e-service was added to e-Albania to obtain an "Attestation of open economic activity", a document proving that a business was authorised to function even during the pandemic time.

#### 2. Benefits

- During the difficult quarantine months, the provision of e-services was over two to three times higher than usual. But not only that. e-Albania was the only window that successfully regulated, through its e-services, which, in the end, guaranteed a successful management of the first phase of the pandemic, through controlled movements of citizens, which was undoubtedly reflected in the lower spread of the coronavirus in our country during the first months. *More than 6 million applications for permissions on e-Albania were registered.*
- The impact of the e-Albania platform is an initiative like no other when it comes to Information and Communication Technology in Albania. The avant-garde nature of this platform has facilitated acquiring vast numbers of state issued documents from the comfort of one's home, with a few clicks. Through a user-friendly layout, requesting documents, or obtaining the daily pass for going out during the COVID-19 lockdown showed great results with *over 9 million citizen applications during the three months of lockdown*.

#### 3. Key success factors

- A few years ago, we had a dilemma. Albanian citizens and businesses were not receiving the public services they
  deserved. The administration could not act in response to the dynamics and aspiration of Albanians to be served in time,
  with quality, without regarding corruption as "a secret tax". We responded to this dilemma with a radical solution, investing
  in technology, digitalization, networking and efficient services through a single portal. Little by little, the creation that
  forever changed the relationship between the state and citizens came to life: e-Albania.
- In march 2020 when the country went into a lock-down due to the pandemic you can imagine the great responsibility but also the sensation Albania felt due to fact that e-Albania turned into the only open door, where citizens and businesses could claim everything, from organised exit permits, to social or health services. As a result of this management, lives were saved and the help was given even in the most extreme situations.

#### 4. More information

More information can be found at: www.e-albania.al

#### Austria | oe.gv.at - platform

#### Relevant Key Dimension(s)

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

#### Life event

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

#### 1. Good practice description

Oesterreich.gv.at is an internet platform linking to a large number of public authorities. As the One-Stop eGovernment platform for citizens, it provides information on all interactions with Austrian authorities required in the most frequent life situations such as pregnancy, childbirth, marriage or housing, and allows the electronic processing of some of these procedures. The portal constitutes an interface between authorities and citizens, with an emphasis on transparency, user-friendliness and clarity of information. The portal is accessible 24/7 and obtains useful information on dealings with different authorities in over 200 life situations.

#### 2. Benefits

- It makes a large number of administrative procedures available electronically via the website https://www.oesterreich.gv.at.
- · Single-Sign-On and eID integration: one-time authorisation used at every featured service.
- The most important official channels are also available for mobile devices via the "Digitales Amt" app.

#### 3. Key success factors

- Mobile first transformation from eGovernment to mGovernment dedicated mobile app with integrated eID to improve the service quality of Austria's most used eGovernment portal for citizens.
- Website and app have been expanded with the introduction of new services for citizens (e.g. baby point and relocation) and added chatbot named "Mona".

#### 4. More information

More information can be found at: https://www.oesterreich.gv.at

#### Austria | Digitales Amt - mobile app

Relevant Key Dimension(s)

User Centricity

#### Life event

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

#### 1. Good practice description

With its 'Digitales Amt' mobile app project the Federal Government promotes user-oriented and secure access to services and decision-making processes. Our society and economy has become digitally driven, and the Covid-19 pandemic has accelerated this trend, with the need to use services at all times and at all places. The device which is used primarily for going online is the mobile device. The smartphone has become the main communication tool nowadays. This is why Austria is pursuing a mobile first approach by enabling services, especially also government services, for mobile environments. As a major step towards "mobile Government", Austria launched the platform "oesterreich.gv.at" which also includes the first comprehensive mobile app called "Digitales Amt" for comprehensive online administrative information and services.

#### 2. Benefits

 m(mobil)Government - dedicated "Digital Office App" to facilitate a centralised, mobile and easy access for citizens to the most important administrative services; an important step towards location- and time- independent use of eGovernment.

#### 3. Key success factors

• The 'Digitales Amt' app also helps to close the digital divide, improve participation opportunities for people in more remote areas of Austria and reduce traffic. The project also ensures nondiscriminatory access to public services and is in line with the underlying concept of 'leaving no one behind'.

#### 4. More information

More information can be found at: https://www.oesterreich.gv.at/app-digitales-amt/faq/app\_digitales\_amt.html

#### Austria | Austrian Business Service Portal usp.gv.at

#### Relevant Key Dimension(s)

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

#### Life event

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

#### 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 and transaction services, it intends to help businesses fulfil their information obligations and reduce their administrative burden. Information and advice are provided on administrative activities, including starting a business, tax and legal requirements. As a result of the successive expansion, this One-stop eGovernment platform for businesses already offers more than 70 public service procedures via single Sign on. Information about the most important life events for businesses are available in German and English. Austria integrated further new and redesigned eGovernment Services in the Business Service Portal like electronic starting up and eDelivery to strengthen and foster economic growth in Austria. Moreover, with the 'call for tenders search' service, it is possible to search for and view via the portal all calls for tenders published in accordance with the Austrian Federal Procurement Act in one place without additional registration giving SMEs free and unlimited access to tenders from 7,000 public authorities.

#### 2. Benefits

- The portal aims to serve as a single point of entry for businesses to public authorities.
- By offering information and eGovernment services, it helps businesses to fulfil their legal obligations and to reduce administrative burdens.

#### 3. Key success factors

- Verified information for all major business situations. More than 5,000 content pages.
- · Online transactions with public authorities save time and money.

#### 4. More information

More information can be found at: www.usp.gv.at

#### Belgium | MijnOpinie/MonOpinion

#### Relevant Key Dimension(s)

User Centricity, Transparency

#### Life event

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

#### 1. Good practice description

MijnOpinie / MonOpinion is a digital platform for citizen participation, provided by the Federal Public Service (FPS) Policy and Support – BOSA. After the introduction with several local administrations, the solution has been used to increase consultation and participation opportunities by the representational body De Kamer van volksvertegenwoordigers / La Chambre des représentants. It enables all citizens to start and submit online petitions.

#### 2. Benefits

• Brings public administrations and citizens closer to each other. The solution makes it easier and faster to reach for example sufficient online signed petitions (> 25,000) to initiate a public hearing at the De Kamer van volksvertegenwoordigers / La Chambre des représentants.

#### 3. Key success factors

- Free and open source solution.
- Adopted by several public administrations.

#### 4. More information

More information can be found at: https://monopinion.belgium.be/

#### 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/

#### Bulgaria | eForms

#### 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 electronic forms system provides access to authenticated users to a list of electronic administrative services, the ability to choose a service, download and fill in electronic forms locally, attach documents accompanying the service and automatically deliver them to the service provider through the secure electronic delivery system. Since the second half of 2020, a functionality for automated filling in of the e-forms with data of the applicant is provided. More than 574 electronic forms have been created for the request of electronic services and the accompanying documents.

#### 2. Benefits

- Automatic data entry reduces error risks and speeds-up time.
- · Simple to use.

#### 3. Key success factors

- · Improved user experience and functionality.
- pre-filled intelligent online forms that can also be saved as draft to continue later, and e-payment is also provided where necessary.

#### 4. More information

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

#### Bulgaria | Platform for publicly available information

#### Relevant Key Dimension(s)

Transparency

#### Life event

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

#### 1. Good practice description

The Platform for Publicly Available Information is a single, centralised, public web-based information system that electronically provides the entire process of filing and reviewing an application for access to information, referral by competence if necessary, providing a decision and publishing the requested information by the obligated subjects under the Access to Public Information Act while protecting the applicant's personal data pursuant the Personal Data Protection Act.

#### 2. Benefits

- Single point of access to public information.
- · Opportunity for citizens or legal entities to receive the public information they want electronically.

#### 3. Key success factors

- The process is fully digital.
- Access via mobile devices.

#### 4. More information

More information can be found at: https://pitay.government.bg/

## 7

#### Croatia | eRenovation

#### Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

#### Life event

Family, Moving, Transport

#### 1. Good practice description

It is a digital system that enables: submission of requests for renewal with the attachment of all necessary documentation, monitoring the implementation of the renewal procedure, display of renewal data on the Geoportal and reporting according to various criteria. The following principles have been applied in the development of the system: Minimise the amount of data required from applicants; Link to the records of other public authorities for the purpose of data exchange; Do not look for what already exists in the records of other public authorities; Amendments, if necessary, should be made in source systems (registers); Promote a process approach to solving the required functionalities with the aim of maximally reducing points with the possibility of making discretionary decisions; Communicate in a way that electronically is faster, easier, cheaper and more precise than paper; Strive for the user to always be exposed to select from a set of known values, i.e. to minimise the possibility of free entry.

#### 2. Benefits

- Digital receipt of applications without the need for applicants to come to the Ministry -> Saving time for applicants, speeding up the application process, increasing the accuracy and quality of data of submitted applications;
- Maximum reduced amount of documentation that needs to be submitted -> Saving time for applicants, other public
  authorities are not burdened in terms of the need to issue various certificates required for the process;
- Emphasis on requesting information, not various documents, certificates or statements -> Saving time for applicants, reducing the amount of data exchanged, does not burden other public authorities in terms of the need to issue various certificates necessary for the process;
- Maximum use of existing digital records of other public authorities by establishing mutually automated exchange of
  necessary data -> The processes are taking place almost instantly, Increasing the quality of overall data in the records of
  public authorities, which contributes to better reporting;
- Providing citizens with insight into the status of reconstruction through the reporting system of publicly available data -> Transparency in spending public money;
- Communication with applicants through the existing state information infrastructure (NIAS, OKP) -> promoting the use of digital technologies to citizens

#### 3. Key success factors

- · Clear and intuitive interface for working with the system;
- · Reporting by various criteria; Informing the user about the status of the case in each step;
- Minimised amount of data required from users;
- Maximum transparency and public information on the process, procurement and spending of public money;
- No need to physically arrive at the ministry site

#### 4. More information

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

## Croatia | e-Enrollment (Informatisation of process and establishment of complete service for enrollment to educational institutions)

#### Relevant Key Dimension(s)

User Centricity, Transparency

#### Life event

Family life

#### 1. Good practice description

Results of project eEnrollment is new complex service, which encompasses processes for application and enrollment into institutions of educational system. Importance of project is strengthening of development to digitised service, which public administration provides to citizens, additionally administrative savings on institutional level, for institutions which provide enrollment. This phase of project enables digital enrollment of child into kindergarten by parent's using of application for child registration. By using this application, parent is not obligated to collect applicable documentation on administrative desks to prove personal status and a need for child enrollment into Kindergarten. The State took care of that by interconnecting of important registers which content all relevant data.

#### 2. Benefits

• In this phase, 150 kindergartens are interested in using this application, which supports administrative processes of kindergarten and parent's processes for digital enrolment, as well.

#### 3. Key success factors

- Clear and intuitive interface for working with the system
- Minimised amount of data required from users

#### 4. More information

More information can be found at:

https://rdd.gov.hr/projekti-i-eu-projekti/eu-projekti/informatizacija-procesa-i-uspostava-cjelovite-elektronicke-uslugeupisa-u-odgojne-i-obrazovne-ustanove/1574.

## Croatia | E-Pass system

## Relevant Key Dimension(s)

User Centricity, Transparency, Cross-Border Services

#### Life event

Family, Regular Business Operations, Moving, Transport

## 1. Good practice description

The delivery of public services in Croatia during the COVID-19 crisis has been obstructed due to the lockdown measures coming into force in March 2020. Government imposed a national lockdown, preventing Croatian citizens from leaving their municipality of residence. Such a scheme required granting exceptions for special needs, for instance for essential workers and citizens who had to access face-to-face public services in another municipality. ePass system was therefore implemented, as a digital solution, available via an online browser. It enabled Croatian citizens to request authorization forms to move outside their municipality to reach a specific place. ePass became the central solution for requesting and obtaining this electronic pass as the requests were checked by the system and automatically denied or accepted. Acceptance of the circulation request by the ePass system allowed citizens to download their electronic pass (containing a QR code) in PDF format and print it.

#### 2. Benefits

- System has been accessed over 3,000,000 times by 475,000 unique users.
- It enabled users to quickly get an e-Pass if they have had a proper reason for an exception.

#### 3. Key success factors

• Rapid agile development of the solution, reuse of the existing components.

## 4. More information

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

## Croatia | Andrija Digital Assistant

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

#### Life event

Studying, Family, Regular Business Operations, Moving, Transport

## 1. Good practice description

The struggle with the pandemic crisis highlighted the importance of quality cooperation between the Ministry of Health and citizens of the Republic of Croatia. In partnership with the Ministry of Public Administration and private partners, the Ministry of Health deployed a digital assistant who advises people how to diagnose and manage suspected COVID-19 infections. It is powered by artificial intelligence and has been developed by Croatian IT companies in cooperation with epidemiologists. The digital assistant is available online and can be activated on WhatsApp using the name Andrija. The tool is available to all Croatian smart phone users, being a voluntary and anonymous application.

## 2. Benefits

- Educates citizens on how to recognize the symptoms of coronavirus infection on themselves and others through assisted self-assessment.
- Assists people in contact with the competent institutions, directing everyone to the right address, thus saving time and energy to citizens and doctors. The digital assistant is very helpful to the healthcare system as it can process tens of thousands of requests on a daily basis, while doctors can handle some 50 calls a day.
- It allows people to report relevant information from their household and thus fulfill their civic duty to help epidemiologists have up-to-date data.

#### 3. Key success factors

- The solution was created by a team of experts led by an epidemiologist and combining resources from Croatian and global IT companies that are part of the Croatian Association of Artificial Intelligence CroAI.
- The CroAl Association made the digital assistant available to the Government of the Republic of Croatia, free of charge.
- The solution is designed to keep up to date with the latest protocols, guidelines and knowledge about the COVID-19 emergency.

## 4. More information

More information can be found at: https://andrija.ai/

## Republic of Cyprus | CyprusFlightPass (CFP) Platform

## Relevant Key Dimension(s)

User Centricity, Transparency, Cross-Border Services

## Life event

Business start-up, Regular business operations, Moving, Owning and driving a car

## 1. Good practice description

To facilitate the travel arrangements of passengers to Cyprus and ensure the capture of all necessary information required by the Health authorities, the CyprusFlightPass (CFP) online platform was created enabling passengers to complete all the necessary formalities in a quick and easy way and receive the relevant authorisation to fly.

Passengers, travelling form any country, prior to their trip, must obtain the Cyprus Flight Pass. For each country, specific conditions and prerequisites apply (i.e. availability of PCR tests or vaccination certificates) which are managed through this platform in an effort to (a) comply with the related Governmental Decrees and (b) to minimise the spreading of COVID-19.

The platform also facilitates the electronic process for obtaining a special Permission. Passengers, with nationality of third countries, travelling to the Republic of Cyprus from a country not included in Categories Green, Orange, Red are required to obtain beforehand a special permit. For specific passengers' categories, the platform also allows for the electronic prepayment for covering the required accommodation and laboratory tests amount. The CFP platform is up and running as from the 9th of June 2020. Cyprus was the first country at a European level to create an online platform to support the needs of the Passenger Locator Form set by ICAO (Annex 9). Passengers' information and personal data remain confidential and are being processed only for public interest purposes and the protection of public health from COVID-19.

## 2. Benefits

- Total Number of registered users in CFP (as from 9 June 2020 up to 21 April 2020): around 540,000.
- Total Number of arrivals in 2020: approximately 1.1 ml of which around 50% passengers issued a CFP.
- Helps fast tracking of COVID-19 close contact passengers with a COVID-19 confirmed case passenger and a positive COVID-19 passenger within the Republic (e.g. hotel, residence address).
- Mandatory usage of an electronic CFP avoids paper documentation and enhances passenger's service at the Airports.

## 3. Key success factors

- Political will, Commitment and close cooperation by all the involved stakeholders (Deputy Ministry of Research, Innovation and Digital Policy, Ministry of Transport, Communications and Works, Ministry of Health and the Private sector).
- Quick Response and Adoption for new requirements to support new needs due to COVID-19 pandemic.

