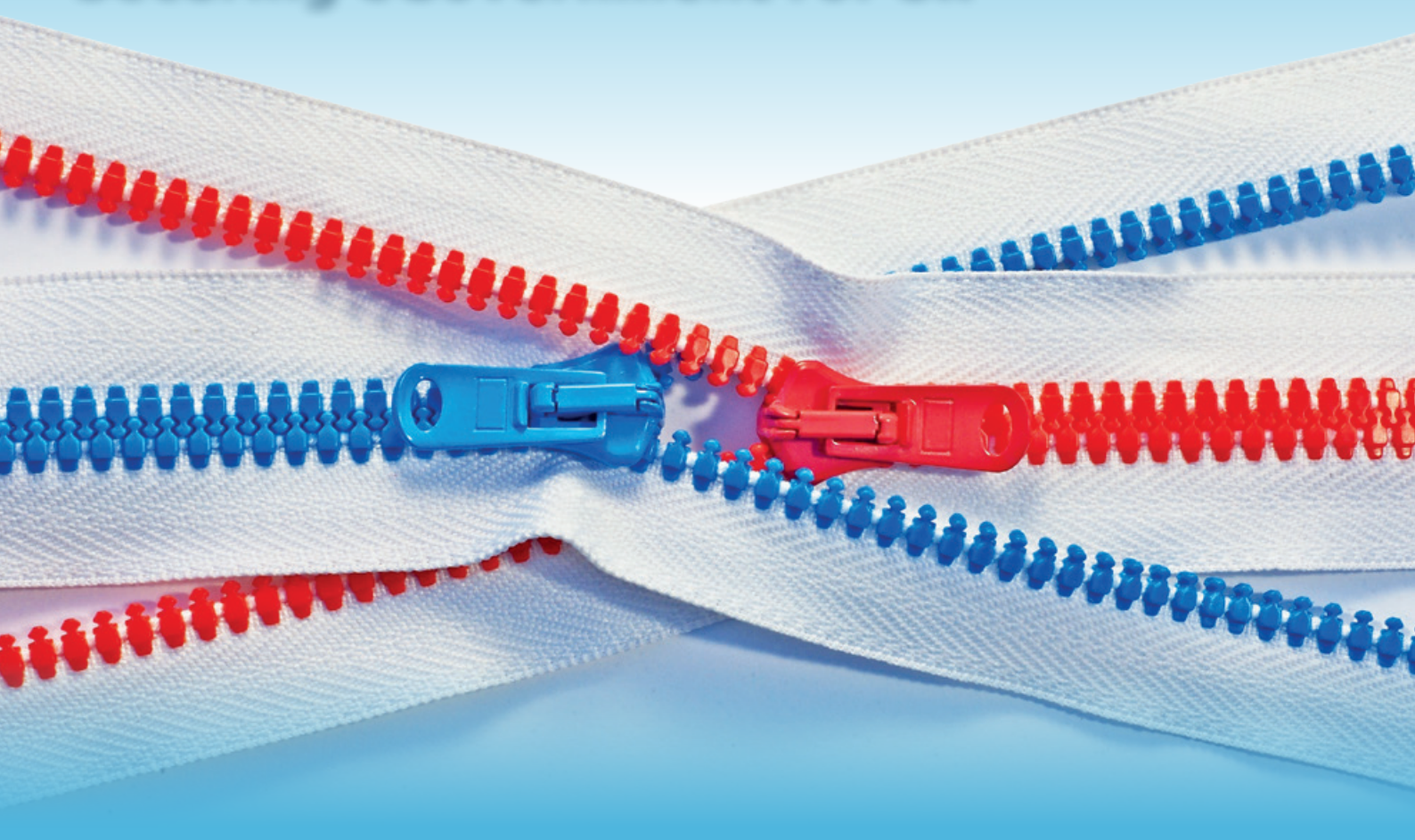




eGovernment Benchmark 2018

Securing eGovernment for all



INSIGHT REPORT

A study prepared for the European Commission
DG Communications Networks, Content & Technology by:



Digital
Single
Market

This study was carried out for the European Commission by Capgemini, IDC, Sogeti, and Politecnico di Milano



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Internal identification

Contract number: Ares(2018)2076846

SMART number: SMART 2018/0048

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ISBN: 978-92-79-96381-0

DOI: 10.2759/371003

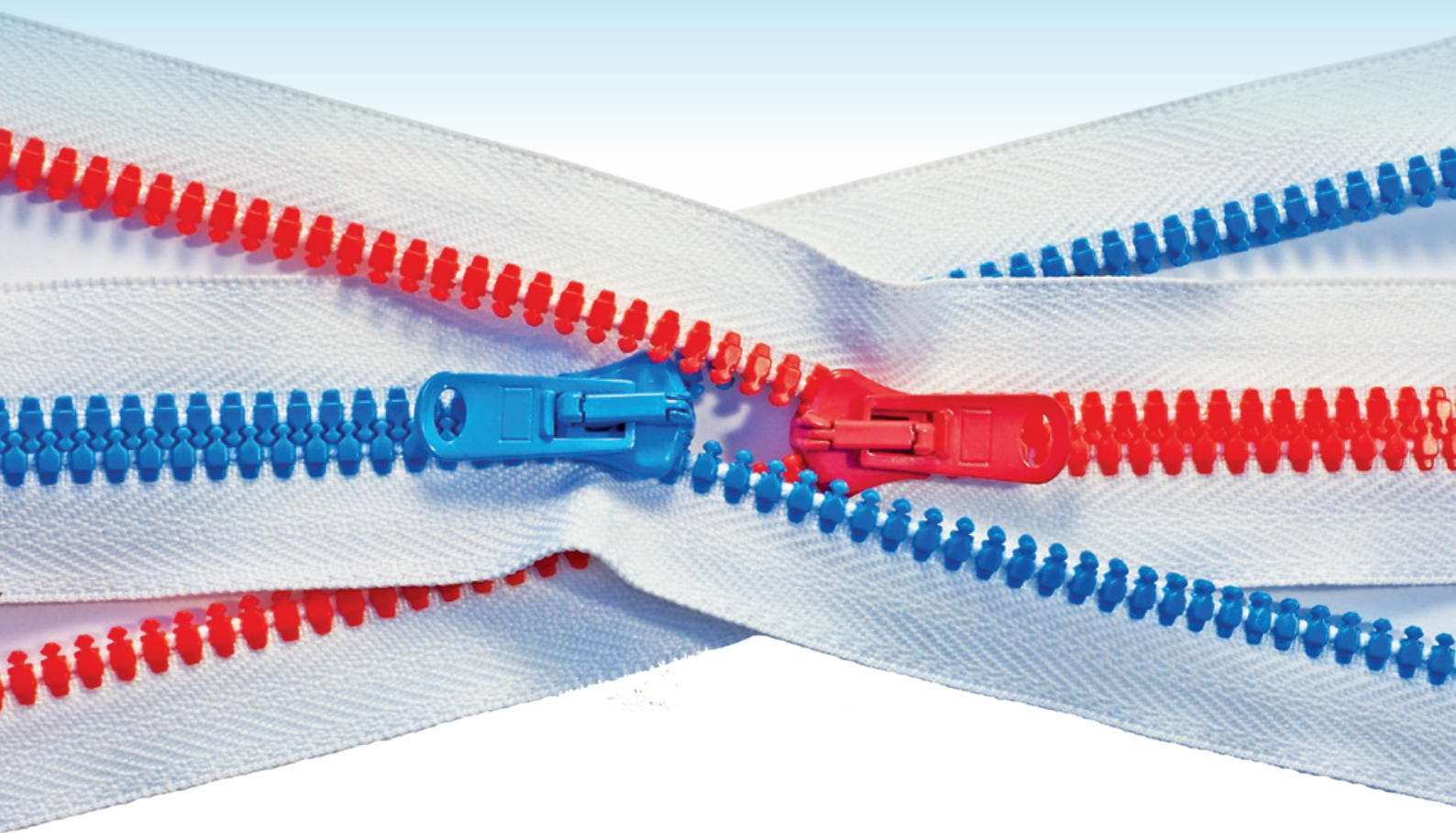
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Executive Summary

In times of rapid digitalisation and societal change, governments across Europe transform their public services. Both enhanced and innovative solutions support the realisation of a European Digital Single Market. Further integration of technologies optimises and unifies public services both within and across countries. The 2018 eGovernment Benchmark sheds light on the state-of-play of the digital transformation of European public administrations. Moreover, its in-depth analysis offers key reflections on the realisation of the principles set forth in the EU eGovernment Action Plan 2016-2020¹ and the Tallinn Declaration on eGovernment², such as digital-by-default, trustworthiness and security, as well as openness and transparency. Building upon these foundational policies, the eGovernment Benchmark pinpoints improvements and potential opportunities for putting into practice public services that ensure citizens and business come first.

The Insight Report at hand, presents the main highlights of the assessment of eGovernment services in 34 countries: the 28 European Union Member States, as well as Iceland, Norway, Montenegro, the Republic of Serbia, Switzerland, and Turkey (referred to as the EU28+). The assessment of these services covers the priority areas of the EU eGovernment Action Plan 2016-2020, which also provides insights in the current status of the principles set forth in the Tallinn declaration of eGovernment. Each priority area is measured by one or more indicators, included in the so-called **top level benchmarks**:

- **User centricity:** indicates the extent to which a service is provided online, its mobile friendliness and its usability (in terms of available online support and feedback mechanisms).
- **Transparency Government:** indicates the extent to which governments are transparent about the process of service delivery, the responsibilities and performance of public organisations and the personal data processed in public services.
- **Cross-border mobility:** indicates the extent to which users of public services from another European country can use the online services.
- **Key enablers:** indicates the extent to which technical and organisational pre-conditions for eGovernment service provision are in place, such as electronic identification and authentic sources.

Mystery Shoppers play the role of a normal citizen in each of the observed countries. They were trained and briefed to observe, experience, and measure public service processes, covering the four top-level benchmarks. After the Mystery Shopping exercise, results were **validated by the participating EU28+ countries**.

¹ EU eGovernment Action Plan 2016-2020, available online: http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=15268
² Tallinn Declaration on eGovernment, available online: http://ec.europa.eu/newsroom/document.cfm?doc_id=47559

Overall eGovernment performance in Europe

The digital efforts of European countries are visibly paying off in their eGovernment performance. The assessment covers eight different life events. The life events capture users' journeys through relevant online public services tied to events in citizens' and entrepreneurs' lives. Eight life events are included in the overall eGovernment performance score. Four of these life events were measured in 2017 and the other four were measured in 2016. The life events measured in 2017 were Regular business operations, Moving, Owning and driving a car and Starting a small claims procedure. The life events measured in 2016 are Business start-up, Losing and finding a job, Family life and Studying.

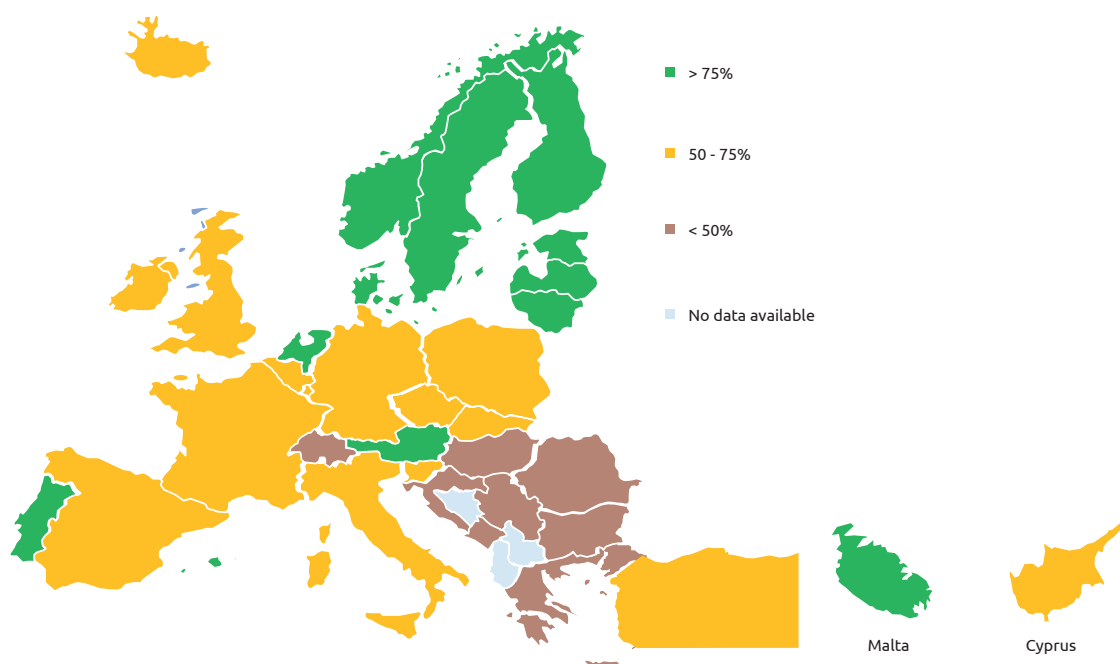


Figure 1.1: Overall eGovernment performance in Europe on the top-level benchmarks (biennial 2016+2017 averages)

The overview of the overall eGovernment performance in Figure 1.1 shows that eleven countries deliver high-quality digital services across evaluated public sector domains³. On the opposite end, eight countries have an overall eGovernment maturity score under 50%. All evaluated countries score highest on User centricity, but the leaders score on average 23 percentage points (p.p.) higher. Particularly interesting is that the leaders score 56 p.p. higher on Key enablers (81% vs. 24%), which has likely enabled them to perform better on the other indicators as well.

In general, the most developed benchmark is User centricity which has a biennial 2016+2017 average of 82%⁴. The other three top-level benchmarks leave more room for improvement. The biennial scores for Transparency, Cross-border mobility and Key enablers are 59%, 54% and 54% correspondingly.

³ Figure 1.1 presents biennial scores. This means the scores obtained for the eight life events measured in the past two years: 2016 and 2017. Each life event is evaluated once every two years to allow countries to implement improvements. For this figure, the unweighted average is calculated of the four top-level benchmarks: User centricity, Transparency, Cross-border mobility and Key enablers.

⁴ From here mentioned scores refer to the biennial 2016+2017 score for the EU28+ – unless explicitly mentioned otherwise.

User centricity: a constant improvement

The top-level benchmark User centricity stands at 82% and includes three key elements of online service provision:

- The average **online availability maturity** score stands at 83%. It is based on four ways illustrating how services in a life event are made available: the service is automated (4% of all evaluated services), it is available online (62%, either through a portal or directly), information on the service is available (32%, either through a portal or online), (information about) the service is not online available (2%; 'offline').
- The maturity score for **user support** stands at 88%, which is evaluated based on the availability of support channels, such as online chats.
- Six out of ten public services are **mobile friendly** (62%).

Transparency: embedding transparency in government routines

The top-level benchmark Transparency stands at 59%, urging public entities to further embrace transparency as key driver for trust in digital government:

- Public organisations can still upgrade their **transparency of service delivery**. Approximately half of services (52%) provide essential user information on timing of delivery, service progress and service performance.
- **Transparency of public organisations** is the highest scoring indicator of this benchmark, at 71%. Organisations are particularly clear on their mission and responsibilities, organisational structure, relevant legislation, and how users can request additional information.
- More **transparency on the processing of personal data** is crucial for offering trusted services. Currently, the transparency of personal data holds at 54%. Only the Czech Republic has reached the highest level, by providing information on whether, when, by whom and why personal data is consulted, in no less than four life events.

Cross-border mobility: easier for businesses than for citizens

The top-level benchmark Cross-border mobility reaches 54% and reveals that the Digital Single Market needs focussed attention to open digital borders for both citizens and businesses:

- Cross-border public services are more often **available online** for businesses than for citizens (72% versus 59%).
- Citizens can only use proper **electronic identification** for 6% of the services encountered abroad, while businesses can use electronic identification for 18% of services. These low scores have an obvious explanation, as the data collection was completed ahead of the deadline for eIDAS implementation (29 September 2018). For twice as many services, citizens and businesses can use **eDocuments** to complete a service request (13% and 35% correspondingly).

Key Enablers: the foundation for user-centric eGovernment services

The top-level benchmark Key enablers scores 54%, showing European nations have ample room to implement key enablers in their service processes: **eDocuments** is the most mature Key enabler as it is implemented in 63% of the services. The **eID** indicator stands at 51%. More specifically, a national eID is implemented in 34% of evaluated websites.

Additionally, in 18% of cases another service can also be accessed without reauthentication. **Digital post** options are available from 52% of institutions, being relatively similar in all life events (44% is the lowest within the Studying life event and highest for Regular business operations at 62%). Governments use known data to (partly) pre-fill data in 53% of the eForms, expressed in the **Authentic sources** score of 53%.

Drivers for eGovernment performance: a benchlearning perspective

To stimulate progress, countries with similar characteristics are compared on their eGovernment performance through selected complementary indicators from external sources focusing on the level of adoption and of investment in digital technologies. Such a benchlearning exercise helps to understand which contextual factors promote or hamper innovation. eGovernment performances are measured by two proxies: Penetration and Digitisation.

- **Penetration** captures the adoption of eGovernment services online. The overall European level of Penetration is 53%, with countries showing a wide range of scores. The best performing country for Penetration is Sweden, meaning use of Swedish online channels is widespread among users of government services.
- **Digitisation** proxies the digitisation level of the back and front offices of public administrations. It encompasses the four eGovernment Benchmark's top-level benchmarks. Europe's Digitisation level marks at 63%, with countries obtaining more similar scores than for Penetration. The best performing country for Digitisation is Malta, which accomplished high levels of User centricity, Transparency, Cross-border mobility and Key enablers.

To provide further insights, the possible correlation between the characteristics of a country and its scores on Penetration and Digitisation was tested. The strongest correlation was found between User characteristics (both Digital skills and ICT usage) and the Penetration index. Countries with skilful citizens and more frequent daily internet use are also the countries with a widespread usage of eGovernment services. This might hint at the value of awareness-raising and educational activities to potentially increase usage of online public services. Furthermore, there is a positive correlation between Penetration and quality of government. It seems that whenever citizens perceive public administration service delivery to be of high quality, they are more inclined to use online tools and public services.

On the Digitisation side, a strong correlation was found with the indicator Connectivity. This indicates that countries with high a level of deployment and quality of broadband infrastructures are also the countries with a high quality of online public services. Hence, it seems that ensuring fast broadband-enabled services allows public administrations to share service related data more rapidly and process service requests with more speed, resulting in higher levels of Digitisation. Moreover, Digitisation is positively correlated with quality of government, indicating that whenever a country has high levels of Digitisation, citizens perceive the eGovernment performances to be of high quality.

By comparing countries with similar characteristics, it becomes clear which countries perform below, in line, or above the expectations stemming from their country specific context. Countries with lower levels of Penetration and Digitisation might learn from countries that were able to reach higher levels of eGovernment performances under similar contextual variables.

Table of contents

Table of contents

1 INTRODUCTION	13
2 EGOVERNMENT BENCHMARK: WHAT HAS BEEN MEASURED AND HOW?	16
3 OVERALL EGOVERNMENT PERFORMANCE IN EUROPE	18
3.1 Performance in 2017 and 2016	
3.2 Historical trends	
3.3 Digital Economy and Society Index (DESI)	
4 USER CENTRICITY: A CONSTANT IMPROVEMENT	26
5 TRANSPARENCY: EMBEDDING TRANSPARENCY IN GOVERNMENT ROUTINES	30
6 CROSS-BORDER SERVICES: EASIER FOR BUSINESSES THAN CITIZENS	34
7 KEY ENABLERS: THE FOUNDATION FOR USER-CENTRIC EGOVERNMENT SERVICES	38
8 EUROPEAN EGOVERNMENT WEBSITES NEED TO RAISE SECURITY LEVELS	42
9 DRIVERS FOR EGOVERNMENT PERFORMANCE: A BENCHLEARNING PERSPECTIVE	46
10 WAY FORWARD: SECURING EGOVERNMENT FOR ALL	50

Table of figures

Figure 1.1	Overall egovernment performance in europe on the top-level benchmarks	6
Figure 1.2	Purpose of this report and coherence with study's deliverables	12
Figure 2.1	Overview of life events under assessment	17
Figure 3.1	Overall egovernment performance in europe on the top-level benchmarks	18
Figure 3.2	Top-level benchmark results	19
Figure 3.3	Historical development of key indicators	20
Figure 4.1	User centricity in europe	26
Figure 4.2	Mobile friendliness improvement of the 2017 life events	27
Figure 5.1	Percentage of public sector services per personal data maturity stage	31
Figure 6.1	National and cross-border public service performance compared	35
Figure 7.1	Key enablers performance	39
Figure 8.1	Percentage of public websites passing the three tests on cybersecurity on internet.NL	43
Figure 8.2	Percentage of public websites passing the three tests on cybersecurity on mozilla	44
Figure 9.1	Absolute and relative performances	48

Who should read this report?