## 4. More information

More information can be found at: https://www.cyprusflightpass.gov.cy.

## Czech Republic | the BankID

## Relevant Key Dimension(s)

User centricity, Cross-border mobility, Key enablers

#### Life event

Business start-up, Regular business operations, Moving, Owning and driving a car, Starting a small claims procedure, Studying, Family life

## 1. Good practice description

In order to simplify an access to personalised digital services of the governent and to provide citizens with yet another option for their online identification, the Czech Republic made necessary amendments to its banking legislation and introduced the BankID. For the banks, as well as for the citizens, the participation in the BankID system is voluntary. Starting 2021, clients of several banks can already use their familiar high-security bank authentication interface to file tax returns, apply for a new driving licence, obtain statements of their social security contributions as well as solve other life events with the government online.

## 2. Benefits

- Better accessibility of digital services: more than 5 million people who use their internet banking on daily basis can now
  access digital government services without a need to create another digital identity;
- Uptake of digital services has increased: after the introduction of the BankID, the number of the Citizen Portal users grew up significantly. While in January 2020, 45,500 registered users signed in 200,000 times and in January 2021, 72,200 registered logged in 385,000 times, in March 2021, the number of registered users grew to 114,900 with 542,000 accesses to digital services using the electroinic identification.
- The legal framework and technical solutions allow banks to access data in base registries during the identity verification process, as well as when complying with their obligations under anti-money laundering law.

#### 3. Key success factors

- The national Act on the right to digital services accelerated digital transformation of public administrations. One of the main prerequisites for the increased use of online government services by citizens is an existence of multiple eID means that are part of the government secure eID scheme, easily available, and user-friendly.
- A successful cooperation between the government and banking sector experts focused on achieving mutual goals and providing their clients with the best services possible.
- An effective communication among stakeholders and decision makers on various platforms, both the government and private ones, about the benefits, options and technical solutions of BankID and its implementation.

#### 4. More information

More information can be found at: https://bankovni-identita.cz/ https://info.eidentita.cz/idp/

## Czech Republic | The government response portal "covid.gov.cz"

## Relevant Key Dimension(s)

User centricity, Transparency

## Life event

Family life, health, increasing resilience of the society during the COVID-19 pandemic

## 1. Good practice description

In response to the need to cope with the COVID-19 pandemic and to provide reliable and up-to-date information to citizens and businesses, the government introduced a single portal dedicated to life situations typical for these difficult times. Regularly updated information and guidelines are structured by life events what allows easy navigation. The portal provides information on government measures and available support programs for individuals and businesses. It is possible to access vaccination register and other government websites from this "single gateway", such as the mobile contact-tracing application "eRouška", portals of relevant ministries as well as the Institute of Health Information and Statistics.

## 2. Benefits

- The COVID portal is part of the whole-of-government approach to communication with citizens during crisis situation;
- The COVID portal contributes to better resilience of the society through effective information sharing. Citizens learned to trust the portal as their gateway to other government COVID-related information sources;
- The portal uses responsive web design approach allowing citizens to access information from their preferred devices. The English version of the portal focuses on foreign citizens, so they have relevant information without the need to contact government helplines.

## 3. Key success factors

- A strong need of citizens and public administrations to have all relevant pandemic-related information "at one place", in a simple and easy-to-understand way;
- An effective cross-sector cooperation;
- Joint efforts between the public and private sector with the single objective in mind: to support society in new life situations using digital tools.

## 4. More information

More information can be found at: https://covid.gov.cz/en/

## Denmark | Digital ready legislation

## Relevant Key Dimension(s)

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 public digital infrastructure and Denmark's Digital Ready legislation has shown its worth during the COVID-19 pandemic. The digital infrastructure has enabled public service to remain at a high level even with a high degree of remote work within the state, regions and municipalities. Furthermore, the government has launched a range of new initiatives to cope with COVID-19, including a contact-tracing app, digital booking of tests and vaccines, payment of benefits and more. This has been enabled by clear legal rules and well-functioning digital infrastructure, and in this way, the COVID-19 pandemic has underlined the benefits of Denmark's digital-ready legislation and evolved digital infrastructure. In the Danish Agency for Digitisation, they are currently working on a broader coverage of how digital maturity level can have an impact on how countries perform best through the COVID-19 pandemic.

#### 2. Benefits

- Digital-ready legislation simplifies legislation and integrates public case processing with technology. Unnecessary and complex legislation is simplified and new legislation becomes more easily understandable and digitally compatible, allowing for quick and seamless administration.
- As an example of this, the central government has been able to process COVID-19 stimulus checks to 2.2 million benefits recipients fully automatically in less than 8 days.
- Another 2.1 million residents have been able to apply for and receive early holiday allowance money to a value of 7 billion euro within 7 days resulting in a month-over-month increase in retail spending of 8.2 pct. leading to the highest value of the retail trade index ever in the month of October 2020 in the middle of the COVID-19 pandemic.

#### 3. Key success factors

- In 2018, a unanimous parliament in Denmark entered into an agreement on digitisation-ready legislation. Since then, more than 270 bills have been analysed by the Danish Agency for Digitisation's secretariat for digital-ready legislation before they were presented in the parliament.
- In support of this work, a course in digital-ready policymaking will be generally available to legislative drafters and policy officers in government departments by the summer of 2021.

#### 4. More information

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

## Denmark | 'My Overview' feature on the citizen portal

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

#### Life event

Studying, Family, Career, Moving, Transport, Starting a Small Claims Procedure

#### 1. Good practice description

'My Overview' is the citizens' personal page on the Citizen Portal. Here, citizens can log on using their NemID (eID solution) to grant access to some of the information public authorities hold on them. My Overview is developed step by step over a period of four years towards 2024, and will provide the citizens with a user-friendly overview of all relevant data concerning their interactions with the public sector.

The end of 2020 marks a major step for the development of My Overview, as all 98 municipalities are now represented on the Citizen Portal, borger.dk, where they provide a case and benefit overview in the area of employment to the citizens. At the same time, NemKonto (the Danish public payments solution) is implemented, and the first government authorities have begun to provide data. This means that 'My Overview' can now provide information on unemployment benefits and early retirement pay, respectively, as well as Student benefits.

## 2. Benefits

- My Overview will in time be relevant to all Danish citizens with a NemID (eID solution).
- My Overview will not replace existing websites or self-service solutions but will be a supplement offering a wider digital
  overview of a citizen's data and interactions with the public sector such as information on tax, debt, student grants or
  housing as well as status on benefits and ongoing cases with public authorities, including upcoming agreements and
  deadlines.
- The overview is personalised and therefore, no one but the citizen has access to the data on the site.

#### 3. Key success factors

- The development of My Overview is part of a joint public political vision for creating transparency, and a better and more coherent digital service across sectors and levels of government, and thus increasing trust in government.
- My Overview is being developed step by step towards 2024, where more and more areas will be connected over time and set the framework for the coming years' targeted efforts for increased transparency and overview in the digital service.

#### 4. More information

More information can be found at: https://digst.dk/digital-service/mit-overblik/om-mit-overblik/

## Denmark | Digital Guides to life events

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

#### Life event

Business Start-Up, Studying, Family, Regular Business Operations, Moving

#### 1. Good practice description

The Danish Agency for Digitisation and the Danish Business Authority are developing Digital Guides to support coherent user journeys in relation to the 11 most common life events for citizens and 10 most common life events for businesses. The guides will be further developed as new user needs are identified, and so will the architecture supporting the guides.

## 2. Benefits

- The guides improve public digital service by providing citizens and businesses with an overview and understanding of the procedures regarding their life event and giving them a collection of relevant links to i.e. public services and self-service solutions across public sector. The guides also provide an overview of relevant private sector tasks.
- The guides help citizens and businesses "getting things done" in the right order and the right way which expectedly leads to more effective proceedings for both users and caseworkers and increases the trust in public sector. By testing and collecting feedback on the use of the guides it is made clear that the users are very positive towards the service provided by the guides.

## 3. Key success factors

- The digital guides are a result of a close and ongoing cooperation (analysis and implementation) amongst public authorities and with close involvement of private sector representatives. Design thinking methods are used to map user journeys and ideate on both guide design and other possible efforts to improve the coherency and digital service regarding each life event.
- The digital guides are also enabled by the citizen portal and the business portal respectively.
- The Citizen Portal (Borger.dk) offers a user-friendly interface, personalisation of content and syndication of borger.dk content, and flexibility for authorities adding location-specific content to the Portal. It contains more than 2,000 self-service solutions and in 2020 a total of 58.7 million visited the portal (over a population of 5.8 million people).
- The Business portal (Virk.dk) aims to relieve Danish businesses from administrative burdens and provide a single entrance point to the public sector. The portal features a personalised dashboard for businesses to provide them with an overview of current deadlines, tasks and obligations towards public authorities, access to Digital Post and much more. In 2020 user sessions on Virk.dk totalled 23 million.

#### 4. More information

The guides can and will be found on the portals borger.dk (citizens) and virk.dk (businesses) e.g.: www.borger.dk/naarlivetslutter and https://virk.dk/vejledning/virk-assistent.

## Estonia | Health Care Decision Support for General Practitioners

## Relevant Key Dimension(s)

Key enablers

## Life event

Family

## 1. Good practice description

Since May 2020, general practitioners and nurses can use a clinical decision support system that brings patient-based recommendations to their desktops and helps them make decisions faster and better. The clinical decision support system is the first tool of its kind in Estonia, as it collects and analyses human data, such as diagnoses, medications and tests from the last five years, blood pressure readings, lifestyle indicators and genetic risk scores. The development of decision support has taken place in close cooperation with family doctors, the Ministry of Social Affairs and TEHIK (Health and Welfare Information Systems Center).

## 2. Benefits

- GPs and nurses can make faster decisions.
- Better use of already existing data of the healthcare system.

## 3. Key success factors

- · The service is relevant to everyone.
- The service makes the decision-making easier for General Practitioners.

## 4. More information

More information can be found from https://e-estonia.com/the-best-public-sector-digital-service-in-estonia-is-supporting-doctors/.

## Estonia | HOIA mobile app

## Relevant Key Dimension(s)

User Centricity

## Life event

Family, Transport

## 1. Good practice description

With the HOIA mobile app, you can quickly find out about possible close contact with a COVID-19 infected person, allowing you to take steps to protect your own health and the health of others.

## 2. Benefits

- Anonymous data processing, the sensitive personal data is invisible to other counterparts.
- No need to collect visitors' data manually.

## 3. Key success factors

- The IT solution that reliably informs persons from the close contacts during the pandemic.
- Successful cooperation between the private and public sector.

## 4. More information

More information can be found at: https://e-estonia.com/estonias-coronavirus-app-hoia-the-product-of-a-unique-private-public-partnership/.

## Estonia | Decision Support for the Unemployment Insurance Fund (OTT)

## Relevant Key Dimension(s)

User Centricity, Key enablers

## Life event

Career

## 1. Good practice description

As people turn to the Unemployment Office for support, OTT is a tool used by civil servants to improve the understanding of the clients' needs. It is an AI system that employs more than 100,000 client records to estimate the probabilities of different employment pathways, systematizes clients to provide support where it is most needed, and distributes the workload between civil servants.

## 2. Benefits

- The AI helps us to understand the probability of finding a job for the unemployed.
- The tool that estimates the probabilities of different employment pathways.
- Systematizes clients to provide support where it is most needed.
- · Distributes the workload between civil servants.

## 3. Key success factors

- The better usage of available data.
- · Continuous improvement of the system.
- Cooperation between the public and private sector.
- A problem-solving oriented way of thinking.

#### 4. More information

More information can be found at: https://e-estonia.com/ai-to-help-serve-the-estonian-unemployed/.

## Estonia | Suve Chatbot

## Relevant Key Dimension(s)

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

#### Life event

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

#### 1. Good practice description

Suve is a chatbot that helps find answers to questions related to COVID-19 and the situation in Estonia, including issues related to travelling, health and documents.

Suve already works on the webpages of Emergency Situation, Health Board, Ministry of Social Affairs, Ministry of Economic Affairs and Communications, Ministry of Justice, Ministry of Culture, Consumer Protection and Technical Regulatory Authority, Enterprise Estonia, Work in Estonia, International House of Estonia, Invest in Estonia, TV3, North Estonia Medical Centre, Corona Map and Teeviit. Suve can respond to questions in Estonian, Russian and English

#### 2. Benefits

- The chatbot offers an additional, convenient channel to receive information about the crisis.
- It alleviates the pressure on information hotlines and family doctors to ask whether it is currently possible to travel to Finland or ask about sick leaves. This way doctors are reachable to the people who have the coronavirus symptoms or suffer other medical conditions.
- · It helps counter fake news about the crisis.

#### 3. Key success factors

- Quick innovation cycle Chatbot Suve was one of the ideas that started at the Hack the Crisis hackathon organised by Garage48 and Accelerate Estonia – a part of Estonia's startups' plan to hack the current crisis. The eeBot team – headed by a Work in Estonia executive – could focus on finding quick and impactful IT-solutions to minimize the effects of the crisis.
- Right mix of skills eeBot team includes IT and marketing specialists, as well as others whose competencies include providing relocation and integration help to foreigners in Estonia, promoting foreign direct investment, and dealing with environmental issues.
- Interoperability Suve builds on the digital infrastructure that all state agencies are connected with. The new system is an interoperable network of public sector algorithms that are easy to deploy on multiple websites.

## 4. More information

More information can be found at: https://eebot.ee/

## Finland | Construction emissions database

#### Relevant Key Dimension(s)

User Centricity, Transparency, Cross-border services

#### Life event

Family, Regular Business Operations

## 1. Good practice description

On 1 March 2021, a new digital service providing impartial data on the climate impacts of construction products used in Finland was opened. The information harmonises the calculation of greenhouse gas emissions throughout the life cycle of buildings, facilitating low-carbon building design. The service is free of charge and open to everyone. The information is based on open sources, and is useful for anyone who is interested in the climate impacts of construction. The database lays a foundation for statutory guidance of low-carbon construction.

The construction emissions database is also a practical example of the work of the Nordic countries intensifying their collaboration with a view to reducing climate emissions from the built environment. The goal is for low-carbon buildings to be assessed on the same principles in these countries. Sweden published its own complementary database on the same day as Finland. The information is country-specific, but collected and collated in the same way. The database user interfaces will also correspond. Open information exchange, joint development and sharing of best practices between countries will help to ensure the comparability and quality of information. The Nordic construction industry in particular will benefit from this collaboration.

## 2. Benefits

- The construction industry will benefit from being able to see and anticipate changes in operating conditions and the direction of statutory guidance.
- The database lays a foundation for statutory guidance of low-carbon construction and for the assessment of low carbon-buildings on the same principles in the participating countries.
- The service is useful to anyone interested in the climate impacts of construction

## 3. Key success factors

- Collaboration with the construction industry
- Nordic cooperation

#### 4. More information

More information can be found at: https://ym.fi/-/rakentamisen-paastoja-voidaan-nyt-vertailla-uusi-paastotietokanta-luoperustan-vahahiilisen-rakentamisen-saadosohjaukselle?languageId=en\_US, the emissions database can be found at: https://co2data.fi/

## Finland | Online service for registering as jobseeker extended to entrepreneur's unemployment security

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

## Life event

Business Start-Up, Career, Regular Business Operations

## 1. Good practice description

In Finland, full-time entrepreneurs are temporarily (until 30.6.2021) eligible to receive labour market subsidy due to the sudden and unexpected decline in demand caused by the coronavirus epidemic. This applies to all entrepreneurs, regardless of the type of business, if the income from the business activity is under a certain level. In order to receive labour market subsidy, the entrepreneur must register online as a jobseeker with the TE Office's E-Services. After registering, the entrepreneur provides evidence of the termination of full-time employment or loss of income due to the coronavirus epidemic. The entrepreneur then applies online to the Social Insurance Institution of Finland for a labour market subsidy.

#### 2. Benefits

• The temporary law amendment covers full-time entrepreneurs due to the exceptional circumstances during the coronavirus pandemic. Online applications for entrepreneurs' labour market subsidies would not have been possible without pre-existing digital infrastructure at TE Offices and the Social Insurance Institution of Finland.