Anyone who is interested in how governments are coping with today's societal challenges and exploiting modern technologies in that challenge should read this report.

Benchmarking is used to encourage mutual learning, to perform multilateral assessments, and to contribute to further convergence of the policies of Member States of the European Union, Iceland, Montenegro, Norway, the Republic of Serbia, Switzerland and Turkey (EU28+ countries). It is an essential part of the response to current socio-economic challenges. The benchmarking framework used here rests upon the key EU eGovernment priorities. The results build on a rich source of research data, using different methods, with strong collaboration from participating countries; they provide a robust and coherent insight into the current state of play of eGovernment in the EU28+ countries. This report offers insights into how public administrations are progressing in their digital transformation and enhancing public services offered online. Benchmarking is the first step in an ongoing benchlearning and improvement cycle. This report is produced in conjunction with two other deliverables, a Background Report and open research data.

	Insight Report (THIS report)	Background Report	Open research data
For whom?	Government leadership	Policy officers	Academics and research communities
What?	Key findings	Detailed analysis of indicators and life events	All data collected in machine-readable format and method
Purpose	Steer European and national eGovernment strategies	Realise direct improvements in public service delivery	Stimulate reuse of data and in-depth analysis

Figure 1.2: Purpose of this report and coherence with study's deliverables

Introduction

Introduction

The swift transition towards increased digitization in combination with ongoing societal change has motivated European governments to transform their public services. The accomplishment of a European Digital Single Market⁵ is aided by enhanced and innovative solutions. The 2018 eGovernment Benchmark sheds light on the state-of-play of the digital transformation of European public administrations against the background of the eGovernment Action Plan 2016-2020⁶ (launched in April 2016).

eGovernment across Europe has progressed over the years. More information and services are available online, increasingly orchestrated via central portals and one-stop-shops across government tiers. The advancing digital economy and society also brought new challenges regarding for instance interoperability, emerging technologies, and inclusion. More recently, cyber security is prioritised on policy agendas. Public policy making is radically changing and requires different attitudes from public entities. The progress demonstrated in policy monitors such as the eGovernment Benchmark, and the Digital Economy and Society Index (DESI)⁷ in a broader sense, is clearly positive. At the same time, it can also be concluded that on some aspects there is not much

progress. The cyber security assessment of approximately 3000 public websites in this year's evaluation clearly calls for action. Transparency and Key enablers indicators are only modestly progressing as is use of eGovernment services. Why are not more people using eGovernment services when they are available? How can eGovernment services better match users' needs? What can governments do to reach all their businesses, and citizens as well as fellow-Europeans working or living in their country? Personalisation is a key concept in answering these questions, and to ensure that the opportunities for all citizens are growing. The Tallinn Declaration⁸ provides guidance and principles on eGovernment, and specifically user centricity. It reminds us that: *'It is time to start laying the foundation for further digital evolution and joint actions beyond 2020'*. This is pivotal for securing eGovernment for all. But will these efforts be enough?

This report provides an in-depth analysis of the progress made by European public administrations in their modernisation of service provision. Moreover, it pinpoints improvements and potential opportunities for putting into practice public services that ensure citizens and business come first.

⁵ <https://ec.europa.eu/digital-single-market/>

⁶ <https://ec.europa.eu/digital-single-market/en/european-egovernment-action-plan-2016-2020>

⁷ <https://ec.europa.eu/digital-single-market/en/desi>

⁸ Ministerial Declaration on eGovernment - the Tallinn Declaration. Online available: <https://ec.europa.eu/digital-single-market/en/news/ministerial-declaration-egovernment-tallinn-declaration>

The *Insight Report* at hand, presents the main highlights of the assessment of eGovernment services in 34 countries: the 28 European Union Member States, as well as Iceland, Norway, Switzerland, Montenegro, the Republic of Serbia, and Turkey. These participating countries are referred to as the EU28+ throughout this report. The benchmark is a yearly assessment that monitors the implementation of the eGovernment Action Plan's priorities across Europe.

This *Insight Report* is accompanied by a *Background Report*, which provides more comprehensive analyses. It encompasses for instance the detailed results of the four top-level benchmarks (User centricity, Transparency, Cross-border mobility and Key enablers) in each of the 2017 life events.

eGovernment Benchmark: what has been measured and how

The eGovernment Benchmark evaluates the priority areas of the eGovernment Action Plan 2016-2020. Progress on priority areas is measured by one or more indicators, comprised in four so-called **top-level benchmarks**:

- **User centricity:** indicates the extent to which a service is provided online, its mobile friendliness and usability of the service (in terms of available online support and feedback mechanisms)
- **Transparency:** indicates the extent to which governments are transparent with regard to the process of service delivery, the responsibilities and performance of public organisations and the personal data processed in public services.
- **Cross-border mobility:** indicates the extent to which users of public services from another European country can use the online services.
- **Key enablers:** indicates the extent to which technical and organisational pre-conditions for eGovernment service provision are in place, such as electronic identification and authentic sources.

In order to assess all indicators, the current benchmark uses so called Mystery Shoppers, citizens of each of the observed countries who are trained and briefed to observe, experience, and measure a (public service) process. Mystery Shoppers act as prospective users and follow a detailed, objective and standardised evaluation checklist. Mystery Shopping was the method of choice for the assessment of all top-level benchmarks under review this year.

After the Mystery Shopping exercise, results are validated by representatives from the EU28+ countries. This is a thorough collaborative process. The respective countries are involved at the start and at the end of the evaluation: at the start to validate the sample of websites to be assessed and to identify key characteristics of the services under assessment; at the end to validate the research results in collaboration with the responsible organisations in a country and possibly correct erroneous findings.

	Data collected in 2016 (and 2014 and 2012)	Data collected in 2017 (and 2015 and 2013)
Business life events	Business start-up	Regular business operations
Citizen life events	Losing and finding a job Studying Family life (as of 2016)	Starting a small claims procedure Moving Owning and driving a car

Figure 2.1: Overview of life events under assessment

The eGovernment Benchmark spans a set of eight life events. Each life event consists of a user journey representing common public services that citizens or businesses will go through. Four life events are measured each year; the biennial average covers the whole domain of all life events. Figure 2.1 provides an overview of the eight life events and the corresponding measurement years.

This two-year cycle allows countries to follow up on the results and to implement

improvements after each measurement. With the adoption of the EU eGovernment Action Plan 2016-2020 and in line with its objectives, the measurement has undergone a constructive method update in 2016. This hinders full comparisons with series before 2016. In general, this report presents the biennial results: the average achieved over the past two years of measurement. Where possible, historical comparisons are provided for single indicators to illustrate trends in eGovernment development.

Overall eGovernment performance in Europe

3.1 Performance in 2017 and 2016

The digital efforts of European countries are visibly paying off in their eGovernment performance. The overview of Figure 3.1 shows that eleven countries deliver high-quality digital services across the four top-level benchmarks, across all life events. Eight countries seem to be lagging with eGovernment developments. Almost all these lagging countries seem to have difficulty to implement key enablers in eGovernment services, and consequently are confronted with limited online service provision.

In particular, the top-five scoring countries (Malta, Estonia, Austria, Latvia and Denmark), have managed to make public services widely available online, in a mobile-friendly manner and with a strong focus on citizen and business users. At the same time their public organisations are transparent on service delivery, organisational operations and personal data processing, and equip users with smart key enabling technologies (such as eIDs and digital post solutions). Malta scores very well on all benchmarks. Estonia scores relatively well

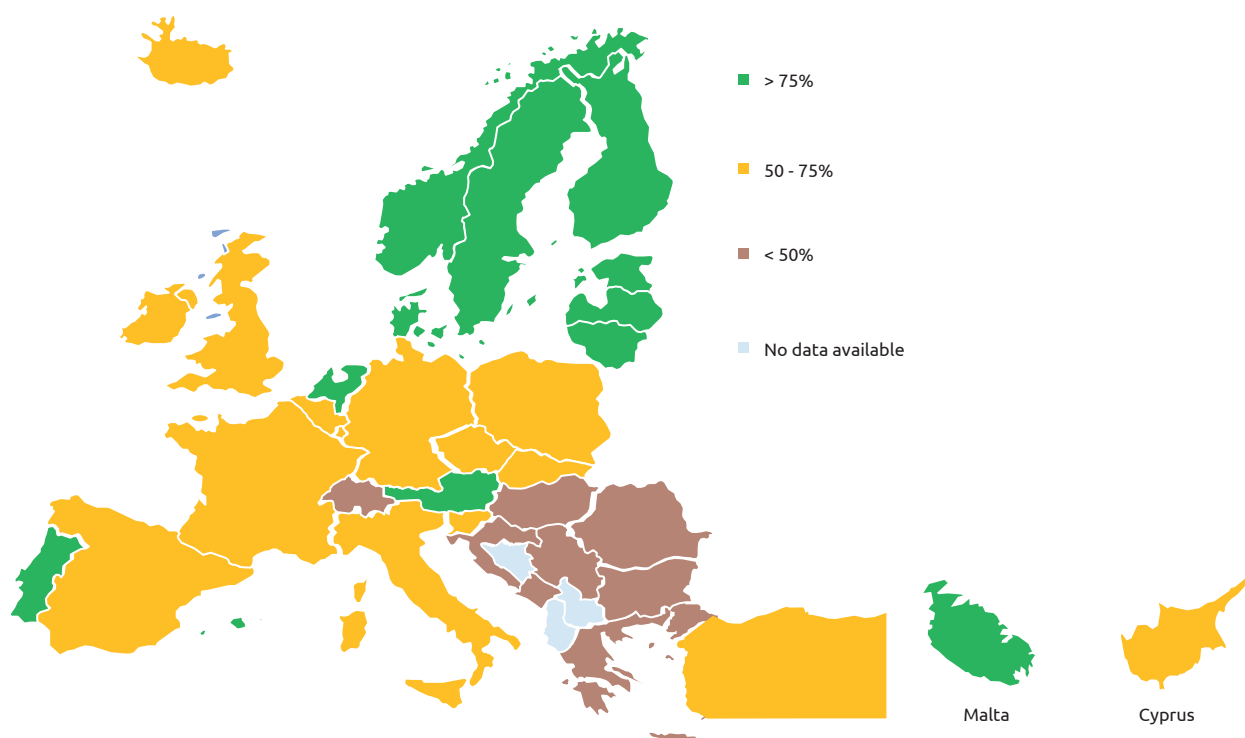


Figure 3.1: Overall eGovernment performance in Europe on the top-level benchmarks (biennial 2016+2017 averages)

on Key enablers, Citizen mobility and Transparency. Austria also performs relatively well on Citizen mobility, while Latvia performs particularly well on Business mobility. Denmark does relatively well on Business mobility and User centricity. Putting into practice the Digital Single Market vision, these countries ensure high eGovernment levels for both national citizens and businesses, as well as users from other European countries.

Figure 3.2 presents the scores for the top-level benchmarks for each of the life events. As a general conclusion, the User centricity benchmark is most developed (2016+2017 biennial average score of 82%) signifying the continuous focus of governments to bring more public information and

services online. The next highest, though significantly lower, biennial average score is for Transparency, followed by Cross-border mobility and Key enablers (biennial average scores of 59%, 54% and 54% correspondingly). Moreover, the higher maturity of services aimed at businesses compared to those aimed at citizens stands out. In effect, the 2016 Business start-up life event shows the highest scores for Cross-border mobility, whereas digital services are most advanced for the 2017 Regular business operations life event when it comes to User centricity, Transparency and Key enablers. The Family life event underperforms in all areas, possibly as this life event is comprised of a relative higher number of services provided by local governments.

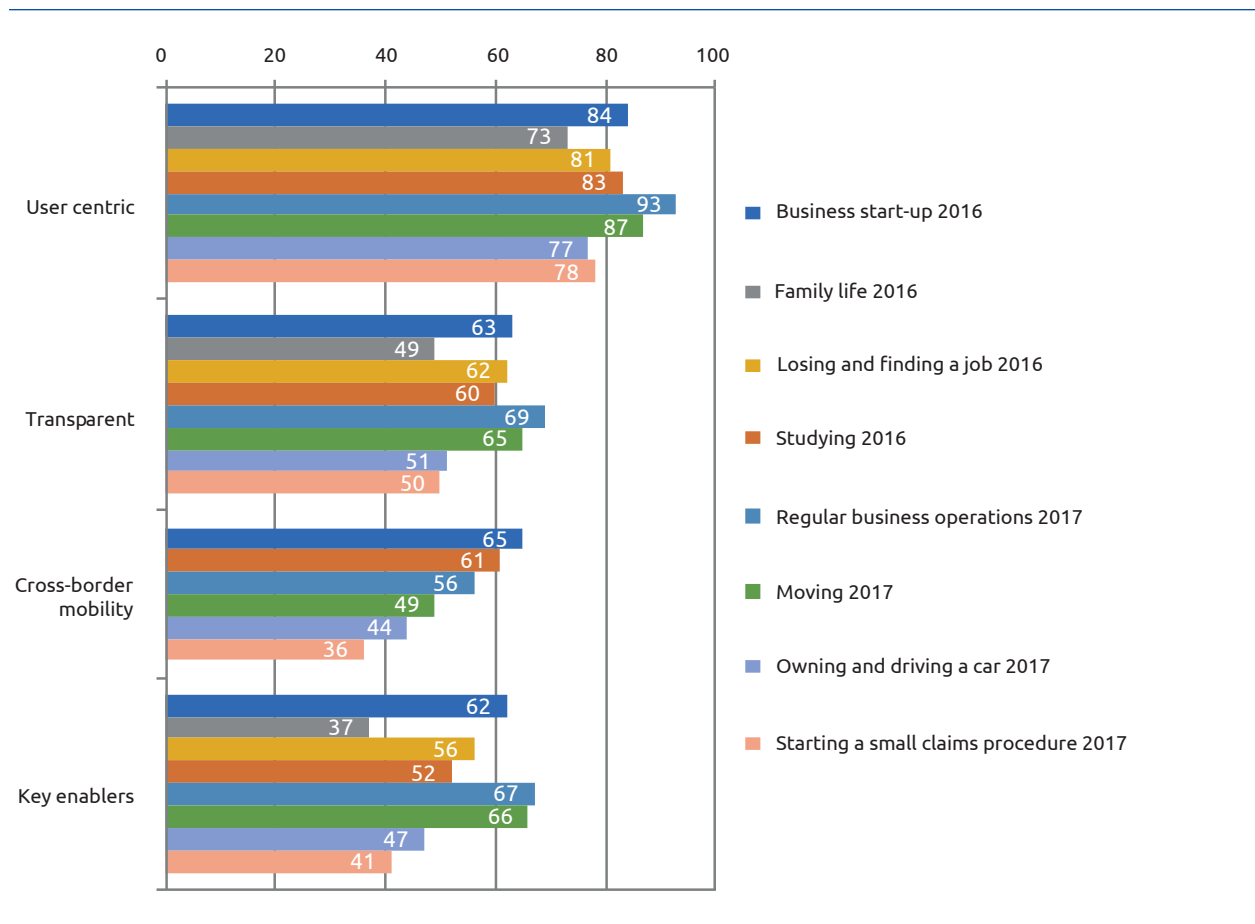


Figure 3.2: Top-level benchmark results (average per 2016 and 2017 life events, Cross-border mobility not measured for Family life & Losing and finding a job)

3.2 Historical trends

Due to a change in the methodology, placing these results in historical perspective is possible for a selection of indicators only: Online availability and Mobile friendliness (from the User centricity benchmark), Transparency of service delivery (Transparency benchmark), Cross-border online availability (Cross-border mobility) and Authentic sources (Key enablers benchmark). Figure 3.3 provides an overview of the moving biennial averages for these indicators, excluding scores from the Family life event. Improvements are apparent across the board for the five historical indicators, evidence of the effort the participating countries have put into improving their eGovernment services.

Online availability has risen from 72% to 85% (biennial averages of 2012+2013, vs 2016+2017), increasing by 13 p.p.. The improvement in the biennial averages of Cross-border Online availability was con-

siderably larger with 23 p.p. However, the Cross-border indicator had a much lower starting point, with a 2012+2013 score of 43%. The biennial averages for Transparency of service delivery improved by 15 p.p. over the years. There is plenty of room to improve on this indicator since its current score is only 54%. The indicator that improved the least is Authentic sources, with an 8 p.p. increase since 2012+2013. At the moment, this indicator scores slightly higher than Transparency of service delivery with a score of 57%, but if both indicators continue at their current pace it is plausible this sub-indicator will be surpassed by Transparency of service delivery in the near future.

In 2014 Mobile friendliness was introduced as an additional indicator, to capture the extent to which government services are available through mobile devices. Even though the mobile friendliness measurements have been taking place for a shorter

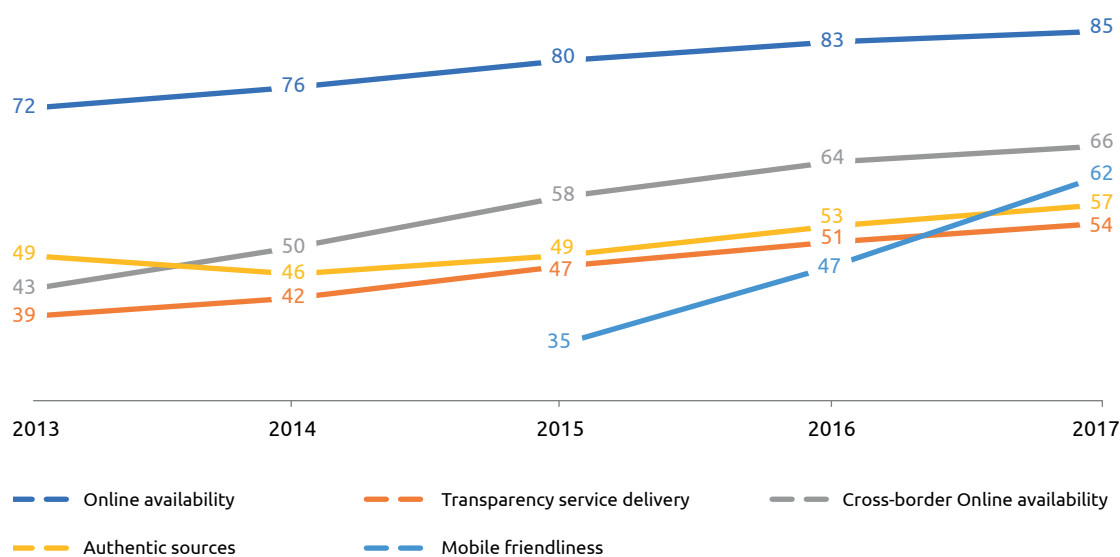


Figure 3.3: historical development of key indicators (rolling biennial averages of historical sub-indicators)

9 For the other indicators the method for data collection was updated in 2016, and a new life event (Family life) was introduced in 2016, together decreasing comparability with previous years.

period of time, this indicator shows the largest improvement with an increase of 27 p.p.. Nevertheless, still 38% of public websites does not provide the seamless and convenient mobile experience citizens and businesses are looking for (considering the biennial 2016+2017 average).