#### 3. Key success factors

Pre-existing digital services at TE Offices and Social Insurance Institution of Finland.

## 4. More information

More information can be found at: https://www.te-palvelut.fi/special-pages/entrepreneurs-employers-corona.

## France | Vie-publique.fr

## **Relevant Key Dimension(s)**

User Centricity

## Life event

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

## 1. Good practice description

The government news and communication platform vie-publique.fr was created in 2002 and relaunched in 2019. It presents government news and developments in a concise and understandable manner. This may entail summaries of government reports, legislative news, public speeches, explanatory guides on the missions of public organisations, etc. A broad variety of citizens is served by the platform.

## 2. Benefits

More effective and understandable government communication, with nearly 20 million website visits in 2020.

#### 3. Key success factors

• The multimedia approach, using different types of content and formats (videos, podcasts, infographics), helps to explain government decisions and developments.

## 4. More information

More information can be found at: https://www.dila.premier-ministre.gouv.fr/actualites/toutes-les-actualites/vie-publique-fr-les-politiques-publiquesexpliquees-au-plus-grand-nombre

## Germany | Express-Digitisation of health- and crisis-related administrative services

## Relevant Key Dimension(s)

User Centricity, Key enablers

#### Life event

Family, Regular Business Operations

#### 1. Good practice description

Germany is currently implementing the Online Access Act (OAA), a program responsible for digitising all administrative services. The Federal Ministry of the Interior coordinates the implementation at federal level, the aim is to make public administration digital, more efficient, user-friendly and safe to use.

Due to COVID-19, in the beginning of April the digitisation of health- and crisis-related services was prioritised and their digitisation has been accelerated, e.g.:

- Remote Express-Laboratory: online-application for the reimbursement for loss of earnings due to quarantine or closing of schools/kindergarten because of COVID-19 (German Infection Protection Act), development and implementation in only 36 days: https://www.ifsg-online.de
- Development of an online-application for a "COVID-19 bridging aid" for small and medium-sized businesses in only three weeks: https://www.ueberbrueckungshilfe-unternehmen.de/
- Express digitisation of "Unemployment Benefit II" for municipal job centers (the application is implemented in the portal of the respective municipalities, e.g. in Wiesbaden: https://portal-civ-brd.ekom21.de/civ-brd.public/start.html?oe=00.00.ALGII.
   JCWI&mode=cc&cc\_key=ALGII

One part of the OAA-program is the work in digitisation labs to develop the most user-friendly applications possible, together with (potential) users themselves. In spite of COVID-19, digitisation labs with users are still made possible, but take place only in a virtual environment.

## 2. Benefits

- In 2019 there were less than 200 applications per year, due to the pandemic, there are more than 1.3 million eligible applicants per year. For them, the online application saves time and resources.
- In the first four weeks alone, 16,000 applications were submitted online
- With the online application, over 8,000 working hours in the administration per year can be saved due to faster processing.

#### 3. Key success factors

- Agile methods in digitization labs allow for flexibility. Planning in iterations, including several stakeholders, using dynamic structures make it possible, to react to uncertainties and change courses when unexpected things happen – like with this pandemic.
- The "One for All"-approach: That means that every solution in the OAA-implementation is developed only once by one federal state and every other state uses this solution afterwards, too. That was also done with the express development: one federal state, in this case Nordrhine-Westphalia, developed the service with the Federal Ministry of the Interior and operates it centrally. Twelve other federal states are now connected to and also use the existing solution. As a result, the federal states have not only saved time in implementation, but also financial resources.

#### 4. More information

More information can be found at: www.onlinezugangsgesetz.de

## Germany | SSI Wallet (eID Wallet)

Relevant Key Dimension(s)

Key enablers, User centricity

## Life event

All life events which need the eID-function

## 1. Good practice description SSI Wallet

This ecosystem of digital identities has great potential for the economy. We intend to demonstrate this with up to ten pilot applications developed in cooperation with the private sector. The first of these applications will be the digitisation of hotel registration forms to allow a fully digital check-in process (partners: large hotel groups, leading industry & transportation companies, IT Consulting). A legal amendment to the Federal Act on Registration enables fully digital completion of the registration form. Piloting began in May 2021, and around 120 hotel locations in Germany will be connected by summer 2021. The result of this work could later provide the basis for a "self-sovereign identity" ecosystem. This will strengthen the citizen's right to digital self-determination.

## 2. Benefits

- As the digital transformation progresses, secure electronic identification online is becoming more important.
- Making the eID function more user-friendly and to show the value of the eID in often used applications (travelling/ vacations)
- · Citizens in Germany have a secure and simple solution that also protects their data in the registration processes.
- Citizens themselves determine when to use this information, allowing them a secure and easy access to online services provided by businesses and public authorities.
- Conformity with the German Registration of Persons Act

#### 3. Key success factors

- A strong cooperation with enterprises from the travel sector (Air Carrier, Railway etc.) as well on the user side (Industry, IT-Company etc.) and Hotels (leading hotel chains) to implement the eID wallet and its further development.
- · User Acceptance and a large number of daily business use cases to make the wallet suitable to the daily use
- The federal ministries are working with individual target groups on those services and benefits provided as a shared responsibility for the further development and more claimed/requested use cases.
- · Secure and protected automated transfer of personal data (travel data, official registration data, companies legal address)
- A legal amendment to the Federal Act on Registration enables fully digital completion of the registration form.

## 4. More information

## More information can be found at:

https://www.bundesregierung.de/breg-de/aktuelles/hotel-check-in-kuenftig-per-id-wallet-moeglich-1914612 https://www.personalausweisportal.de/Webs/PA/EN/business/the-digital-identities-project/the-digital-identities-projectnode.html

## Germany | Smart elD

## Relevant Key Dimension(s)

Key enablers, User centricity

#### Life event

All life events which need the eID-function

#### 1. Good practice description Smart eID

German citizens will be able to save their electronic proof of identity from their German ID card directly on their smartphone and use that eID function via their smartphones. Citizens and representants of companies will be able to use the Smart eID for identification only with their smartphone instead of using a card reader or the smartphone as a card reader.

Six federal authorities are engaged in this project to secure different perspectives on the use of the Smart eID (Federal Ministry of the Interior, Building and Community (BMI), the Federal Office for Information Security (BSI), the Federal Office of Administration (BVA), the Federal Chancellery (BK), the Federal Ministry for Economic Affairs and Energy (BMWi), and the Federal Ministry of Finance (BMF)).

#### 2. Benefits

- Users will not need to use a card reader anymore in the process of using their eID-Function.
- The smart eID offers a secure alternative authentication tool in online transactions not only with government agencies as well in private transactions.
- Shaping an open ecosystem for digital identities with the Smart eID function
- Offers the basis for a "self-sovereign identity" ecosystem as well as strengthen the citizen's right to digital selfdetermination

#### 3. Key success factors

- The project OPTIMOS 2.0 has succeeded in securely saving both the eID function in the secure element of smartphones as well as in the eSIM using a standardised interfaces.
- "Showroom Secure Digital Identities" with a large number of show cases to use the Smart eID and to earn a great user acceptance through a large number of daily business uses cases.
- The federal ministries are working with individual target groups on those services and benefits provided as a shared
  responsibility for the further development and more claimed/requested use cases.
- New eID solutions are to be tested together with citizens, companies, research institutions and authorities in several cities and regions in order to make them user-friendly, trustworthy and economical.
- · Adjusting the legal requirements for the electronic identification via smartphone.

## 4. More information

More information can be found at: https://www.personalausweisportal.de/Webs/PA/EN/business/the-digital-identities-project/the-digital-identities-projectnode.html

## Germany | Online Access Act

## Relevant Key Dimension(s)

User centricity, Transparency, Key enablers

#### Life event

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

#### 1. Good practice description

Upgrading and standardizing digital solutions for public administration in Germany can succeed only if the Federation, the 16 federal states and all 11,000 local governments pull together. They must work together in a completely new way, across boundaries between ministries and different levels of government. This requires an enormous amount of coordination, which was agreed in summer 2017 in the form of the Act to Improve Online Access to Administrative Services, or Online Access Act (OZG) for short.

The Federal Ministry of the Interior, Building and Community (BMI) is overseeing this digital "building site", where all the federal ministries and state and local governments are hard at work alongside organizations, administration employees, service providers and end users. All interest groups will have a say. In this way, the BMI is making sure that the public administration of the future will meet the needs of the public, and not vice versa.

The central body responsible for coordination within this large-scale project is the IT Planning Council, which is overseeing two projects in the implementation of the Act: the programme for putting state and local services and benefits online and the network of administration portals at federal, state and local level. The national associations of local authorities are members of the IT Planning Council and represent the concerns of the local governments.

#### 2. Benefits

- The Online Access Act will make public administration easier to reach: user-friendly digital forms and documents will make it easier to find and apply for government services and benefits.
- Public administration employees will also benefit, because the Act will make their jobs easier: resources previously
  needed for processing applications can now be devoted to providing advice and services.

#### 3. Key success factors

- The actual work of making the services available online is divided among the participants: the relevant federal ministries are putting those services into digital form which are offered at the federal level. The federal ministries are working with individual federal states and local governments on those services and benefits provided as a shared responsibility.
- This collaboration demonstrates the advantage of federalism: based on the idea of "one for all", experts are developing
  digital solutions for the various areas which all the other federal states will be able to use as well. By mandating such
  cooperation between agencies and levels of government, the Online Access Act is ushering in the future of public
  administration.

## 4. More information

More information can be found at: https://www.onlinezugangsgesetz.de/Webs/OZG/DE/startseite/startseite-node.html

## Greece | Signed Declaration/solemn statement

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border

#### Life event

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

## 1. Good practice description

The service is providing the online completion of a Signed Declaration/Solemn Statement for a third party and the option to use it further.

## 2. Benefits

- Signed Declaration is a very common procedure in the Greek public administration, so the capability of the online process of it, reduces a lot of bureaucratic burden and citizen/businesses inconvenience as well.
- Statistics (21.03.2020 15.04.2021): 2,395,485 Signed Declaration/Solemn Statement issued.

#### 3. Key success factors

- User centered design and experience
- Use of TAXISnet credentials to login
- Authentication using e-Banking Credentials
- · Security of Transactions, using OTP (One Time Password) with the user's mobile.

#### 4. More information

Link for the service: https://www.gov.gr/ipiresies/polites-kai-kathemerinoteta/upeuthune-delose-kai-exousiodotese/ekdose-upeuthunes-deloses

Link for validation service: https://www.gov.gr/ipiresies/polites-kai-kathemerinoteta/upeuthune-delose-kai-exousiodotese/ elegkhos-egkurotetas-eggraphon-gov-gr

## Greece | Vaccination Platform (COVID-19)

## Relevant Key Dimension(s)

User Centricity, Transparency

#### Life event

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

## 1. Good practice description

The national vaccination campaign is supported by an online platform (emvolio.gov.gr). By using this platform citizens are able to schedule an appointment for vaccination. Citizen can use the platform by themselves, or address to Citizens' Service Centers (KEP) or to a local Pharmacy to do it for them.

## 2. Benefits

· Central Coordination and daily statistics.

#### 3. Key success factors

- Use of Taxisnet credentials to login.
- · Social Security Number (AMKA) is used to cross-verify.
- Email/SMS Notification.
- Interoperability of registries.

## 4. More information

Link to the service: http://emvolio.gov.gr Link for the online guide/course for the service: https://emvolio.gov.gr/sites/default/files/attachments/emvolio\_platform\_presentation\_vfinal.pdf?rel=homepage Statistics: https://emvolio.gov.gr/vaccinationtracker

## Greece | Paperless ePrescribing

**Relevant Key Dimension(s)** User Centricity, Transparency

#### Life event

Health

#### 1. Good practice description

Citizens now have the opportunity to receive their prescriptions/referrals on their mobile phones, without having to present them printed in the pharmacy/hospital/laboratory. The registration for paperless e-prescribing is performed through the gov.gr site. The presence of the patient –currently in the pharmacy, but in the near future also in doctor's office/hospital/laboratory– is verified by the use of OTP in the citizen's mobile.

This is a joint initiative of the Ministries of Digital Governance and Health, through which a very important and sensitive process becomes simpler for all involved (citizens, doctors, pharmacists, laboratory performers), while ensuring safety, transparency and privacy at all stages. In addition, remotely prescribing drugs and examinations is introduced for cases of recurring prescriptions related to chronic diseases and for providing health care at a distance, relieving the sensitive groups of the population from the need for personal presence in the doctor's office. Please note that the procedure is not mandatory.

#### 2. Benefits

- Transparency.
- Prescribing drugs/examinations at a distance.
- · Elimination of printed documents.
- Economic and ecological benefits.
- Statistics (until 20.04.2021): 1,940.058 registrations for paperless e-prescribing, 14,459,393 e-prescriptions and 4,380,544 e-referrals.

## 3. Key success factors

- Use of Taxisnet credentials to login for registration.
- · Social Security Number (AMKA) is used to cross-verify.
- Email/SMS Notification.
- Use of OTP (One Time Password) with the citizen's mobile.

## 4. More information

Link to the service: https://ehealth.gov.gr/ Link for the online guide/course for the service: https://howto.gov.gr/course/view.php?id=5

## Hungary | Online Invoice System - eInvoicing and supplying of data on invoicing

## Relevant Key Dimension(s)

User Centricity, Key enablers

## Life event

Regular Business Operations

## 1. Good practice description

## 2. Benefits

- In Q1 of 2021, 893,000 taxpayers used the system, and they sent 131 millions of invoices to the system.
- Propagating e-invoicing: As of 4th of January in 2021, taxpayers can use Online invoice system for e-invoicing purposes, and purchasers can download data of invoices from the system.
- Decreasing administrative burden: With downloading functions of the system, taxpayers can get data needed for their bookkeeping automatically from the systems. Tax administration can automatically draft VAT declaration from available data for taxpayers from August 2021.
- Customers can build business functions on top of the Online Invoice system.
- Whitening the economy.
- Invoicing flow standardisation.

## 3. Key success factors

- User-friendly services
- Centrally provided tool for invoicing

## 4. More information

More information can be found at: https://onlineszamla.nav.gov.hu/.

## Hungary | Automatic drafting of eVAT declaration

## Relevant Key Dimension(s)

User centricity, Transparency, Key enablers

#### Life event

**Regular Business Operations** 

#### 1. Good practice description

In order to reduce administrative burden of taxpayers the National Tax and Customs Administration are planning to draft VAT declaration of taxpayers from August 2021. NTCA is currently developing a system (so called eVAT system) with which NTCA can reuse data coming from different sources (Online Invoice system, Online Cash Machines, etc) in order to automatically provide a proposal and draft for eVAT declaration. Taxpayers will be able to access the draft of VAT declaration, the invoices and the aggregated data of other sources, and taxpayers can download, modify, finalise and submit the drafted declaration to NTCA manually via the user interface or automatically using the machine to machine interface of the system. Furthermore, as a new service, taxpayers are able to see actually calculated balance of VAT in the system.

#### 2. Benefits

- · Decreasing administrative burdens of taxpayers.
- Reduce tax fraud, including VAT fraud.
- More data for risk analysis.

## 3. Key success factors

- User-friendly portal for declaring VAT.
- · Centrally provided services to access data of Tax administration necessary for VAT declaration.
- · Administrative simplification.

## 4. More information

The service is to be launched in August 2021, therefore there is no separate webpage yet, general information on Tax matters: https://nav.gov.hu/.

## Hungary - Vehicle Service Platform (JSZP)

## Relevant Key Dimension(s)

User Centricity, Key enablers

## Life event

Transport

## 1. Good practice description

The Vehicle Service Platform (JSZP), introduced in January 2019, allows the customer to access the essential data of the car's life path from various Hungarian registers on a uniform interface free of charge. The request for data may be made following electronic identification on the single point of contact portal of Hungary. After acceptance of the Privacy Policy, any number of searches can be started within the application. After login, the licence plate number of the car to be checked must be entered on the JSZP query interface. Following data can be requested:

- Vehicle registration data
- Originality test and authenticity check
- Registration certificate and traffic restrictions
- Technical condition data
- Run performance data
- Insurance and damage history

Only cars registered in Hungary can be searched with the service. Data on mileage and registration certificate of the car is also shown on a graph to make it easier to understand, as well as the photo documentation of the originality test and the roadworthiness test.

## 2. Benefits

- After the query, the information is available immediately.
- On the JSZP the selected data and image documentation are displayed and it is possible to save them or send them to notification storage.

## 3. Key success factors

- From January 2019 until the end of the first quarter of 2021 a total 31,973,275 data requests have been done by the users with the use of the service.
- The service contributes to providing free information to those who wish to purchase second-hand cars in Hungary in a customer-friendly way. The JSZP allows anyone, especially as a potential buyer, to ask for information about the specific car they want to buy that is contained in different registration systems and can be useful in making a purchase decision.

## 4. More information

More information can be found at: https://magyarorszag.hu/szuf\_fooldal#ugyleiras,28c28a1a-7296-4629-8f36-7f3fbe6596c6%2Cadatigenyles\_a\_jarmu\_szolgaltatasi\_platformon.

## Hungary | Video identification eID service

## Relevant Key Dimension(s)

Key enablers

#### Life event

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

#### 1. Good practice description

From 1 February 2021, a new face-recognition video-technology electronic identification service has been introduced within the Hungarian eID building block, the Central Authentication Agent (that already included the Ügyfélkapu trusted profile, Telephone identification and eID card identification options before). The new solution is an end-to-end identification service based on biometry through video means providing citizens with the necessary registration and identification for electronic administration. The new video eID service just like the other eID means allows users to access the e-government services that need electronic identification, thus increasing user satisfaction, as they can choose the most convenient eID means. The solution is also capable for handling and taking photographs of documents required for the application for documents. Video identification is a cross-platform solution that is available on computer and handheld mobile devices as well.

#### 2. Benefits

- A new means of electronic identification to choose from by the users available on any device.
- A quick and automated solution releases administrative capacities, which can be regrouped through customer service to deal with other, more complex cases. In addition, citizens can handle their affairs quickly and comfortably.

#### 3. Key success factors

- Cross-platform and customer-friendly solution: the service is available not only from computers and laptops, but also from smartphones. A simple, easy-to-use interface helps customers to identify themselves.
- E-government services can become more attractive by allowing citizens to handle their affairs comfortably at any hour of the day with the use of eID of their choice.
- Compared to existing electronic identification services, it provides an automated, biometric-based solution. This makes electronic identification easier, faster and safer.

#### 4. More information

More information can be found at: https://www.magyarorszag.hu/szuf\_fooldal#ugyleiras,f0673a4e-49ea-47a0-8e08-1f03731e4125%2Carckepes\_azonositas\_%25E2%2580%2593\_videotechnologian\_keresztul\_torteno\_azonositasi\_ szolgaltatas

## Iceland | Lower airfares for residents in rural areas

## Relevant Key Dimension(s)

User Centricity, Transparency, Key Enablers

## Life event

Family, Transport

## 1. Good practice description

The Loftbrú (en. Airbridge) discount scheme is a digital service at the national portal Ísland.is that manages rights to and reservations of discount airfares on all domestic fly routes to and from the capital area.

The user finds the service on the national portal Ísland.is and logs in to it there. They who are eligible for a discount fare will see an overview of their rights. Those who want to avail the discount can download a discount code to use on booking pages of domestic airlines when booking scheduled flights. The user then completes the booking by paying the remaining fare with the deducted discount.

Airlines are responsible for the supply and pricing of airfares.

## 2. Benefits

• During the first seven months of the service, fifteen thousand residents in rural areas used it.

#### 3. Key success factors

- Cooperation between public bodies and business
- · Fully automated service for the users who can check their rights, book and pay in one adjacent process
- Good UX design and user experience

## 4. More information

More information can be found at: https://Ísland.is/en/lower-airfares-for-residents-in-rural-areas

## Iceland | Digital criminal record certificate

## Relevant Key Dimension(s)

User Centricity, Transparency, Key Enablers

#### Life event

Career, Family, Regular Business Operations

## 1. Good practice description

Every year, when applying for certain types of jobs, thousands of residents need confirmation of not having violated against certain laws and regulations. Until July 2020, everyone who needed the confirmation had to apply for it in person at the district commissioners offices. Now the application for the criminal record certificate can be found as a digital service at the national portal Ísland.is. Where individuals can log in to an application system, file an application, pay a fee and receive the certificate in their digital postbox on Ísland.is. The criminal record certificates are available both in Icelandic and English.

## 2. Benefits

• 70% of all licenses are delivered entirely digitally and automatically

#### 3. Key success factors

- Digitalizing public service that had been the same for a long time
- Contributing to better public service in the form of self service
- Better focus for institution on other more complicated matters

## 4. More information

More information can be found at: https://island.is/en/criminal-record

## Iceland | Digital Driver's License

## Relevant Key Dimension(s)

User Centricity, Transparency, Key Enablers

## Life event

Career, Transport

## 1. Good practice description

A digital driver's license is an innovation useful to any person who has earned the right to drive and owns a smartphone. The digital license verifies that the person in question has a valid driver's license and includes all the same information that is presented on the physical driver's license.

The service is located at the national portal, Ísland.is. The license holder logs in with digital credentials and applies for the license. If the user has a valid license it is sent to the phone's wallet. The service is available for both Android and iOS.

## 2. Benefits

Seven months after launching the service 40% of all driver's licenses in Iceland are issued in digital form.

#### 3. Key success factors

- Good UX design and user experience
- The service is available for both Android and iOS
- · Popular with users and put public service on the map in digital service.

## 4. More information

More information can be found at: https://Ísland.is/en/digital-drivers-license https://Ísland.is/okuskirteini

## Iceland | Electronic registrations

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers,

#### Life event

Business Start-Up, Family, Regular Business Operations

#### 1. Good practice description

The project delivers webservices and a public portal for the land and property registrations at the district commissioners in Iceland. Currently all registration processes are paper based but managed in a central registration system that has been used by the district commissioners for over two decades. The project is now in its first phase where it already delivering web services with more to follow. Phase two focuses on the portal.

The webservices handle the business logic, permissions and connects to all external and internal sources. The main users of the webservices will be automated processes at financial institutions, real estate software providers and the public web portal. The web portal will be a part of Ísland.is and development will start when the sufficient web services are ready.

#### 2. Benefits

- 1,2 to 1,7bn ISK cost saving per year combined for the district commissioners, financial institutions, end users and brokers.
- Unlock other non-tangible benefits such as: Quicker processes, options for new development and less road traffic.
- · Service time reduces from sometimes weeks to seconds.

## 3. Key success factors

- · Having all stakeholders participate and move as a team towards a collective goal.
- Cooperation between public and private sector on a mutual goal
- Financing of the project
- Access to relevant talent

## 4. More information

More information can be found at: https://www.Ísland.is/rafraenar-thinglysingar

## Italy | Italian Post Office Vaccinicovid.gov.it portal

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

## Life event

Family

## 1. Good practice description

The Italian Ministry of Health and the special commissioner appointed in 2020 to deal with the emergency coordinated the national vaccination campaign in terms of guidelines and vaccine supply chain; however, delivery of the vaccines has been the responsibility of regional government, which oversee all public healthcare service delivery in the country. Each region had the flexibility to decide what channel they could use to book vaccination appointments. The national government offered a platform that some of them decided to use: prenotazioni.vaccinicovid.gov.it. The portal is built and operated by Poste Italiane (the National Post Office), which runs other public services in collaboration with the government – for instance, Poste Italiane is one of the certified providers of the national digital identity system SPID. Access is free of charge for citizens. The service is also accessible through Poste Italiane ATM machines, a national contact center and postmen.

#### 2. Benefits

• 6 of the 20 Italian regions could use the Poste platform to be up and running quickly, without having to develop their own service.

## 3. Key success factors

- User-friendly service for citizens.
- Multi-channel (portal, ATM, contact center, postmen).
- · Poste Italiane scalable platform and previous experience as intermediary of public services.

#### 4. More information

More information can be found at: https://prenotazioni.vaccinicovid.gov.it

## Italy | Solidarietà Digitale

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

#### Life event

Regular Business Operations, Family, Studying, Moving, Transport

#### 1. Good practice description

Solidarietà Digitale is an initiative of the Minister for Technological Innovation and Digital Transition, coordinated by the Department for Digital Transformation with the technical support of the Agency for Digital Italy. It was launched to respond to the social and economic emergency of COVID-19. Launched in March 2020, the project consisted of inviting private and public entities to offer their contribution to mitigate the inconvenience suffered by citizens and businesses during the early stages of the health emergency and restrictions on movements due to prevention reasons. The initiative has spearheaded two further projects:

- Vicini e Connessi (Near and connected) launched on November 18, 2020, encourages the use of digital tools with the aim of determining advantages for those who sell, for those who buy and for the social fabric of Italian cities and communities.
- Missione Scuola (Mission school), which since September 2020, Solidarietà Digitale has been supporting the activities
  of teachers and students with Mission School through the first public notice issued to collect offers related to
  #DidatticaDigitale (e-Learning). The notice was developed and promoted by the Department for Digital Transformation
  and the Ministry of Education.

## 2. Benefits

- Over 11 million visits registered to the website.
- 785 online offers made available to the public on the dedicated website between March-August 2020.
- Use of new technologies to reduce the difficulties of shopping for people who can move less than before and counter the risks of closing small businesses otherwise damaged by a drop in demand.
- Provision of free digital services and innovative tools to support schools, teachers and students with e-learning activities.

## 3. Key success factors

- · Free accessibility of services and platforms from part of entrepreneurs, teachers and students.
- · Broad geographical coverage of the online services made available to the public.

#### 4. More information

More information can be found at: https://solidarietadigitale.agid.gov.it/iniziative/

## Italy | Italian Revenue Agency agenziaentrate.gov.it portal

## Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

#### Life event

Regular business operations

#### 1. Good practice description

Following the prolonged state of emergency due to the outbreak of COVID-19, the "Sostegni" Decree (Legislative Decree no. 41 of 22 March 2021) aims to provide for different types of support measures towards businesses and workers.

In particular, the non-repayable contribution bonus consists in the payment, by the Revenue Agency, of a sum of money or, at the irrevocable choice of the taxpayer, can be requested, in its entirety, as a tax credit that can only be used as compensation. The contribution is issued in favour of all subjects carrying out business activities, arts or professions or receiving an agricultural income, as well as holders of VAT numbers resident or established in the territory of the State. The amount of the grant is determined by applying a percentage to the difference between the average monthly amount of turnover and fees for the year 2020 and the average monthly amount of sales and fees for the year 2019.

The Italian Revenue Agency reacted quickly to this and other emergency measures and made available the services in digital format through their portal, which both companies and authorized tax accountants could use.

## 2. Benefits

- Concrete support to individuals/businesses having had revenues or remuneration not exceeding 10 million euros in the year 2019 and average monthly turnover in the year 2020 at least 30 percent lower than the average monthly turnover of the year 2019.
- For all eligible subjects, the amount of the grant cannot exceed one hundred and fifty thousand euros and is recognized, in any case, for an amount not less than one thousand euros for individuals and two thousand euros for subjects other than individuals.
- Access through national eID.

#### 3. Key success factors

- · Ability to re-use existing Revenue Agency portal platform to quickly deploy the new services.
- End-to-end online application through the "Invoices and payments" area of the portal.
- · Easy consultation of results on the portal.

#### 4. More information

More information can be found at: https://www.agenziaentrate.gov.it/portale/web/guest/contributo-a-fondo-perduto-ds/ infogen-contributo-a-fondo-perduto-ds-imprese

## Italy | SPID

## Relevant Key Dimension(s)

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

## Life event

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

#### 1. Good practice description

SPID (Public Digital Identity System), is one of the two Italian public digital identity solutions. SPID consists of a pair of strictly personal credentials (username and password) to access the online services of the public administration and private adherents. SPID experienced a huge growth during 2020 driven by the COVID-19 pandemic and Decreto Semplificazioni ('Simplification Decree', no. 76/ 2020) enacted by the Italian Government. Through the Decreto Semplificazioni the administrations were asked to adopt SPID and CIE as the only means of access to online services. In addition, in December 2020 the Italian government has created a Fund for Technological Innovation and Digitization of 50 million euros, thanks to which a Public Announcement was promoted for the allocation of financial contributions to Italian Municipalities<sup>27</sup>. In March 2021 7,345 Municipalities participated in the opportunities of the Innovation Fund. 6,328 Municipalities that participated in the fund have already activated SPID.

#### 2. Benefits

SPID brings important benefits to the citizens:

- SPID is a fast and secure access system to digital services that can be used from any device: computer, tablet and smartphone. Citizens activate the identity only once and it is valid for all digital public services and they no longer have to use multiple credentials. In this way they have a simpler interaction with online services.
- SPID is secure. Access to services is protected, also thanks to security checks up to three levels. Identification is ensured by protocols established by AgID, which identity providers must adhere to. The personal data are not profiled and privacy is guaranteed.
- SPID is the key to access European public services. With the Login with eIDAS button, the Italian node enables the cross-border interoperability of digital identities (eID) and its implementation enables the circularity of Italian eIDs among 23 EU member states for digital public services access.

SPID brings important benefits to the Public Administration:

- with a certain and centralized identification, public bodies can save money (no longer having to develop proprietary
  solutions or manage a registration/recognition process), increasing the effectiveness of the relationship with their users
  and the knowledge that citizens have of the services they provide. In this way they also have certainty of the user's
  data when he accesses the online services.
- by adopting a single system, the Public Administration fosters a new relationship with people, unique for all digital services, offering an increasingly simpler experience in accessing digital services. The activation of the digital identity will allow the creation of innovative services also thanks to a more certain and secure identification.
- The private sector will also be able to benefit from digital identity, improving the user experience and the management of their customers' personal data.

As of April 26, 2021, SPID Digital Identities are over 20 million, a sustained growth (over 200%) on a yearly basis (SPID Identities were 6.5 million in April 2020).

The active administrations are 7098, at the end of 2020 they were 4900 administration and 3500 at the end of 2019. The growth of PA has been 50.8% in the first quarter of 2021. The municipalities that have activated SPID are 6733, 84.2% of Italian municipalities.

Strong growth also for access to online services. In the first quarter of 2021, total authentications were 100 million, equal to 70% of the authentications in 2020. In 2020 access to services with SPID amounted to 140 million, from 2017 to 2019, there were 52 million authentications.

## 3. Key success factors

- In a period of epidemiological emergency COVID-19 that we are experiencing, made up of social distancing, blocking
  and growing importance of digital, SPID has allowed access to online public services and bonuses made available by the
  government, allows public administrations to freeing citizens from unpleasant experiences such as queues at public office
  counters.
- Increase in the offer of services and bonus accessible with SPID as well as some increase of mandatory as a strong push from the government to make access to public services for citizens mandatory with SPID and CIE, thanks to the Decreto Semplificazioni. In 2020, some administrations anticipated the deadlines of the Decree: for example, the Ministry of Labor and the National Institute of Social Security (INPS), which is the largest social security and welfare institute in Italy with approximately 200 online services for citizens with authentication, started the transition from PIN to SPID and CIE in October 2020. The Inail (National Institute for Insurance against Accidents at Work) and the Agenzia delle Entrate (Italian Revenue Agency – which has about 200 online services with authentication) have also started the transition from their credentials to SPID and CIE, in line with the timing of the Decree.
- Economic contributions to municipalities and regulatory obligation for all administrations to activate SPID and CIE for access to services (Innovation Fund) and initiatives to simplify the activation of SPID for citizens. For example, from October 2020 Italian administrations can become responsible for identity verification. By adhering to the Public Registration Authority Officer (RAO) model, the administration can check, free of charge, at its offices, the personal identity of citizens who want to have SPIDs and facilitate them in the first phase of identification. In April 2021 there were 23 active administrations.