How do the countries compare over time? Analysing how the leaders (top 5 countries) compare to the laggards (lowest 5 countries) on each biennial score for the historic five indicators, gives an impression on how the individual countries are evolving their

eGovernment services. Averaging the five indicators shows that the gap has been closing from 54 p.p. in 2012+2013 to 44 p.p. in 2016+2017. The biggest improvements were apparent in Online availability, cross-border and national, where the initial gaps of 44 p.p. and 64 p.p. decreased with 11 and 10 p.p. respectively. The gaps are larger on Transparency of service delivery and the Authentic sources, at 65 p.p. and 78 p.p.. These gaps also shrink more slowly with 5 and 4 p.p. between 2012+2013 and 2016+2017 respectively.

3.3 Digital Economy and Society Index (DESI)

Digital Economy and Society Index indicators deriving from the eGovernment Benchmark Three of the indicators of the European Commission's Digital Economy and Society Index (DESI) use data from the eGovernment Benchmark as input.

- The DESI Online service completion indicator measures the extent to which the various steps in dealing with the public administration can be performed completely online. The input for this indicator is the Online availability indicator of the eGovernment benchmark, which has an EU28 biennial average of 84%.
- The DESI eGovernment Services for Business indicator measures the degree to which basic public services for businesses, when starting a business and for conducting regular business operations, are online available and cross-border. The indicator is also based on eGovernment benchmark data and currently stands at 83% for the EU28.
- The DESI Pre-filled forms indicator measures the extent to which data that is already known to the public administration is prefilled in forms presented to the user. The input for this indicator is the Authentic sources indicator of the eGovernment benchmark, which has a EU28 biennial average of 54%.

The insights and data gathered during the eGovernment Benchmark are widely used, among others by the Digital Economy and Society Index (DESI)¹⁰ of the European Commission. The DESI consists of five dimensions; Connectivity, Human Capital, Use of Internet Services, Integration of Digital technology and Digital Public services. The Digital Public Services dimension is concerned with eGovernment and eHealth and contains six indicators. Three of the Digital Public Services indicators are derived from the eGovernment benchmark report; the

DESI online service completion indicator (eGovernment benchmark online availability indicator), the DESI eGovernment services for business indicator (eGovernment benchmark cross border online availability indicator), and the DESI pre-filled forms indicator (eGovernment benchmark authentic sources indicator). The DESI indicators use only the information on the basic services and not the extended services of the eGovernment benchmark. Basic services are transactional (submitting corporate taxes) whereas extended services are information-

¹⁰ <https://ec.europa.eu/digital-single-market/en/desi>

al (obtain information on required working conditions for employees). For each of the indicators used by the DESI we provide a short overview.

The DESI online service completion indicator is based on the eGovernment benchmark **online availability indicator**, which is measured as sub-indicator of the eGovernment User centricity benchmark and captures the extent to which the steps necessary for obtaining a public service can

be taken online. The DESI indicator only considers the EU28, however the eGovernment benchmark covers more countries than the EU28, therefore both the EU28 and the EU28+ 2016-2017 biennial averages are presented in figure 3.4.

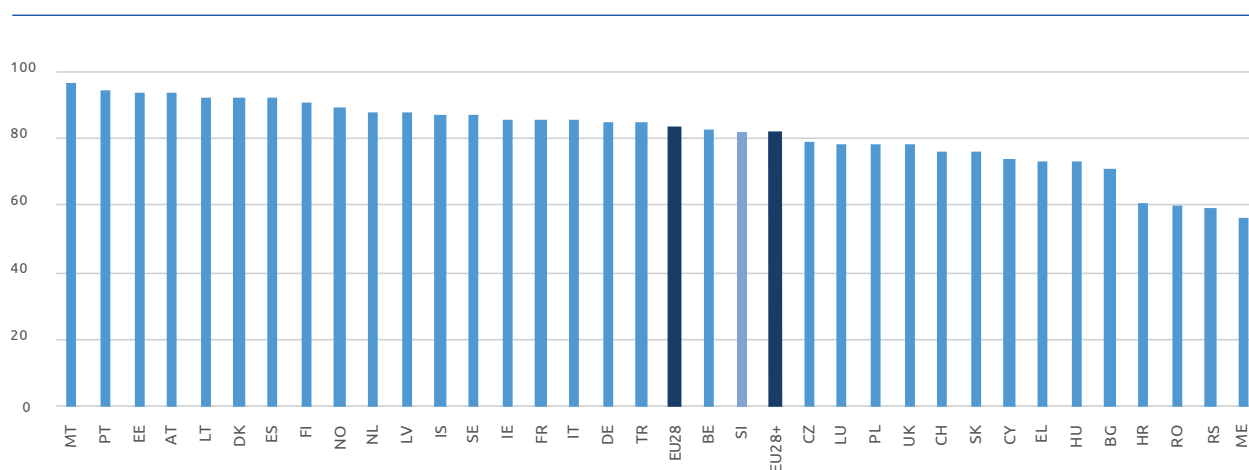


Figure 3.4 Online availability scores, biennial average (2016+2017)

The average EU28 score is 84 and the EU28+ score is 83%, with some countries scoring better and some countries doing worse. The three best performing countries are Malta, Portugal and Estonia. The three countries that leave most room for improvement are Romania, Serbia and Montenegro.

The DESI eGovernment services for business indicator presents the share of public services needed for starting a business and for conducting regular business operations that are available online for domestic as well as for foreign users. The indicator focusses on so-called basic services only. These services require some form of transaction. Figure 3.5 shows the 2016+2017 biennial averages for this indicator.

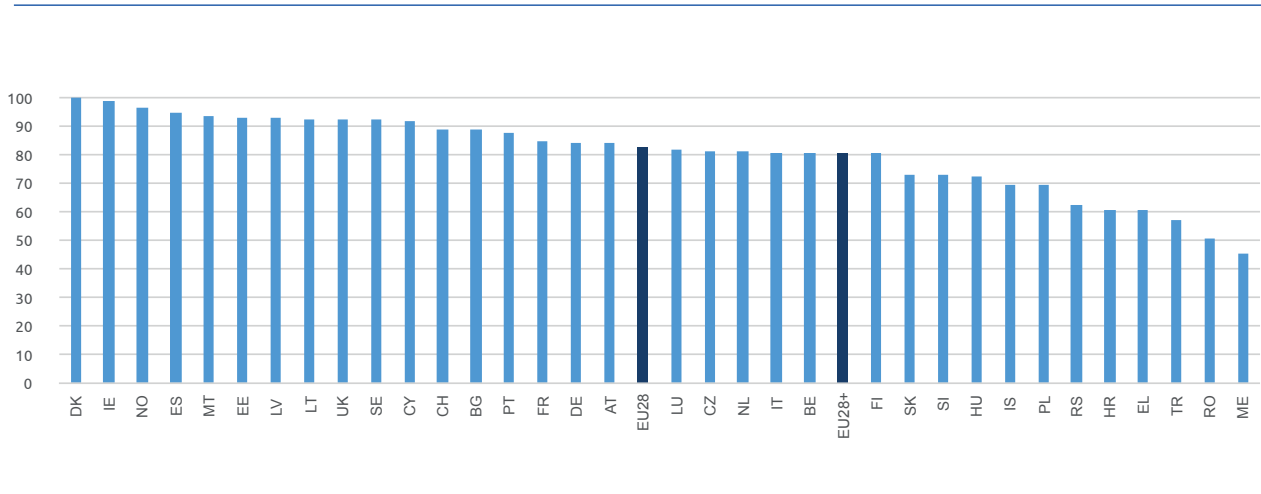


Figure 3.5 eGovernment Services for Businesses, biennial average (2016+2017)

The average EU28 score is 83% and the average EU28+ score is 81% on this indicator. However, there is considerable variation among the individual country scores. Denmark, Ireland and Norway perform extremely well, while Montenegro, Turkey and Romania score quite low on this indicator.

The DESI Pre-filled forms indicator is based on the eGovernment Benchmark **authentic sources indicator**, which measures if personal data that was previously gathered by the public administration is prefilled in forms presented to the user. This indicator is a sub-indicator of the eGovernment key enablers benchmark. Figure 3.6 displays the 2016+2017 biennial averages for this indicator.

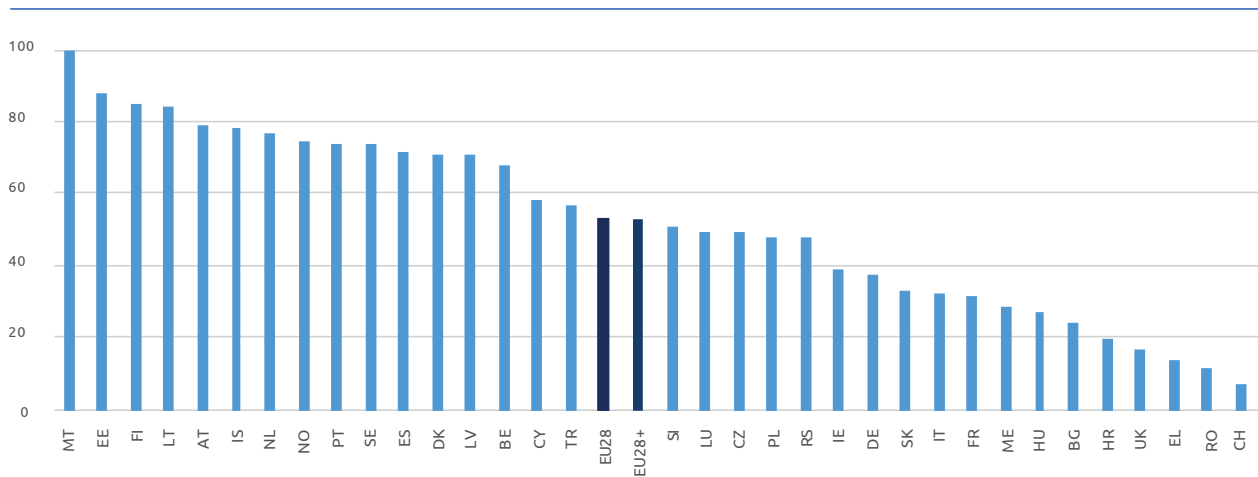


Figure 3.6 Authentic sources scores, biennial average (2016+2017)