#### 4. More information

More information can be found at:

- Spid website: www.spid.gov.it
- Guidelines for the implementation of SPID/CIE, pagoPA and app IO: https://innovazione.gov.it/dipartimento/focus/linee-guida-decreto-semplificazione
- Public announcement for municipalities: https://www.pagopa.gov.it/it/pagopa-spa/fondoinnovazione/avviso

## Italy | App IO

## Relevant Key Dimension(s)

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

## Life event

Studying, Family, Regular Business Operations, Moving.

#### 1. Good practice description

IO, the app for Italian public services represents a single channel through which all local and national authorities (Municipalities, Regions, Central Agencies) offer their services to citizens, in a simple and personalized way, directly on smartphones. Through the app and thanks to the integration of the Enabling Platforms (unique digital identity, payment platform, single national registry), IO represents the access point for all digital public services.

IO overturns the paradigm underneath the current relationship between Italian citizens and institutions, to achieve a new vision of public services completely user-centered.

#### 2. Benefits

- IO brings important benefits to the Public Administration: by integrating their own services on the app, public bodies
  can save money (no longer having to develop proprietary solutions), increasing the effectiveness of the relationship
  with their users and the knowledge that citizens have of the services they provide. In particular, administrations will
  be able to:
  - Having the certainty of the citizen's identity in order to contact a citizen through IO, it is sufficient for the Administration to know his tax code. The certainty of sending communications, notices and payments exactly to the recipient of a given service is guaranteed by the process with which the citizen must authenticate himself in IO, based on SPID or CIE (Electronic Identity Card). All citizens who have installed IO will be able to immediately receive communications from the services of the organizations: it is not necessary that they have previously activated the related services.
  - Enhance and increase the visibility of its digital services all local and national services relevant to the citizen are in one place, with simple and direct language. Through IO, the administration will be able to publicize the digital services it already makes available to citizens, and inform them about new services and initiatives.
  - Have significant savings on technology implementation expenses and lower costs for sending messages, replacing notifications sent via regular mail.
  - Manage appointments, messages and payments more efficiently giving citizens the possibility to pay directly from the message received on the app or from the pagoPA paper notice (by scanning the QR code or manually entering the IUV), reducing collection time and costs for the administration.
  - Ensuring privacy and security fully complying with the requirements of current legislation, including the GDPR regulation, and with the standards supervised by the Italian Data Protection Authority, IO offers the administration the opportunity to improve the experience of the citizen also in terms of accessibility of their personal data.
- Thanks to IO a citizen can access the common functions of the public services of all the national and local entities integrated on the app. These include:
  - receive messages and communications from an institution, with the possibility of archiving them;
  - remember and manage deadlines with the Public Administration (e.g. identity card, car permit, announcements for enrolment in nurseries...), adding reminders in the personal calendar with a touch;
  - **receive payment notices**, with the possibility to pay services and taxes (e.g. car tax, school canteen, fines...) from the app in just a few seconds (directly from the message or by scanning the QR of the paper notice), always carrying the history of operations and payment receipts;
  - request bonuses and discounts linked to specific initiatives or programs.

- Since the debut in stores of the IO App in April 2020, the number of downloads has grown to more than 11 million and nearly 10,000 of new services have been integrated into the app by more than 4,000 national and local authorities. Data show that today IO represents the access point for digital public services, producing benefits for citizens and greater efficiency for public administrations. Some examples are shown below:
  - Cashback Program a 10% cashback on purchases with payment cards and apps registered on IO, as part of the "Cashless Italia" plan promoted by the Italian Government to reduce use of paper money and foster a more widespread adoption of digital payments.
  - From December 8, 2020, more than 465 million transactions were processed by almost 8.5 million people, who added a total of 15.3 million payment methods.
  - Bonus Vacanze *a subsidy of up to 500 euros for citizens to support domestic tourism during the pandemic.* From July 1, 2020, through IO 1,885,802 families obtained the Bonus Vacanze in less than 3 minutes on average (2.2 minutes in 80% of cases) and benefits were disbursed for an economic countervalue of 829,431,050 euros.
- The IO app relies on the integration with the so-called "enabling platforms", necessary components for its functioning and for the Italian digital transition. Among these, the one of greatest interest for citizens is SPID, the public digital identity system, a username and a password that guarantee all citizens and businesses a single, secure and protected access to the digital services of the Public Administration. Spid is the necessary component for authentication in the App: today, the SPID digital identities dispensed reached 20 million, increased by over 13,5 million (200% growth) since the debut in stores of the IO App in April 2020.

#### 3. Key success factors

- IO simplifies the life of citizens. Thanks to the App, people can access the common functions of the public services of all the entities of his interest (national and local) integrated on the app.
- In a complex period like the one we are living, made of social distancing, lockdown and increasing importance of digital, IO app allows public administrations to free citizens from unpleasant experiences such as queues at counters in public offices, besides minimizing their effort to be compliant with duties and deadlines.
- IO integrates pagoPA, which allows citizens to pay quickly and intuitively from the app: securely saving their preferred methods (credit cards and, soon, also ATM, paypal, etc.) and using them every time they need to make a payment to the State. With the app, citizens can pay any paper notice issued in the pagoPA circuit, simply by framing the QR code on the bill.

#### 4. More information

- More information can be found at: www.io.italia.it/
- · App IO metrics are public and updated daily.

# 7

# Italy | ANPR

# Relevant Key Dimension(s)

User Centricity, Transparency.

## Life event

Family

### 1. Good practice description

ANPR is an integrated system that allows municipalities to carry out registry services, consult or extract data, monitor activities and generate statistics. With ANPR administrations and service providers will be able to have a single and reliable source for citizens' data.

Approximately 7,500 municipalities and 14 metropolitan cities are already using ANPR (almost 94% of the total municipalities); full integration is expected by 2021.

This project aims to ensure full adoption of ANPR by increasing and improving the services available to citizens whose municipalities are already using or will use ANPR.

#### 2. Benefits

The ANPR is a strategic project in the digital agenda that opens the way to new scenarios for digital public services, since a national database allows to standardize and automate the procedures relating to personal data, guaranteeing the certainty and confidentiality of the data.

With ANPR, administrations will be able to communicate efficiently with each other, having a single and certain source for data, without having to request them from citizens every time.

The advantages for the State are attributable to: considerable savings in hours / year of work; automatic and centralized access to timely and synchronized personal data; facilitation of verification and assessment activities; increased security on law enforcement controls.

ANPR will also allow citizens immediate benefits, such as the possibility of requesting personal certificates in all municipalities, obtaining a change of residence in a simpler and more immediate way, accessing their data in real time, requesting certificates from a single portal. Each update will be direct and immediate, being automatically communicated to other bodies such as INAIL, ISTAT (Italian National Institute of Statistics), the Revenue Agency, the civil motorization, health companies.

### 3. Key success factors

Collaboration between the Ministry of the Interior and the Department for digital transformation through the signing, since 2017, of specific Agreements as well as through the establishment within the Department of a Program Office, which has provided technical and operational support in implementation activities of the ANPR, provided for in the contracts between the Ministry of the Interior and Sogei SpA.

#### 4. More information

More information can be found at: www.anpr.interno.it and www.innovazione.gov.it

# Ireland | COVID Tracker App

# Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

# Life event

Family, Moving, Transport

# 1. Good practice description

Ireland's COVID Tracker App was created in 2020 to help tackle the repression of the COVID-19 virus. The App was an inter-departmental and agency initiative, working with a private software company, to quickly build and release a safe and secure app to aid in the tracing of close contacts of confirmed positive COVID-19 cases.

The COVID Tracker App is based upon Bluetooth proximity using the Google and Apple exposure notification system. It is visually appealing and engaging and was developed with privacy at its core. The successful App has a user-friendly UI to make it accessible to all age groups, nationalities and people with learning or visual difficulties.

### 2. Benefits

- Uses open source code to ensure trust and transparency
- Nearly 2 million downloads since the app was first launched
- Using Apple and Google exposure notification systems reduced costs

# 3. Key success factors

- Early and open engagement with the public to ensure buy-in and trust
- Fast-track agile development with strong governance
- Core code being used in other jurisdictions such as Northern Ireland, New Zealand and some states within the U.S (such as New York, New Jersey and Delaware).

# 4. More information

More information can be found at: https://covidtracker.gov.ie/

Example media article: https://www.irishtimes.com/business/technology/race-against-time-the-inside-story-of-ireland-s-covid-tracker-app-1.4303509

# Ireland | gov.ie Portal

# Relevant Key Dimension(s)

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

## Life event

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

### 1. Good practice description

gov.ie is the central portal for government services and information in Ireland. It combines the websites of most Government Departments. By end-2020, 14 of the 18 Department websites had merged with the gov.ie service. The remainder will be on-boarded in 2021.

During 2020, gov.ie became a key platform for Government communications supporting the COVID-19 pandemic response. It handled 100 million+ page views – up from 6 million in 2019. gov.ie is also the main source for information complying with the Single Digital Gateway Regulation.

Building on this success, gov.ie will enable seamless integration of existing (e.g. MyGovID, Digital PostBox) and new digital services to the public over time.

#### 2. Benefits

- A trusted source that makes interactions with the government more user-focused
- · Consistent user centric look-and-feel for all Government information, saving users' time
- Cost savings from retiring multiple separate government websites

## 3. Key success factors

- Presents a unified and consistent front strong content team
- · Recognised by public and media as core source for information on government services
- Rapid increase in visitor traffic

# 4. More information

More information can be found at: www.gov.ie

## Lithuania | State Data Governance System as capable data management platform

# Relevant Key Dimension(s)

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

#### Life event

Family, Regular Business Operations, Transport, Health

### 1. Good practice description

A common data space (or national data lake) to consolidate and enable important state data – State Data Governance System, created on the basis of a multifunctional and capable data management platform, which enables quick and efficient access to different data sources, with intention to provide services for state, science and business. It means centralised opening of administrative data, effective exchange, re-use of data and production of operational data as well. Now is realized model of operational COVID-19 data management processes: morbidity and mortality, vaccination and outbreak management. It created preconditions for decisions making "now and here", to produce better and more transparent public information on COVID-19.

### 2. Benefits

- Operational COVID-19 data management: data ecosystem from data collecting, anonymization, transformations, analysis to dissemination, fully automated process from data provider to user
- Process management (vaccination logistics, COVID outbreaks management, sequencing)
- Close to 500 users: from government (25), ministries and other public authorities (200), public health centers (50) hospitalities (145), municipalities (100), medicine laboratories and others

#### 3. Key success factors

- High level technology (multifunctional and capable data management platform)
- Government support

#### 4. More information

More information can be found at: COVID-19 dashboards (public result), video

# Lithuania | Open data dashboard on public contracts aimed at combating COVID-19 by Public Procurement Office

### Relevant Key Dimension(s)

Transparency

### Life event

**Regular Business Operations** 

### 1. Good practice description

In April 2020 Public Procurement Office (PPO) has opened the data on public contracts regarding the supplies and services aimed at combating COVID-19. The dashboard covers several groups of purchases (PPE, testing materials, transportation services, other services) and contains the data on the buyer, supplier, date of the conclusion of the contract, type of purchase and prices of certain purchases.

User-friendly data is freely accessible to anyone interested at the PPO's website. Moreover, PPO has also conducted an in-depth analysis of the data in order to determine the emerging procurement practices and areas for improvement and released an overview in June 2020.

Currently a second overview is being prepared (the release intended in April 2021).

#### 2. Benefits

- Increased transparency of COVID-19 related purchasing in Lithuania: the data comes from the public contracts register and provides reinforcement for public buyers to comply with the obligations regarding the publishing of the concluded contracts;
- Increased civic monitoring: anyone interested can look up the purchases by any public buyer and conduct analysis of the provided data;
- Basis for further research: e. g. Transparency International Lithuania conducted an additional overview of the COVID-19 related spending of the biggest public buyers, which uncovered that the factual spending is approx. 10 percent higher in comparison to the publicly available information (meaning, some contracts are still unpublished).

### 3. Key success factors

• PPO's willingness to take the initiative to ensure the transparency of the COVID-19 related spending, public buyer's willingness to respond to the PPO's request to publish the contracts without delay.

# 4. More information

More information can be found at: https://vpt.lrv.lt/kovai-su-covid-19-sudarytos-sutartys (dashboard) and https://vpt.lrv.lt/ uploads/vpt/documents/files/Viesuju\_pirkimu\_kovai\_su\_COVID-19\_apzvalga.pdf (overview in Lithuanian).

# 7

# Lithuania | Online pre-acceleration program "Startup Guide"

# Relevant Key Dimension(s)

User Centricity, Key enablers

# Life event

Business Start-Up, Studying, Career

# 1. Good practice description

Free of charge online pre-acceleration program, launched by national startup ecosystem facilitator "Startup Lithuania" (Enterprise Lithuania) to encourage create global innovative businesses (startups), offering basic information, video lessons and templates needed from idea to investment attraction and going to market.

# 2. Benefits

- · Accessible for everyone anytime.
- 500 students in 10 months.

### 3. Key success factors

- Demand for such information in Lithuania (based on the questions that Startup Lithuania receive from potential and existing startup founders).
- Actual, structured content.

# 4. More information

More information can be found at: https://startupguide.startuplithuania.com/

# Lithuania | GovTech Lab

# Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers, Cross-Border

### Life event

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

### 1. Good practice description

GovTech lab is an initiative in Lithuania to open the public sector and its challenge to startups and innovative tech companies. To achieve this, the GovTech lab has developed GovTech Challenge Series, a structured programme to build GovTech solutions solving the most pressing challenges. GovTech Challenge Series is designed to solve public sector challenges that do not have a clear answer but have the potential to foster the creation of innovative digital solutions. It is an innovation to the traditional procurement process because it focuses on piloting solutions before proceeding to full-scale implementation.

# 2. Benefits

- Solving government's technological challenges that would usually be left unsolved, such as detecting hate speech, detecting dangerous goods online, or undertaking better environmental risk assessment of companies. So far, 20 challenges have gone or are still going through the GovTech Challenge Series process.
- Economic opportunity for startups and companies. In Lithuania, public procurement constitutes 13% of GDP. GovTech lab allows startups to access this market and provide economic opportunity to entrepreneurs to set up and grow new businesses.

#### 3. Key success factors

- Extensive consultations with private sector, public sector, citizens prior to set up of GovTech Lab and consistent and open communication before and after the set up.
- Cross-border cooperation with CivTech Alliance

# 4. More information

More information can be found at: https://govtechlab.lt/

# 7

# Lithuania | Smart Tax Administration System (i.MAS)

# Relevant Key Dimension(s)

Transparency

### Life event

Regular Business Operations.

### 1. Good practice description

Smart Tax Administration System (i.MAS) goal is to reduce the administrative burden on taxpayers, increase accounting for the taxpayer income, tax collection and performance of tax administration by installing electronic services and by shifting the tax payers' transactions data collection, processing, management and delivery to electronic space. Currently i.MAS system is comprised of:

General part - all i.MAS overall functionality (messages, contact information, i.MAS representations management, settings for web services);

#### Subsystems:

i.SAF - electronic invoicing subsystem;

- i.VAZ electronic way-bill subsystem;
- i.APS a subsystem for remote accounting services for small businesses.

### 2. Benefits

- Reduced the administrative burden on taxpayers, increased taxpayers' revenue accounting, tax collection and tax administration efficiency.
- Statistics on the number of users are available at: https://imas.vmi.lt/isaf/

### 3. Key success factors

· Obligation to use developed digital solutions.

# 4. More information

More information can be found at: https://imas.vmi.lt/isaf/

# Lithuania | Lithuanian Virtual Museum

Relevant Key Dimension(s)

User Centricity

## Life event

Family (Culture), Studying, Moving

# 1. Good practice description

The Lithuanian Integrated Museum Information System (LIMIS) is modernized:

- 26 virtual tours of Lithuanian museums and the territory of Vilnius castles were created in Lithuanian and English. During the pandemic period, when there are no cultural events for long periods of time, the possibility to visit museums virtually becomes particularly relevant;
- 10 audio guides have been created in Lithuanian and English for museum exhibitions adapted for children;
- A 10-language audio guide to the Vilnius Castles area;
- 3-D digital images of 28 wooden buildings of the Lithuanian Folk Life Museum were created;
- 3D digital images of 52 cultural heritage objects were created;

## 2. Benefits

- · the possibility to visit museums virtually;
- modernisation of the LIMIS, and adaptation it to the contemporary needs of museums and the public;
- the provision of advanced electronic services, the proper visualisation of digital content about objects of cultural heritage compiled in the database;
- accessibility on the Internet and strengthening of the material base for digitisation available to the participants of the Project.

## 3. Key success factors

- · Creation of new generation advanced electronic services to the public;
- Increasing the competence and qualifications of professionals;
- Strengthening the network of the centres of excellence for digitisation in museums and other project partners and strengthen the material base, whilst at the same time creating an opportunity to successfully implement the activities of the Project during its execution and continuity;
- Integration the Lithuanian Integrated Museum Information System (LIMIS) with the Cultural Heritage Register (CHR), enabling the exchange of digital information regarding digitised values between LIMIS and CHR, and to add new content to the current electronic services offered.

## 4. More information

More information can be found at: https://www.limis.lt/en/ https://turai.vturai.lt/3\_pilys\_lt/

# Lithuania | Political integrity monitoring tool ManoSeimas.lt (MyParliament)

# 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

Transparency International Lithuania collaborating with the Parliament to obtain data created online political integrity monitoring tool called Manoseimas.lt. The tool contains agendas of Members of Parliament including their meetings with interest groups and registered lobbyists allowing to compare the activity of individual MPs as well as different political groups. Moreover, recently the tool was updated with the data about long-term permits to access the Parliament, being one of the very few countries in the world to publish such information. Permits data was also matched with data from parliamentary committees meetings to see who and how much used their permits to participate in commitees discussions. Currently, Manoseimas.lt is being updated with 4 years data on committees' meetings.

## 2. Benefits

- Increased transparency in decision-making processes in Lithuania: more MPs started publishing more meetings (since the beginning of the term (2016-2020), 100 MPs out of 154 declared at least one meeting with interest groups and registered lobbyists).
- Parliament has been opening its data in open data format including MPs agendas, and in 2021 a new Law on Lobbying
  activities came into force introducing a cross-declaration of lobby meetings, which means that both politicians and
  lobbyists have to declare their meetings. Lithuania possibly being the first country in the world to introduce such
  measures.

## 3. Key success factors

• TI Lithuania's close collaboration with the members of Parliament, the Chief Official Ethics Commission and other stakeholders to seek for changes and bring more transparency into politics

# 4. More information

More information can be found at: www.manoseimas.lt. Press releases in English www.transparency.lt/en/2016-2020\_parliament/ and www.transparency.lt/en/long\_term\_permits/

# 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

# 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

# Latvia | Change of vehicle owners in e-environment (e- CSDD)

# **Relevant Key Dimension(s**

User Centricity, Transparency

## Life event

Transport

## 1. Good practice description

The process consists of two interlinked services: (1) Deregistration of a vehicle for alienation in Latvia in e-CSDD and (2) Changes in ownership in electronic in e-CSDD [2].

In order to make changes in ownership within e-environment person need to take following steps: (1) The registered car owner (seller) must deregister vehicle for alienation in Latvia; (2) Buyer (the new owner) makes note in the e-register regarding intention to purchase a specific vehicle; (3) The seller (registered owner) shall approve the change of ownership within 5 days; (4) The purchaser (new owner) registers the vehicle in e-CSDD within 5 days and receives a registration certificate.

E-CSDD is available on the website e.csdd.lv and mobile applications.

# 2. Benefits

- · Reduced number of documents to be submitted.
- Saving time and excluding the possibility of re-registration of a vehicle with falsified documents, it allowed to synchronize around 67 000 e-register notes made yearly with around 8 500 vehicle re-registrations electronically yearly.

## 3. Key success factors

• Users are offered a safe, convenient and controlled change of vehicle ownership in the e-environment, which represents a significant improvement in the complicated process of vehicle re-registration.

# 4. More information

More information can be found at: https://www.csdd.lv/jaunumi/csdd-piedava-transportlidzeklu-ipasnieku-mainu-e-vide

# 7

# Latvia | Tilde COVIDBOT

# Relevant Key Dimension(s)

User Centricity, Transparency

# Life event

Health

# 1. Good practice description

The virtual assistant COVIDBOT is equipped with powerful features like natural language understanding that supports free-text inputs and context-handling features. Through the power of multilingual AI, COVIDBOT instantly answers thousands of questions, provides guidance, and protects from misinformation. The chatbot responses to user questions are enriched with pictures, infographics, tables and videos.

#### 2. Benefits

- 24/7 provision of actual information regarding COVID-19 about actual normative regulation, information about virus and health, actual information and statistics
- Reduce misinformation about COVID-19
- Increase efficiency of treatment and treatment availability

# 3. Key success factors

• Use of and applicability of AI technologies in language specific settings

# 4. More information

More information can be found at: https://covidbots.lv

# Montenegro | UčiDoma

**Relevant Key Dimension(s** User Centricity

# Life event

Studying

# 1. Good practice description

In March 2020, Ministry of Education, Science, Culture and Sports was started recording classes according to the subject programs for primary and secondary school.

All recorded classes are posted on the youtube channel UčiDoma, but they are also broadcast on TV channels.

The portal www.ucidoma.me has also been established, which contains all recorded materials and is organized by classes and subjects.

The schedule of broadcasting the recorded material can be found on the UčiDoma portal, but also on the portal for teachers (www.skolskiportal.edu.me). The schedule published on the Teachers' Portal also contains links to all lessons published on the UčiDoma YouTube channel.

Material for working with preschool children (IgrajSeDoma) is on the School portal in the category of Preschool Education, and material for working with children with special educational needs is on the same portal in the category of Inclusive Education.

### 2. Benefits

· High ratings and monitoring of the educational program created in this way.

#### 3. Key success factors

 Great commitment of teachers and employees in educational institutions for the rapid establishment of distance learning system.

# 4. More information

More information can be found at: https://www.ucidoma.me/

# Montenegro | Digital School Concept (primary and secondary schools)

# Relevant Key Dimension(s)

User Centricity

# Life event

Studying

# 1. Good practice description

Ministry of Education, Science, Culture and Sports, in cooperation with the UNICEF Office in Montenegro, was implemented the Project "Application of tools for online collaboration and learning (Office 365) and improvement of the Education Information System (MEIS) - electronic services".

Within the Project:

- a set of trainings for the use of the Microsoft Teams application in teaching was launched, which included a number of teachers from all primary and secondary schools in Montenegro
- The document "Digital School" was created, which represents the concept and framework through which schools can, with the help of Microsoft 365 (Office 365) software package, realize all school activities through an adequate digital environment and which you can download here
- and finally, as a form of support, web page http://www.digitalnaskola.edu.me/ with video instructions for using Microsoft Teams tools was created.

#### 2. Benefits

- During 2020 and 2021, the Office365 training program was attended by over 4,200 employees in educational institutions.
- · Online teaching in primary and secondary schools is mostly based on this concept.

#### 3. Key success factors

- Good cooperation with school management.
- Great motivation of teachers.

# 4. More information

More information can be found at: http://www.digitalnaskola.edu.me/

# Montenegro | Tracking achievements (primary and secondary schools)

# **Relevant Key Dimension(s**

User Centricity

# Life event

Studying, Family

# 1. Good practice description

The Ministry of Education, Science, Culture and Sports, with the support of Crnogorski Telekom, has created a new portal Dnevnik (https://dnevnik.edu.me/login) which enables parents to monitor their child's grades, absences and behavior. The portal also allows parents to communicate with the class teacher and offers information about scheduled parent meetings, as well as other information. In addition to the web application, mobile applications for Android and iOS have also been created. All data are based on the central Education Information System MEIS.

### 2. Benefits

- Parents can easily, in a simple and accessible way, follow the achievements of their children without going to school.
- 68859 users in 2020 (web portal and mobile applications), which can be assessed as extremely high traffic.

## 3. Key success factors

• Existence of an education information system in which data on each student in Montenegro are kept, as a basis for this service.

# 4. More information

More information can be found at: https://dnevnik.edu.me/login, https://play.google.com/store/apps/details?id=com.edume, https://apps.apple.com/us/app/e-dnevnik-me/id1506663957?ls=1. A clearer picture of this portal can be obtained through the created video tutorial.

# 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 upisi.edu.me, 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.

# Montenegro | Portal Covid19.edu.me

**Relevant Key Dimension(s** Transparency

#### Life event

Studying, Family

# 1. Good practice description

The portal "Covid-19 and education" was created to monitor the impact of the Covid-19 pandemic in educational institutions in Montenegro. The data are presented graphically by levels of education (preschool, primary, secondary) and refer to children and employees in educational institutions in Montenegro, private and state. Data review is weekly. The percentages in the graphs represent the percentage of children / teachers of a certain category (all, new patients, patients, in self-isolation) in a zone / municipality in relation to the total number of children / teachers of the same category in all zones or all municipalities.

# 2. Benefits

• Data transparency.

#### 3. Key success factors

· Great interest of parents and educational institutions.

### 4. More information

More information can be found at: http://covid19.edu.me/.

# **Republic of 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)

# Malta | Covid-19 Related Services

### Relevant Key Dimension(s)

User Centricity, Transparency, Key Enablers

#### Life event

Family, Regular Business Operations, Moving, Health

#### 1. Good practice description

The Malta Information Technology Agency (MITA) involved itself in several initiatives to assist the Government of Malta, and specifically the Ministry for Health, during the Covid-19 pandemic. A brief description for each initiative can be found hereunder:

#### **Telemedicine**

MITA assisted health authorities to implement Telemedicine in Malta. Using digital tools, a new service was setup so that medical consultations between health professionals and patients could be carried out online. ICT support is offered to ease the service delivery.

#### Contact Tracing App

MITA has implemented the COVID-19 Contact Tracing App, referred to as 'COVID ALERT MALTA App' on behalf of the Ministry for Health. The objective of the App is to compliment the Manual Contact Tracing Process that is carried out by the Public Health Department. The App uses the standard privacy preserving norms available on users' smartphones and alerts users when they may have been potentially exposed to COVID-19 after having come near an infected person. It will then suggest actions to be taken. The App is available via the main internet stores and is interoperable with similar Apps used in another 16 European countries. The App does not collect personal data which could lead to identification of the user, nor track a user's location.

#### <u>Vaccin.gov.mt</u>

This online service provides Maltese citizens and residents the ability to register for the COVID-19 Vaccine in specific cohorts as defined by Government. The system uses mobile technology to direct the validated user to proceed for vaccination at his/her preferred location.

#### Rapid Antigen Tests Application

This is an online service related to the recording of Rapid Antigen testing and results. The application guides in the provision of advice and allows the printing/emailing of the result to respective citizens. The application also has the facility to issue statistics based on pre-selected criteria which are crucial in the contact tracing process.

This enables the COVID-19 response team to follow up on citizens who recorded a 'Reactive' (positive) result on the Rapid Antigen Test so that they will take the appropriate action, including requesting them to carry out a Polymerase Chain Reaction (PCR) test and provides the Superintendent of Public Health with visibility of the Rapid Antigen Tests being carried out in line with legal notice.

# 2. Benefits

Each of these initiatives were carried out with a common goal in mind, that of tackling the Covid-19 pandemic. All these initiatives were actioned at the appropriate time during the pandemic and were designed to assist the general public in taking the required action to protect themselves against the virus. In doing so, this also helped to alleviate unnecessary pressure on medical professionals and provided real-time information to Health Authorities.

# 3. Key success factors

- International collaboration
- Teamwork between the ICT professionals and the health professionals
- Internet services across the whole country
- User Friendly systems

# 4. More information

More information can be found at: https://deputyprimeminister.gov.mt/en/phc/Pages/Services/Telemedicine/Telemedicine.aspx https://covidalert.gov.mt/

# Malta | Modern Workplace

# **Relevant Key Dimension(s**

User Centricity

## Life event

Regular Business Operations, Family

## 1. Good practice description

This strategic initiative helped implement Mobility and Collaboration into the Public Administration's workplaces. This was achieved by adopting a standard digital platform based on Microsoft Online Services.

This initiative supports today's business needs and requirements by empowering public service employees to become a digital workforce and be able to work remotely.

### 2. Benefits

- Public Service employees are able to work easier and faster, become more mobile, collaborate seamlessly with their colleagues from other departments and thus deliver public services more efficiently.
- Many internal processes have been automated and re-engineered, enabling individuals to save time and focus on what really matters; thus, being able to serve citizens efficiently, and in a timelier manner.
- One key competitive advantage is that Government employees are empowered to work anywhere, anytime, and most importantly, on any device in a secure manner.

# 3. Key success factors

- In order for this change project to be successful, MITA worked in close liaison with the senior personnel within the Public Administration. A comprehensive implementation and change management plan was drawn up and adopted to ensure a successful change in the workplace behaviours.
- During implementation, the team also adopted a user-centric approach. Human Resources aspects relating to this change
  process were given due attention and aligned to benefit from the technology. A soft-rollout approach was used, allowing
  the implementation team to adapt and improve its operations on day-to-day basis, while helping the clients to change to
  the new ways of working.

## 4. More information

More information can be found at: https://customers.microsoft.com/en-us/story/861421-malta-information-technology-agency-government-microsoft365-en-malta.

# 7

# Malta | servizz.gov One-Stop-Shop services

## Relevant Key Dimension(s)

User Centricity, Key enablers.

### Life event

Family, Career, Studying, Moving, Transport, Starting a Small Claims Procedure, Health

### 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. In fact, pre-COVID, the number of online applications related to social services was 2,427 in 2019. This increased to 17,103 in 2020. The level of satisfaction, according to a survey conducted in December, was high, with 93% of respondents showing a very good level of satisfaction.

### 2. Benefits

- Number of online applications increased by 605%. Therefore, a substantial segment of the population shifted away from the traditional face-to-face service encounters to the services provided online.
- With more individuals choosing to access online services, the service provision at servizz.gov hubs has changed. Although some citizens still prefer face-to-face interaction and opt to visit our hubs, the applications can still be submitted via online services available at these hubs. Therefore, enforcing a greater shift towards online services.

#### 3. Key success factors

• The public administration responded well to the pandemic and increased effort was placed to ensure that government services become more accessible. Although more employees worked remotely, online services increased, and applications were processed within the established timeframes.

#### 4. More information

More information can be found at: www.servizz.gov.mt

# Malta | Ministry of Health Portal, COVID-19 Helpline 111, COVID-19 Symptom Checker and myHealth portal

### **Relevant Key Dimension(s**

User Centricity, Transparency, Key enablers

#### Life event

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

### 1. Good practice description

The Maltese Ministry of Health deployed a coordinated set of digital tools to assist the population during the COVID-19 health crisis, including:

- Developing dedicated content on the ministry portal that provide a COVID-19 dashboard, travel recommendations, guidelines for vaccinations and testing and other resources.
- A COVID-19 helpline to assist citizens that show symptoms and that want to book a test
- The COVID-19 Symptom Checker that helps citizens assess the risk of being infected and provides guidance based on the person's situation. The results also assist the Superintendence of Public Health to assess and predict the spread of COVID-19 in Malta. This app will also be included in the Health Tab under the Malta Apps Application Store of the Government of Malta.
- The national myHealth portal, which was reconfigured to allow quick delivery of COVID-19 test results. In addition, results are being delivered to tested people through an SMS gateway and via email.

# 2. Benefits

- · Education citizens' awareness about the risks of COVID-19.
- Provide multiple channels of interactions so that citizens could choose the more convenient one depending on their needs and circumstances.

## 3. Key success factors

- Building new capabilities on top of platforms, like myHealth portal and the ministerial website that already existed helped speed up the implementation.
- Integrating the new systems, such as the Symptom Checker, with the existing ones even by simply deploying active URL links ensured consistency of information across the different channels.