The EU28 average is 54% and the EU28+ average of this indicator is 53%, which is relatively low compared with the online availability indicators. The three best performing countries are Malta, Estonia

and Finland, these countries all perform quite well on this indicator. However, the three worst performing countries (Greece, Romania and Switzerland) perform quite poorly on this indicator.



eGovernment Benchmark 2018: EU average*

82

User centricity

59

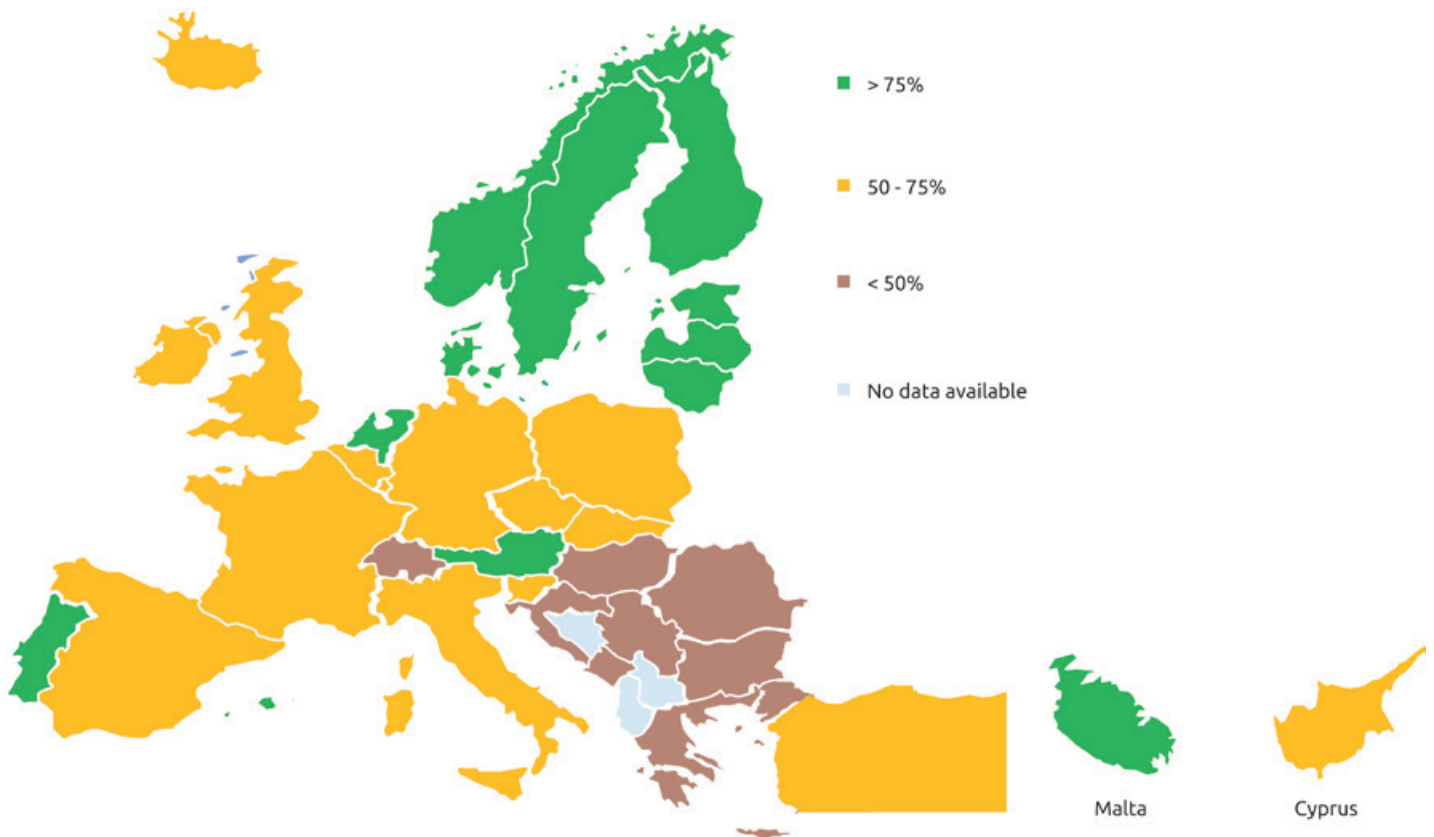
Transparency

52

Cross-border mobility

54

Key enablers



* Biennial average 2016+2017

User centricity: a constant improvement

Key Insights

- The top-level benchmark User centricity marks at 82% for the EU28+ countries (biennial 2016-2017 average).
- The average online availability maturity score stands at 83%. It is based on four ways illustrating how services in a life event are made available: the service is automated (4% of all evaluated services), it is available online (62%, either through a portal or directly), information on the service is available (32%, either through a portal or online), (information about) the service is not online available (2%; 'offline').
- The maturity score for usability stands at 88%, this indicator measures the quality and availability of user support such as online chats and feedback channels are in place.
- Six out of ten public services are mobile friendly (62%).

User centricity involves providing public services and information online, with sufficient support channels in place and in a mobile friendly manner. Figure 4.1 shows Europe's current User centricity

maturity scores. Top-performing countries are Malta, Denmark, Portugal, Finland, Austria, the Netherlands, Estonia, Iceland, Norway, and Spain. These countries take care of citizens and businesses using

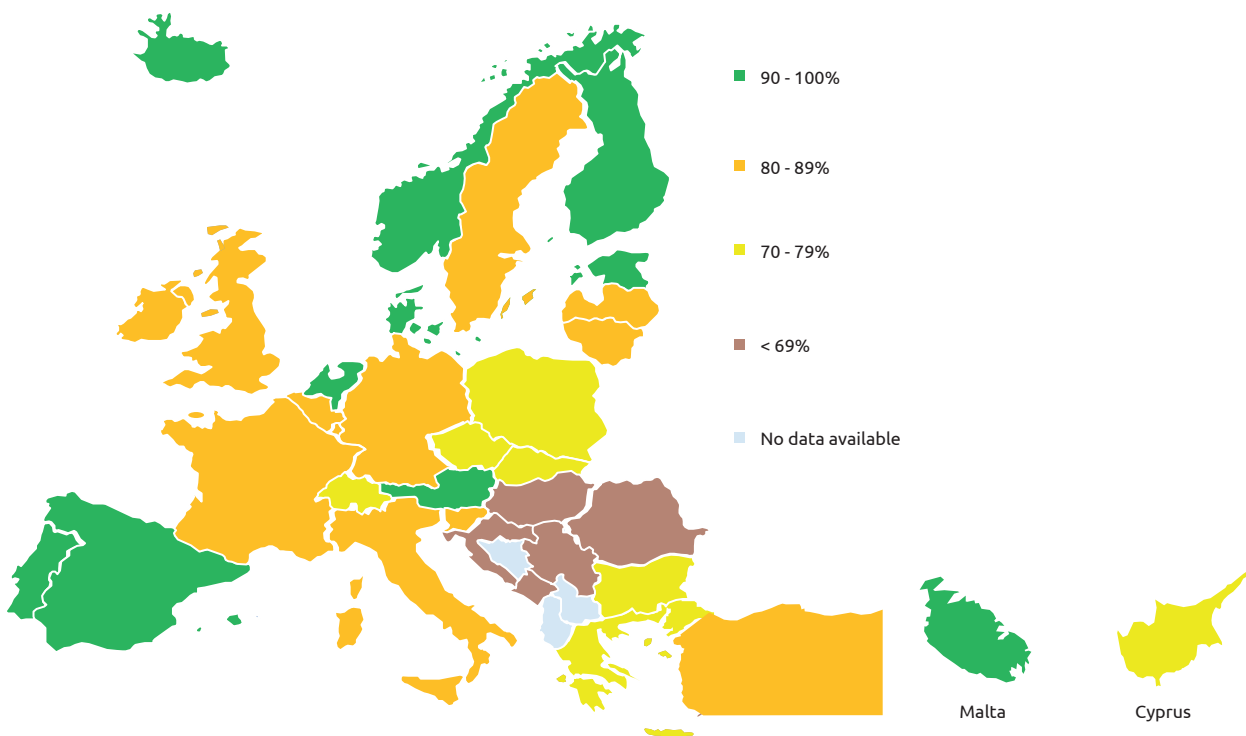


Figure 4.1: User centricity in Europe (biennial 2016+2017 averages)

online services, by offering a variety of support channels (such as demonstration videos, live chat functionalities and feedback forms).

The positive news comes with the substantial increase of mobile friendliness of public websites. Mobile phones are rapidly becoming the status quo device through which citizens and businesses find information and interact with governmental organisations. For the 2017 live events, the EU28+ countries

increased their mobile friendliness with 27 p.p. since 2015. Figure 4.2 shows how countries have evolved in terms of mobile friendliness. With scores over 90%, Iceland, the Netherlands, Finland, Belgium and France nearly completed their service horizon in this regard. Belgium, Italy and Greece illustrate that rapid improvements are possible. These countries managed to implement considerable mobile compatibility measures within two years, having increased 72 p.p., 70 p.p. and 56 p.p., respectively.