## 4. More information

More information can be found at: https://deputyprimeminister.gov.mt/en/health-promotion/covid-19/Pages/landing-page.aspx https://covid19check.gov.mt/ https://myhealth-ng.gov.mt/

# Netherlands | Joint interactive information via business.gov

# Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers,

# Life event

Business Start-Up

# 1. Good practice description

Via business.gov the Netherlands gives all information on business services. With a joint effort the different governmental organisations give an interactive webinar, informing business on al things you need to know to start a business in the Netherlands. See also:

https://business.gov.nl/webinars-and-videos/starting-a-business-in-the-netherlands/webinar-on-demand-starting-a-business-in-the-netherlands/

# 2. Benefits

Thousands of enterprises use these kind of services, more than a million business.gov. User appreciation is high (around 8/10) and its more easy for entrepreneurs to make the diffecult stap of starting a business in the Netherlands.

# 3. Key success factors

- Involve users and other governments
- Really think from the perspective of users

# 4. More information

More information can be found at: www.business.gov

# Netherlands | Improvement of combined registration for starting

# **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 van 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=EAIaIQobChMI0qvZ3Oyj8AIVTPgYCh01iAEuEAAYASAAE gKPkvD\_BwE

# 7

# **Netherlands - Moving**

# Relevant Key Dimension(s)

User Centricity, Transparency, Key enablers

# Life event

Moving

# 1. Good practice description

Integral answer on all aspects of moving for your situations. Via rijksoverheid.nl all information of the government on a specific life event (in this case moving, buying a house) is narrowed down to a set of questions, based on which an integral advice can be made.

# 2. Benefits

· Less time for the users involved.

### 3. Key success factors

• User research on what kind of information they really need.

# 4. More information

More information can be found at: https://www.rijksoverheid.nl/onderwerpen/huis-kopen/vraag-en-antwoord/wat-moet-ik-regelen-als-ik-een-woning-gakopen

# Netherlands | Studying

# **Relevant Key Dimension(s**

User Centricity, Cross-Border Services

# Life event

Studying

### 1. Good practice description

Helping government agencies to improve communication and services to prospective students at an operational level. The starting point is research into bottlenecks from the perception of the target group itself. Solutions include concentrating information in one place (rijksoverheid.nl/studeren), improving mutual references to relevant websites and sharpening the personal overview on rijksoverheid.nl.

### 2. Benefits

- · More overview of what needs to be arranged for prospective students.
- A smoother customer journey through government websites.

### 3. Key success factors

- Own research from the perspective of the target group.
- Participative transformation of processes, at executive and operational levels.

### 4. More information

More information can be found at: https://www.rijksoverheid.nl/onderwerpen/voortgezet-onderwijs/vraag-en-antwoord/checklist-studeren

# Norway | "MinID Passport"

### Relevant Key Dimension(s)

Key enablers, Cross-Border Services and User Centricity

## 1. Good practice description

As a consequence of the corona crisis, thousands of EU/EEA workers had to leave Norway. Like Norwegian workers, some are entitled to unemployment benefits. In order to receive payments, they must do an online submission that requires an electronic ID (eID). Many foreign workers do not have such an eID, and since they are in their home country during the pandemic, they cannot easily show up physically in Norway to identify themselves.

In order to solve this problem, the Norwegian Digitalisation Agency (Digitaliseringsdirektoratet) and Norwegian Labour and Welfare Administration (NAV) with partners from private sector, has developed a new eID solution. The solution, "MinID Passport", is based on users using their own smartphone to carry out scanning of their own passport, and face recognition. The solution provides a sufficient level of security for an eID to be issued based on digital verification. Using smartphones and facial biometrics to confirm their identity, affected workers can register in the Norwegian digital systems from their homes and obtain a high-security eID.

#### 2. Benefits

• It is registered around 10 000 users from 53 different countries, during the time period May 2020 – January 2021

### 3. Key success factors

- A close cooperation with partners in private and public sector
- Exploration of new technology prior to the corona crisis

#### 4. More information

More information can be found at: https://www.regjeringen.no/no/aktuelt/ny-eid-utviklet-pa-rekordtid/id2704954/

# Poland | 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 | Id.gov.pt

## **Relevant Key Dimension(s**

User Centricity, Key enablers

#### Life event

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

### 1. Good practice description

ID.GOV.PT is a pioneering digital wallet that allows citizens to use their smartphones to view, save and share certified versions of their identification documents, such as the national ID or the driving license. Its activation is secure and straightforward, based on an authentication with the Portuguese mobile eID, the eIDAS-compliant Digital Mobile Key (notified with a high level of assurance)

The digital documents generated by ID.GV.PT have the same legal validity as the original ones and can be validated through a QR code available on the app.

#### 2. Benefits

- The possibility to generate and share digital documents with legal validity allows ID.GOV.PT's users to simplify their relationship with the State, through the convenience of a mobile device, while preventing the constraints of forgetting physical identification cards.
- Furthermore, the use of electronic identification solutions such as ID.GOV.PT has a positive impact at economic and environmental levels, considering the reduction of costs (e.g., administrative procedures, work/travel hours), the greater convenience, and the paper/energy savings.

#### 3. Key success factors

- Having a strong eID ecosystem, supported by an interoperability platform that ensures secure data exchanged and reliable authentic sources of information as their basis.
- Taking advantage of the growing demand for mobile public services, allowing citizens a simpler and more convenient relationship with the State, further enhanced by a responsive, easy-to-use and minimalist design to optimize the user experience.

## 4. More information

More information can be found at: https://id.gov.pt/

# Portugal | SIGMA

### Relevant Key Dimension(s)

User Centricity, Transparency, Cross-border Services

### Life event

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

## 1. Good practice description

SIGMA is an AI-based virtual assistant, available at the Portuguese single digital gateway for public services, ePortugal, that allows the quick clarification of doubts and supports navigation through the 1000+ services available on the website. With the help of SIGMA, ePortugal users can perform transactional services such as, for example, changing the address on the Citizen Card (national ID card) - which is very relevant for the Moving life event, or request a contact with one of the available helplines to citizens and entrepreneurs.

### 2. Benefits

- SIGMA registers a good uptake by ePortugal's users, with 336 254 conversations during the period MAR19-MAR21. This allows a reduction of the number of contacts by e-mail or phone to clarify doubts to which the virtual assistant is able to answer, thus easing the workload of the Contact Center's helplines.
- Also, the chatbot represents an important source of learning in the use of AI tools to support the relationship between citizens and public services, whose knowledge can be used to enhance other solutions and experiences within the public sector.

#### 3. Key success factors

- SIGMA enables an alternative, simple and appealing way to search the ePortugal portal, making it easier to find content on a portal as vast as the national singe digital gateway.
- The chatbot supports both access to informational content and the realization of transactional services in the ePortugal portal, providing added value to the user.

### 4. More information

More information can be found at: https://eportugal.gov.pt/en/

# Portugal | LabX

### **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

LabX - short for Experimentation Laboratory of the Public Administration, is a multidisciplinary team created in 2017 as an organic unit of the Administrative Modernization Agency (AMA). It follows an experimental approach based on research, design and experimentation of innovative solutions to improve public services, driven by citizens and businesses needs and expectations, involving the stakeholders in the co-creation of solutions. The lab uses different approaches from service design or gamification to behavioural sciences and participatory techniques, privileging collaborative exchanges with the public administrations, civil society organisations, national research and development centres and the community of entrepreneurs.

#### 2. Benefits

- So far, LabX concluded with success 25 experimentation projects with entities across government and set up several
  capacitation sessions for public employees (515 workers involved). It further created network-based initiatives to bridge
  the existing capacity and expertise within both the public sector and the innovation ecosystem (e.g., the Network of
  Innovators, a community of practice with 675 members from Public Administration')
- Overall, more than 10 000 citizens and 2 250 public servants participated in LabX's initiatives, which further enrolled 165 public entities and 572 partners from the innovation ecosystem (civil society organisations, national research and development centres and the community of entrepreneurs).

LabX's portfolio include, among other projects:

The Death and Bereavement Service, to facilitate all bureaucracies with which relatives interact after the death of a family member;

Tax Citizenship 2.0, developed jointly with the Tax and Customs Authority to improve the latter's communication with its different end-users by sharing fiscal information in a more simplified and concise manner;

#### 3. Key success factors

- Having strong political support at the highest level is key to ensure participation, as experimenting in the Public Administrations is often regarded with a certain amount od scepticism;
- By prototyping and experimenting solutions, LabX can test and adjust services before large-scale implementations, reducing risks and learning from improvement attempts;
- The collaborative methodology used by LabX proved effective to break silos within the public administration and to promote a comprehensive innovation ecosystem.

# 4. More information

More information can be found at: https://labx.gov.pt/?lang=en.

# Romania - The Administrative Code + The Space Agency of Romania - ROSA

The Space Agency of Romania, The Administrative Code, represents its first Agency designated to study THE EARTH throughout Satellites due to The Ministry of Research, Innovation and Digitaliza-tion. SATELLITES are from Europe. The Agency is benefiting of COMMON EUROPEAN STUDIES AND RESULTS.

# **Relevant Key Dimensions**

The Website is informational, at minimum level, in order to inform the specialized user in European and International Policies about Satellites that are producing Real Time Updates about the Activity of The Earth. The website is Transparent due to its Minimal information offered. The persons that are Creating the Content of the WebSite are Key enablers. The website is supporting the Vizibility of the Institution. ROSA'S News and Events are designed to the public which would like to GENERALLY UPDATE WHAT MEANS A SPACIAL INSTITUTE. THE ENGLISH LANGUAGE SECTION OF THE WEBSITE is encouraging AN INTERNATIONAL NAVIGATION. The EUROPEAN ACTS will be reanalyzed to be considered in FUTURE DEVELOPMENTS. There are Informational Cross Border eServices at minimum level, that would be updated during the current Programming Period of 2021 – 2027, at ROSA's WebSite.

## Life event

ROSA would contribute to all Eight Life Events with support of European Countries. Businesses with SATELLITES are running at GLOBAL LEVEL. Informational Services are facilitating GLOBAL BUSINESSES as they are Promoting the Investments Results in Satellites. Romania, as under the Administrative Code, is promoting GLOBAL BUSINESSES THROUGHOUT SATELLITES with ROSA Agency. The Satellites Way ABOVE THE EARTH are using ROUTES with SPECTERS CONFULENCES. The Satellites WAYS are following The Transport Internationally. The benefits of PRECISE SATELLITES would be negotiated by Romania, as into its Administrative Code, throughout THE COUNCILS OF EUROPE AND OTHER ENTITIES. Satellites are monitoring VIGNETTES IN EUROPE. Romania, as into its Administrative Code, is benefiting of Life Events with Satellites developed UNDER THE EUROPEAN and INTERNATIONAL SATELLITES MONITORING. The Transports of Goods in Romania, The Administrative Code, would be monitored as soon as possible with Additional Satellits. The ROSA Agency does not have at its disposal a system of Valorisation of the Content of The WebSite ROSA.RO to be visible as Author Rights IN ALL ITS COMPONENTS- to its Public Articles that would be framed in PROCEDURES OF SMALL CLAIMS WITH SATELLITES (with FUTURE UPDATED VALUES IF INTERESTED), OR OTHER PROCEDURES, as also Romania, under its Administrative Code, to benefit of the results of the European and International MONITORING. Small Claims of STALLITES if Interested would make the object of The Romanian Soupreme Court, The Administrative Code.

#### 1. Good practice description

The Option of the ROSA Agency to promote SATELITES' results that can MONITOR The Transport System of Romania, as into its Administrative Code, does not represent a Life Event, but a Necessity. The Geographic Information System – GIS – has to be realized/utilized with Romanian Administrative Code Technology with Author Rights. Such a Business would be developed online including Online FUTURE TRANSACTIONS.

## 2. Benefits

• The Romanian Economy, as into its Administrative Code, means, with a Large Perspective, The Transport. Transports of Goods are monitored VIA SATELLITES, with Author Rights.

#### 3. Key success factors

- Success in Businesses Online with Satellites means to Produce Profit
- Transport of Goods to Europe via Romania, The Administrative Code, or Other Options, has to be Monitored via Global Satellites with UPDATES
- The Success of The ROSA Agency depends of the capacity of Romania, as into its Administra-tive Code, to facilitate a Safe Tranzit or Other Options, without Accidents to Europe

#### 4. More information

More information can be found at: http://rosa.ro/index.php/ro/

# Serbia | Living in Serbia

# Relevant Key Dimension(s)

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

### Life event

Moving, Business Start-Up

#### 1. Good practice description

The Living in Serbia service on the eGovernment Portal enables a foreigner to electronically submit a request for approval / extension of temporary residence in the Republic of Serbia. The foreigner is registered on the Portal using a secure means issued under the scheme of electronic identification compliant with eIDAS regulations). The request includes the basis on which the person seeks residence (schooling, employment, family reunification, etc.). The Ministry of the Interior, ex officio, checks the relevant facts electronically and determines the basis for the residence permit in a reliable and fast manner. If the reason for the stay is work in the Republic of Serbia, the decision on the request for obtaining a work permit is made at the same time (one stop shop). In that way, the residence permit is combined with the work permit. Upon approval, the person receives the foreigner registration number, which enables him or her to use other electronic services and thus exercise other rights in the Republic of Serbia.

#### 2. Benefits

- · submitting requests and monitoring status online (without physically coming to the institution)
- waiting for a residence permit in the person's country, outside of Serbia (without the cost of staying in the Republic of Serbia and waiting for the finalization of the procedure which could last up to two months)
- establishing facts ex officio in a reliable and secure manner that makes the procedure more efficient and transparent
- Applying online for other rights using e-services

#### 3. Key success factors

- electronically connecting official records
- enabling registration and authentication of foreigners using eIDAS compliant means of electronic identification on the national eGovernment Portal

# 4. More information

More information can be found at: https://livinginserbia.gov.rs/

# Serbia - My High School

## **Relevant Key Dimension(s**

User Centricity, Transparency, Key Enablers

## Life event

Family

#### 1. Good practice description

The portal My High School is an access point that allows parents to use e-services related to the entrance exam, final exam and enrolment in high schools. Parents can check all recorded data for a particular student, but also find all the statistics on primary and secondary schools, as well as other information that can help when deciding on the future school. The portal also includes a Calendar of enrolment activities, intended to follow the main current events on a daily basis.

Using e-services is enabled only to authorized users – parents or other legal representatives who have the appropriate rights to access data about a particular student.

E-services include:

- 1. application for entrance exams
- 2. submission of objections to the results of the final exam
- 3. submission of the list of preferred high school for enrolment
- 4. submission of an electronic application for enrolment in high school according to a complex allocation algorithm

# 2. Benefits

 Parents, who previously had to go to 7 different places to enroll their child in high school, will now be able to implement all steps for electronic enrollment of children in high school with one click on this portal

## 3. Key success factors

- Portal My High School can be accessed with eGovernment credentials as well as through previously provided credentials for access to the portal My eClass Register (which enables parents to view grades in real time and increases teaching transparency, objectivity and efficacy)
- · Several IT systems previously in use are now connected in a single portal.

# 4. More information

More information can be found at: https://mojasrednjaskola.gov.rs

# Serbia | Information System for COVID-19 Immunization Management

# Relevant Key Dimension(s)

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

## Life event

Health

## 1. Good practice description

Information System for COVID-19 Immunization Management integrates the entire vaccine delivery chain and supports every step of the process, from expression of willingness to receive a particular vaccine and (re)scheduling an appointment, to handling procurement procedures and tracking of every vaccine bottle, to vaccination and record keeping on all immunized persons and issuance of certificates of vaccination. Interested persons can register swiftly by completing a simple e-form on the National e-Government Portal, or by contacting call centers for the operators to fill out the e-form for them. An AI-driven algorithm automatically schedules the appointments a few days in advance – for every particular citizen checking the desired vaccine type against the age eligibility, profession (priority groups), health conditions and available time slots at the vaccination sites. Aside from monitoring the entire distribution chain end-to-end and facilitating and expediting vaccination, the solution allows for informed analytics on all critical aspects of the operation.

## 2. Benefits

- One of the world's fastest vaccine rollouts. The system speeds up each step of the vaccine delivery process by three times
- In Serbia citizens are offered to pick and choose between several different vaccines approved by national authorities and to choose in which location they want to get vaccinated when (re)scheduling the appointments, the system takes in consideration citizens' preferences and eligibility for a particular vaccine
- · It provides notifications in real-time about progress
- Analytics helps decide if and where to boost public information campaigns, whether to procure additional doses etc., impose new or relax the existing epidemiological measures
- · Allows for end-to-end monitoring of the distribution chain, including the cold-chain

# 3. Key success factors

- Governance, information sharing and interoperability of hundreds of integrated health centers, call centers, mass
  vaccination sites, institutes of public health, government agencies, etc., ensured by design. Nation-wide immunization is
  a massive logistical challenge that involves many different stakeholders citizens and call center operators (registration
  interest, notification systems and inquires management), medical staff and assisting volunteers (immunization
  registration, issuance of vaccination certificates), supply chain and warehouse workers (procurement and distribution of
  vaccines), as well as for management (orchestration, management of vaccination sites and medical staff, monitoring and
  reporting)
- · Seamless automation ensured by leveraging the power of advanced technologies and artificial intelligence
- Carefully planned vaccination campaign prepared far in advance

# 4. More information

More information can be found at:

- https://www.forbes.com/sites/markminevich/2021/02/05/serbia-and-key-international-sovereigns-lead-with-data-andai-to-become-vaccination-champions/?sh=15a995557a1f
- https://euprava.gov.rs/imunizacija-covid-19
- https://www.euro.who.int/en/countries/serbia/news/news/2021/3/serbias-covid-19-vaccination-campaign-off-to-astrong-start

# Slovenia: Renewal of the design and content on the government portal for businesses SPOT

## **Relevant Key Dimension(s**

User Centricity, Transparency, Key enablers

#### Life event

Business Start-Up, Regular Business Operations

#### 1. Good practice description

At the beginning of the year 2021, the design and content aspects of the SPOT portal were renovated - The transition from CMS Typo to CMS Silver Stripe was performed. The portal is now available in a new and refreshed image, which allows users easier and faster access to the desired information and e-procedures.

In addition to the new visual image of the site and articles, the SPOT portal offers more transparent content, faster and more transparent access to e-procedures and services.

#### 2. Benefits

- Number of users All the business entities in Slovenia. In year 2020, there were 221.711 of them.
- Users can view content on various devices (mobile phones, tablets, computers, ...).

#### 3. Key success factors

- Great teamwork with agile principles
- Good cooperation with an external contractor and other competent authorities.

#### 4. More information

More information can be found at: https://spot.gov.si

# Slovakia: Removal of paper certificates for pension and sickness social benefits

# 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 changed 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

# Spain | ARP for the management of posted workers with the European Union (GISS)

# **Relevant Key Dimension(s**

User Centricity, Cross-Border Services

# Life event

Career

# 1. Good practice description

There is a need to manage in an agile and automatic way the more than 325,000 workers who annually travel for work reasons to other countries of the European Union. These posted workers, in the EU, have the right to social security in cross-border settings. For this reason, European social security coordination regulations establish clear rules for transnational social security cases, which require a lot of communication and exchange of information between the institutions of the countries participating in the posting of workers.

The action of the robots in this project is based on the submission to the destination countries of the documentation that certifies the application of Spanish legislation, using the RINA portal (European portal for information exchange through structured electronic documents).

The new European system for the electronic exchange of information on social security improves this situation by allowing direct, reliable and confidential communication between social security institutions.

## 2. Benefits

- Around 96% of workers posted to the European Union and other associated states are being processed in an automated way.
- It has meant a significant reduction in processing time, since a manual procedure involved 15 minutes of work and the robot does it in 4-5 minutes. This supposes the annual speeding up of 60,000 working hours. There is also a reduction in errors.

#### 3. Key success factors

- The process performs the work on a daily basis, with which the destination countries can have timely information without delays.
- New processes related to posted workers are being designed, so that robots can make changes to reported trips, as well as their cancellation when appropriate. Its implementation will save approx. 43,000 hours of staff time

# 4. More information

More information can be found at:

https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/inclusion/Paginas/2021/110221-tgss\_robot.aspx and https:// twitter.com/info\_TGSS.

# Spain | Ara APP HEALTH (Gobierno de Aragón)

**Relevant Key Dimension(s)** User Centricity

#### Life event

Family, Health

## 1. Good practice description

The ARAapp SALUD APP allows the Aragonese HEALTH Service to have a mobility solution for the management, request and registration of both diagnostic tests for the detection of COVID-19 and for the registration, in real time, of vaccinations of the population.

The information of patients, requests, results and vaccines is integrated with the Electronic Medical Record (EHR) synchronously, as well as with the clinical diagnostic laboratories. It also allows work without coverage, offline, by importing lists of Agendas, Residents and Social Health workers.

This APP has allowed the Government of Aragon the installation of test and vaccination points in an agile and efficient way, as well as control in homes, obtaining information in real time at all times

## 2. Benefits

- The application has been an essential part of the digital transformation of the Aragonese Health Service, bringing the agile world of mobility to the environment of direct patient care. more than 95% of the total registrations are made through it.
- AraAPP SALUD has allowed the administrative part of the work of healthcare professionals to be reduced to practically zero, allowing them to dedicate one hundred percent of their time to patient care and care.
- A daily total of more than 100 requests and diagnostic tests are carried out in mobility environments (outside health centers) in real time, with a peak of more than 500 during the pandemic. To date, 100,000 COVID-19 vaccination administrations have been registered from the different laboratories, having the data in the patient's History just at the time of vaccination, without the need for subsequent registration in any system.

## 3. Key success factors

- The APP is used by professionals in specialized, primary and emergency care responsible for diagnosis and vaccination in the Aragones Health Service.
- This APP has become a main tool for the control of the COVID19 pandemic and has laid the foundations for the future for the registration of vaccinations and primary care home care.

## 4. More information

More information can be found at: https://apps.apple.com/es/app/salud-informa/id1102812328

# Spain | CONFÍA. Project for the management of Vulnerable Clients with Blockchain (Ayuntamiento de Málaga)

**Relevant Key Dimension(s** 

User Centricity

#### Life event

Family, Health

#### 1. Good practice description

According to the report "Energy Poverty in Spain" from the Association of Environmental Sciences, 6.8 million people (15% of the population of Spain) are suffering from energy poverty. In 2019 the Government published the social bonus for vulnerable consumers with problems paying their electricity bills. Since this bonus was put in place, there has been some difficulties requesting it. Having unpaid bills implies the court notice. This management is cumbersome, slow and inefficient.

CONFÍA is a system based on blockchain technology to streamline and simplify the process of managing energy poverty and associated defaults in municipalities for vulnerable citizens. It is a decentralized process that requires the collaboration of different stakeholders involved as energy companies, Public Administrations and vulnerable citizens. This system allows the information to be available to all participants with security, traceability, immutability, reliability and in accordance with the GDPR including the right to be forgotten. Blockchain technology allows operational automation in the global management of the process.

The properties of blockchain and the peculiarities of the project make the development of this system make sense to do it on blockchain and not on an existing mature technology.

#### 2. Benefits

- There are different agents in the management and blockchain technology allows operational automation in the global management of the process.
- The traceability of the actions taken with each client is simple and the reliability is guaranteed by the cryptography-based technology itself.
- · Availability of all the information for the social services of the municipalities.

#### 3. Key success factors

- Protecting the most vulnerable citizens and avoiding supply cuts.
- improving the quality of the process and awarding the aid to each client

### 4. More information

More information can be found at: https://www.endesa.com/es/proyectos/todos-los-proyectos/innovability/south-summit-2020/confia.

# Spain | Coronavirus València

## 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

València focused the response against the COVID-19 crisis around the objective of providing information and support to citizens, and scaling the situational awareness capabilities required by the Municipal Coordination Center (CECOPAL) necessary to guarantee the maintenance of municipal services and the proper crisis management of València City Council.

The core of the solution is the València City Platform (VLCi platform) – based on FIWARE – where data and information from many municipal information systems (population, integral water cycle, mobility, electronic headquarters, municipal buildings, etc.) are consolidated, as well as information on devices that are deployed in the city (environmental noise and traffic sensors, traffic control cameras, lighting controllers, etc.). These solutions offer citizens updated and consolidated information and communication, through the Information Unified COVID-19 Site http://coronavirus.valencia.es.

They provide real-time information about the crisis, like dynamics dashboards fuelled by the information provided by València City Platform (water management, traffic flows, air quality and noise level, etc.), useful information from municipal services, news and the Twitter timelines of the municipal accounts and an overview of the national level situation.

The website has also embedded services from other public entities, such as INE (the national statistics office), which provides maps that indicate what percentage of population is moving vs. staying at home, every day (although not in real-time).

The website also has a section called "New Normal" that provides guidelines for various activities, from work to shopping, to restaurant, beaches, hotels, sport, culture, transport, and so forth.

## 2. Benefits

- More than 250,000 visits to the website during the first wave of the emergency in 2020 (mainly people from the city of Valencia and neighbouring municipalities to the city).
- · Provision of advice and what could and could not be done during the different phases of the emergency.

#### 3. Key success factors

- The website has had the support of many municipal services and citizens had the opportunity to suggest improvements.
- There has always been active listening to the council's social networks, to be attentive to any suggestion or improvement.
- Multiple sources of information, from different levels of governments were integrated by the VLCi platform to enhance the overall situational awareness about the crisis.

#### 4. More information

More information can be found at: http://coronavirus.valencia.es and the AppValència

# Spain | Spanish Revenue Agency agenciatributaria.es portal

# **Relevant Key Dimension(s**

User Centricity, Transparency, Key enablers

#### Life event

**Regular Business Operations** 

## 1. Good practice description

Th Royal Decree-Law 5/2021, of March 12, on extraordinary measures to support business solvency in response to the COVID-19 pandemic, contemplates a series of measures to defer payment of taxes for SMEs and self-employed workers. Taxpayers who want to avail themselves of the measures can use the agency portal to submit a self-assessment. Once the self-assessment has been submitted, the user can process the postponement by clicking on the link to the processing of the postponement request offered by the application, marking it as COVID deferral.

#### 2. Benefits

- Rapid support for eligible businesses.
- Access through national eID.

### 3. Key success factors

- Ability to re-use existing Revenue Agency portal platform to quickly deploy the new services.
- End-to-end online application.

# 4. More information

More information can be found at:

https://www.agenciatributaria.es/AEAT.internet/en\_gb/Inicio/La\_Agencia\_Tributaria/Campanas/\_Campanas/\_Medidas\_ Tributarias\_COVID\_19/Aplazamientos/Instrucciones\_para\_solicitar\_aplazamientos\_de\_acuerdo\_con\_la\_Disposicion\_ adicional\_tercera\_del\_Real\_Decreto\_ley\_5\_2021\_\_de\_12\_\_\_de\_la\_COVID\_19.shtml

# 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 | eMoving Switzerland

# **Relevant Key Dimension(s**

User Centricity, Cross-Border Services

# Life event

Moving

# 1. Good practice description

eMovingCH serves to fulfil the personal duty to register when private persons residing in Switzerland move houses. By law, you must register in the new municipality of residence no later than 14 days of the date of changing address. Use is voluntary and costs no more than when you register at the counter.

41% of communes are connected to the portal, via which around 300 change of address notifications are processed every day, half of which are made via mobile devices. Relative to the previous year, the number of electronic change of address notifications doubled in 2020.

# 2. Benefits

- Time saving. Within a maximum of 15 minutes, the removal notification is transmitted to the commune of departure and the commune of arrival. Residents no longer have to go to two separate counters.
- · Satisfied staff because of the flexible processing of the received moving notifications and the saved time.

#### 3. Key success factors

- A pioneer canton and "follow-up cantons". Visible benefits and for this reason acceptance for implementation in other cantons.
- · Financial support by eGovernment Switzerland.
- · Offer of a state-of-the-art solution for the residents

# 4. More information

#### More information can be found at:

www.eumzug.swiss/eumzugngx/global and Extending eMovingCH to the whole of Switzerland - www.egovernment.ch

# Switzerland | Applying for COVID-19 bridging credits with EasyGov

# Relevant Key Dimension(s)

User Centricity, Transparency

#### Life event

Business Start-Up, Regular Business Operations

### 1. Good practice description

EasyGov makes administrative procedures simple, fast and efficient. The secure and reliable platform enables companies to handle authorisation, application and registration procedures electronically in a single place. EasyGov relieves the burden and saves costs - for businesses and for the authorities.

To ensure liquidity, companies affected by the COVID-19 crisis were able to quickly and unbureaucratically apply for bridging loans guaranteed by the Confederation in EasyGov between 26 March 2020 and 31 July 2020. The loans could be paid out to the companies within a very short period of time. The set-up of this official process was completed within 3 weeks and continuously improved thereafter.

#### 2. Benefits

- · Short time to market (urgency due to liquidity bottlenecks of the companies).
- 137,801 loan agreements concluded for companies in the above-mentioned time period.
- Total of 16,908 million loans disbursed and guaranteed.
- · Simple and fast application process based on self-declaration.

#### 3. Key success factors

- Consistent focus on quick and easy application for COVID-19 bridging loans during specification and development phase.
- · Rapid time to market.

#### 4. More information

More information can be found at: Information-Portal https://covid19.easygov.swiss/ and Transaction-Portal: https://www.easygov.swiss.

## Switzerland | swisstopo Open Government Data

## **Relevant Key Dimension(s**

User Centricity, Transparency, Key enablers

#### Life event

Business Start-Up, Studying, Regular Business Operations, Moving, 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

#### 2. Benefits

- Data from public authorities is created or collected in the course of administrative activities. It is therefore financed through tax money and is a public good. The free and unrestricted provision of digital geodata creates a considerable potential for social benefits and can lay the foundations for operational and economic growth. Innovative private individuals, companies and organisations can use it to develop new applications and information services. Thus, benefit is generated from a macroeconomic perspective.
- Service requests and data transfer have increased significantly, as have visits to the map viewer.
- A wide public takes advantage of the data via non-institutional channels. Several outdoor apps (national and international), for example, make swisstopo data available in their offerings

### 3. Key success factors

- Continuous digitalization of geodata production at swisstopo over the last 20 years.
- Wide internal know-how due to the coordination, development and operation of the Federal Spatial Data Infrastructure FSDI.
- 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.

# Turkey | Sign language support turkiye.gov.tr

## Relevant Key Dimension(s)

User Centricity

### Life event

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

### 1. Good practice description

Users who want to ask a question on the e-Government Gateway can do so using sign language. Users can make a live connection to one of the call centre agents. By activating their camera and microphone, people can interact with the agent and communicate in sign language.

# 2. Benefits

- Promotes inclusive and accessible entrance to the digital government.
- The platform has over 54 million registered users, of which a part benefits from the sign language functionalities.

## 3. Key success factors

- · Cooperation with key stakeholders.
- More in general, the portal is designed in accordance with the Web Content Accessibility Guidelines (WCAG) from the W3C, as well as the Turkish Public Web Site Standards.

# 4. More information

More information can be found at: https://www.turkiye.gov.tr/

# United Kingdom | New data standard for vulnerable people services

# **Relevant Key Dimension(s**

User Centricity, Key enablers

# Life event

Family

# 1. Good practice description

Vulnerable people who need assistance from social, health or other public services have a large variety of needs, as well as specific accessibility requirements. They face a huge amount of lists, registers, activities and advisors standing between their enquiry and a result. The Data Standards Authority (DSA) has launched a challenge to find an agreed standard for directories of public services data. It will aim to help users or their support workers find trusted, specific and personalised data that is appropriate for what they need, where they live, and for the time they have available.

## 2. Benefits

- roviding reliable information simply and quickly, and ideally from a single source.
- Cut down on long lists of potential service providers and provide ways to help people access as much of the relevant data as possible in one place.

# 3. Key success factors

- Close involvement of people who are vulnerable themselves, who need to access services designed to support vulnerable children, or support workers who are busy and have many things to do in a day.
- Using and learning from existing open referral standards.

#### 4. More information

More information can be found at: https://dataingovernment.blog.gov.uk/2021/04/28/vulnerable-people-services-data-standard/

# **GETTING IN TOUCH WITH THE EU**

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#### EU publications

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# EU law and related documents

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: http://eur-lex.europa.eu

# Open data from the EU

The EU Open Data Portal (http://data.europa.eu/euodp/en) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.