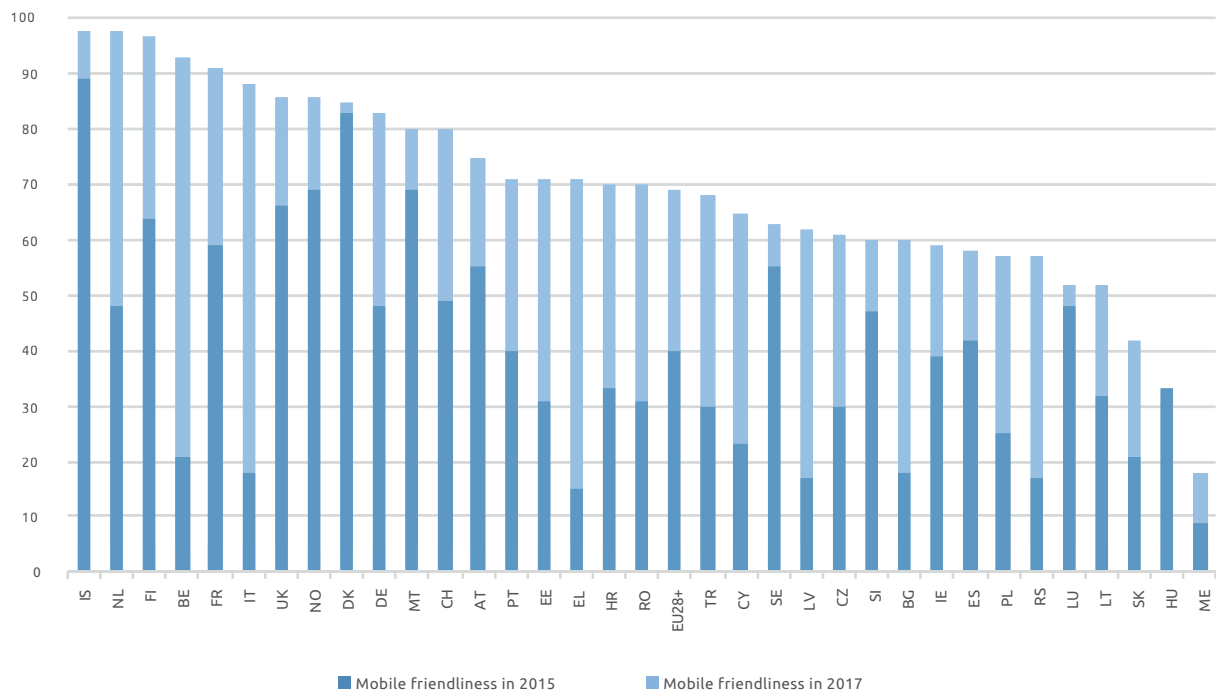


Figure 4.2: Mobile friendliness improvement of the 2017 life events (per country, as compared to 2015)

The User centricity benchmark has been the most advanced in this eGovernment measurement for years. From the results, it can be concluded that the online offer of information and services is increasing and even nearing completion in some countries. Service provision via mobile devices is also finding its way as demonstrated, and so the question remaining is

why the current take-up of eGovernment services is not advancing at the same tempo? In 2017, almost 3 out of 5 European Internet users who needed to send filled forms to public authorities, chose to do it over the internet. This leaves a potential of approximately 200 million Europeans who could also be served via the online channel.

11 Digital Economy and Society Index, available here: <https://digital-agenda-data.eu/datasets/desi/visualizations>.



User centricity: EU average 82*

83

Online availability



88

Usability



62

Mobile friendliness



Service examples

Can I submit corporate taxes online?



Is a demo on how to change my address available?



Can I use my phone to request compensation for ill employees?



Best performers

* Biennial average 2016+2017

Transparency: embedding transparency in government routines

Key Insights

- The top-level benchmark Transparency stands at 59% for the EU28+ countries (biennial 2016- 2017 average).
- Public organisations can still upgrade their transparency of service delivery. Only five out of ten services (52%) provide information on timing of delivery, service progress and service performance.
- Transparency of public organisations is the highest scoring indicator of this benchmark, at 71%. Organisations are particularly clear on their mission and responsibilities, organisational structure, relevant legislation, and how users can request additional information.
- More transparency on the processing of personal data is crucial for offering trustworthy services. Currently, the transparency of personal data holds at 54%. Currently, the transparency of personal data holds at 54%. Only the Czech Republic has reached the highest level, where they provide information on whether, when, by whom and why personal data is consulted, in four life events no less.

Transparency is considered key for building strong relationships between citizens and governments. Moreover, it is believed to stipulate efficient, accountable and trustworthy public organisations. With rising demands of citizens and businesses, public administrations are expected to explain how budgets are spent, how long services delivery takes, what personal data is needed and how it will be processed.

There is ample room for improvement when it comes to informing citizens and businesses on the service delivery processes; just over half of the public services specify delivery procedures and provide timelines estimates (52%). Additionally, clearer expectations can be set in terms of openness on service performance, such as public service goals being reached, and service requests being processed.

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

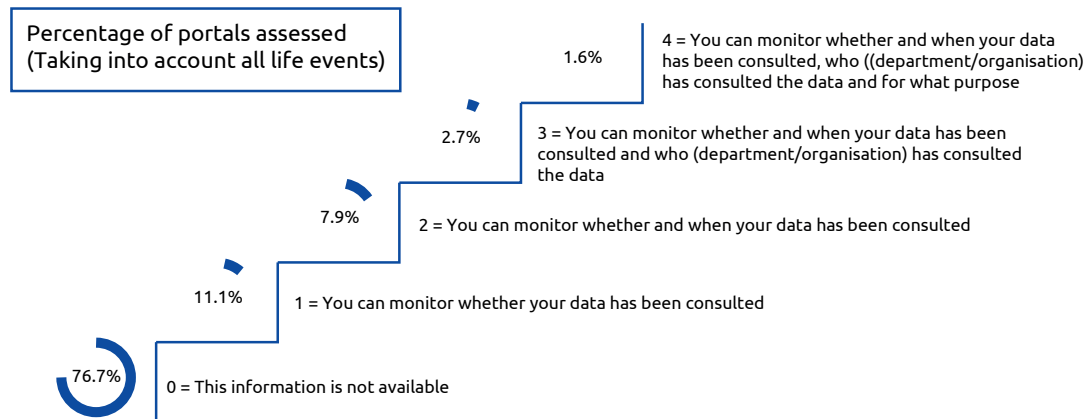


Figure 5.1: Percentage of public sector services per personal data maturity stage (biennial 2016+2017 average)

On a more positive note, public administrations are open about their organisational structures and activities. Across all life events, public organisations published information concerning their mission and responsibilities (99% of all entities) and explain how users can request additional information (97% of all entities). Information on organisational structure is provided on a similar level (95% and 98% respectively) as is legislation related to the public services (95% and 97% respectively).

Less promisingly, public administrations are not yet on track to inform users on the processing of personal data in public service delivery. In general, citizens and businesses are increasingly notified when

personal data is incorrect (71%) and the possibility to modify personal data is increasingly available (67%). When it comes to monitoring usage of your personal data it is important to know whether, when, by whom and why personal data has been used. These types of personal data shape five maturity stages as depicted in Figure 5.1. A remarkable two-thirds of all public organisations evaluated in 2016 and 2017 do not provide information on personal data processing (76,7%). In 11,1% of the services, users can at least monitor whether personal data was part of the service process. Only 1,6% of the services is fully open on the processing of personal data, also clarifying the purpose of personal data usage.



Transparency: EU average 59*

52

Service delivery



71

Public organisations



54

Personal data



Service examples

Is it clear how long it will take to start a claim?



Does the ministry provide information on its organisational structure?



Is it clear who consulted my personal data?



Best performers

* Biennial average 2016+2017

Cross-border services: easier for businesses than citizens

Key Insights

- The top-level benchmark Cross-border mobility reaches 54% for the EU28+ countries (biennial 2016 and 2017 average).
- Cross-border public services are more often available online for businesses than for citizens (biennial averages of 72% versus 59%)
- Citizens can only use proper electronic identification for 6% of the services encountered abroad, while businesses can use electronic identification for 18% of the services. Obviously, this can be explained as the data collection was completed ahead of the date of 29 September 2018 from which the eIDAS regulation comes into full force. For twice as many services, citizens and businesses can use eDocuments to complete a service request (13% and 35% correspondingly).

Cross-border mobility is one of the main objectives of the EU eGovernment Action Plan 2016-2020 and an important milestone towards realising the Digital Single Market. Achieving cross-border mobility in Europe will enable citizens to work, live and study abroad. At the same time, it will fuel business activity from all points of the European compass.

For citizens and businesses to gain cross-border mobility, public services from foreign governments need to be available online in an internationally orientated way. This means, services can be requested online without facing language issues or other related barriers. Furthermore, non-national citizens and businesses require key enablers, such as electronic identification and electronic documents,

to transact with public sector authorities abroad in a seamless and secure manner. This is not easy and requires considerable proactive interventions at all government levels.

As shown in Figure 6.1, national services are more advanced than cross-border services when looking at the online availability, usability and use of both eIDs and eDocuments of basic services. Whereas Online availability reached 83% for national citizens and businesses, it stands at 64% for citizens and businesses abroad (biennial 2016+2017 average). Usability ranks at 88% for nationally orientated services, offering for instance feedback forms and online chat support, compared to 68% for services targeting foreign users¹². One should note that for

¹² It should be noted that the Usability indicator is measured with seven items for national services and with three items for cross-border services.

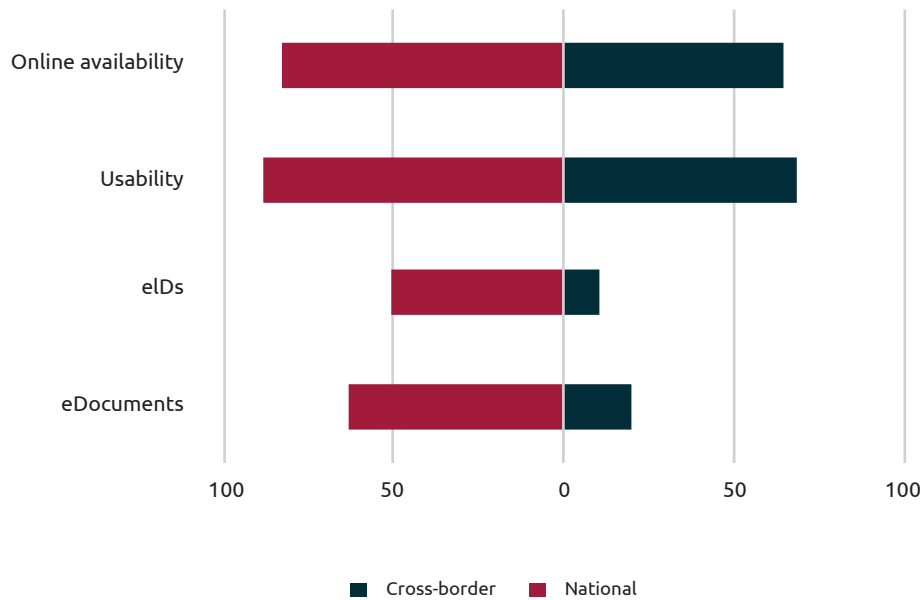


Figure 6.1: National and cross-border public service performance compared (biennial 2016+2017 averages)

the Cross-border Usability indicator only 3 items are scored, while the national Usability indicator contains 7 items that are scored.

The most significant eGovernment gap between domestic and non-domestic services relates to the provision of the key enablers eIDs and eDocuments. Averaging the life events measured in 2016 and 2017, 51% of the national services adopted eID solutions and 63% eDocuments, compared to 10% and 20% for the respective key enablers available for cross-border users. Nevertheless, a boost of the cross-border infrastructure seems to lay ahead. Ongoing internationalisation of public services and the eIDAS Regulation which came into full force on 29 September 2018,

are expected to strengthen service delivery across European borders. It might also be expected to further advance the online availability of services in cross-border services.

Interestingly, cross-border services aimed at businesses and those serving citizens reveal different eGovernment levels. Cross-border public services are more often available online for businesses than for citizens (biennial averages of 72% versus 59%). Moreover, citizens can only use proper electronic identification for 6% of the services encountered abroad, versus 18% of the business services. For twice as many services, citizens and businesses can use eDocuments to complete a service request (13% and 35% correspondingly).



Cross-border mobility: EU average 52*

64

CB online availability



68

CB usability



10

CB eID



20

CB eDocuments



Service examples

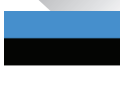
Can I find information on social contributions as non-national?



Is help available for fellow-European students?



Can I use my national eID in other countries too?



Can foreign businesses submit eDocuments?



Best performers

* Biennial average 2016+2017

Key enablers: the foundation for user-centric eGovernment services

Key Insights

- The top-level benchmark Key enablers scores 54% for the EU28+ countries (biennial 2016 and 2017 average).
- eDocuments are the most commonly used key enabler (63%).
- The eID indicator stands at 51%. More specifically, a national eID is implemented in 34% of all evaluated websites. Additionally, in 18% of cases another service can be accessed without reauthentication.
- Digital post options are available in 52% of institutions, being relatively similar in all life events (44% is the lowest within the Studying life event and highest for Regular business operations at 62%)
- Governments use known personal data to (partly) pre-fill data in 53% of the eForms, apparent from the Authentic sources score of 53%.

Efficient and safe public service provision relies on the availability of digital key enablers. These digital building blocks, such as eIDs, eDocuments, authentic sources and digital post systems, lay the foundations for robust and trustful eGovernment.

As the overview of Figure 7.1 displays, the business-related life events (Business start-

up and Regular business operations) entail more developed key enablers than the citizen-related life events (Family life, Losing and finding a job, Studying, Moving, Owning and driving a car and Starting a small claims procedure). With biennial 2016+2017 average scores above 90%, Malta and Estonia set the tone for implementing key enabling solutions, 54% being the European average.

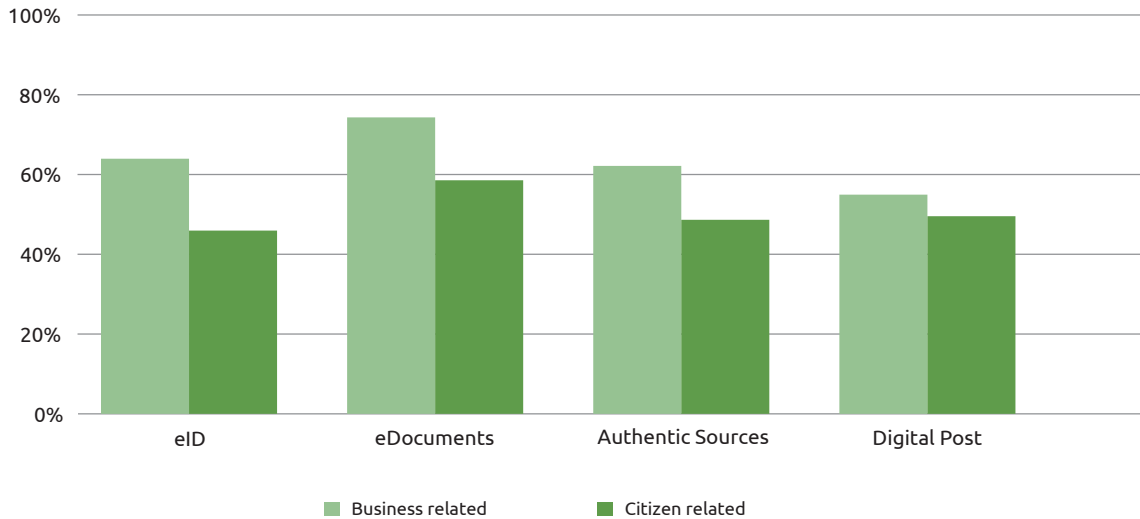
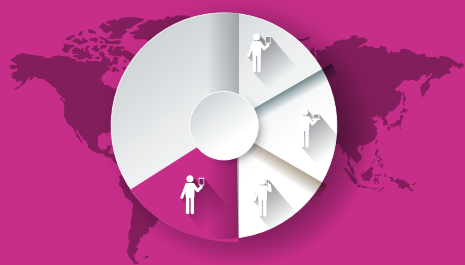


Figure 7.1: Key enablers performance (biennial 2016+2017 average of business life events and citizen life events)

From the four key enablers analysed, eDocuments are most commonly used (biennial average of 63%). Users can send in or receive public service related documents digitally. To compare, the eID solutions, digital post systems and authentic sources reach maturity levels of 51%, 52% and 53% correspondingly. National eIDs are implemented in 34% of all evaluated websites, and in 18% of cases another service can be accessed without re-authentication. This means that the adoption of electronic identification can be improved. Moreover, European public administrations leave room for extending digital post

systems. These systems allow citizens and entrepreneurs to receive governmental communications digitally only. By using personal mailboxes or personal pages, users combine governmental interactions via a single online channel, while public organisations reduce paper mailings. Similarly, the governments have not fully unleashed the potential of authentic sources. Whenever public organisations intensify structured data sharing and prefill service forms with data already known, citizens and business save time and increase accurate service delivery.



Key enablers: EU average 54*

51

eID



63

eDocuments



53

Authentic sources



51

Digital post



Service examples

Can I use my eID to retrieve a judgement?



Can I use eDocuments when obtaining a parking permit?



Can I use an eForm when submitting corporate taxes?



Can I receive government communication digitally only?



Best performers

* Biennial average 2016+2017

European eGovernment websites need to raise security levels

The EU's cybersecurity package¹³, released in September 2017, aims to strengthen Europe's cyber resilience by offering a collective and wide-ranging approach. It calls for more robust and effective structures to promote cybersecurity and to respond to cyber-attacks both in the Member States and in the EU's own institutions, agencies and bodies. One element of the cyber security package addresses Member States' responsibilities when it comes to the development of eGovernment. The package calls for accelerating the usage of more cyber-secure tools in development of e-Government, promoting the adoption of secure means of identification, and ensuring cyber-skilled staff in public institutions.

A pilot was conducted in the context of the eGovernment Benchmark to evaluate the security of public websites. In this pilot we considered all the URLs (over 3.500) that were tested by our mystery shoppers for each of the countries in when assessing the life event services. This assessment

uses two different tools: one developed by the Dutch national government¹⁴, and one developed by Mozilla¹⁵. Both are publicly available. The tests provide scores on items that should be considered 'basic hygiene' of websites. A positive score on the internet.nl and Mozilla Observatory test does not guarantee the website is secure¹⁶. On the other hand, a negative score does not always mean the website is insecure, as a different solution than the "standard option" as tested might have been used. However, this false negative is not likely to occur very often.

The results of the pilot indicate ample room for improvement on cyber security of public websites. The results from the internet.nl tool reveal that less than 10% of European public websites pass the basic tests performed in this evaluation. The Netherlands achieved a score of 58% and the Czech Republic and Sweden pass the 30% marker.

13 Joint Communication to the European Parliament and the Council Resilience, Deterrence and Defence: Building strong cybersecurity for the EU, JOIN/2017/0450 final. Available [online](#).

14 The tool is an initiative of the Dutch Internet Standards Platform: www.internet.nl

15 Tool: <https://observatory.mozilla.org/>

16 Of course, when measuring the security of websites, it is important to be aware that this can be done at various levels. The tools used for this evaluation cover roughly about 10-20% of a thorough testing that includes penetration tests to assess risks such as outdated software versions, SQL injection vulnerabilities, vulnerable content management system plugins, improper password creation policies or storage procedures, and more. These are just as important, and site operators should not be neglectful of them simply because they score well in this pilot assessment.

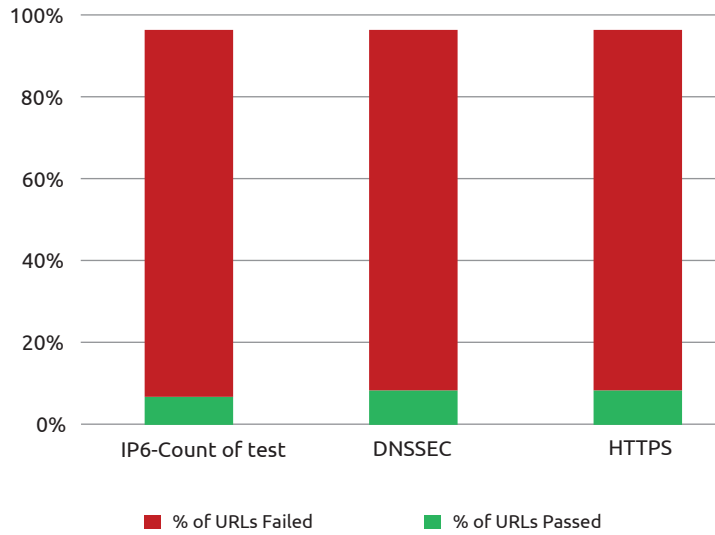


Figure 8.1 Percentage of public websites passing the three tests on cybersecurity on internet.nl

The results for the Mozilla tool show a similar trend. None of the urls passed all the items that were scored in this test as

can be seen in the Figure 8.2. In this test, again, the Netherlands stands out.

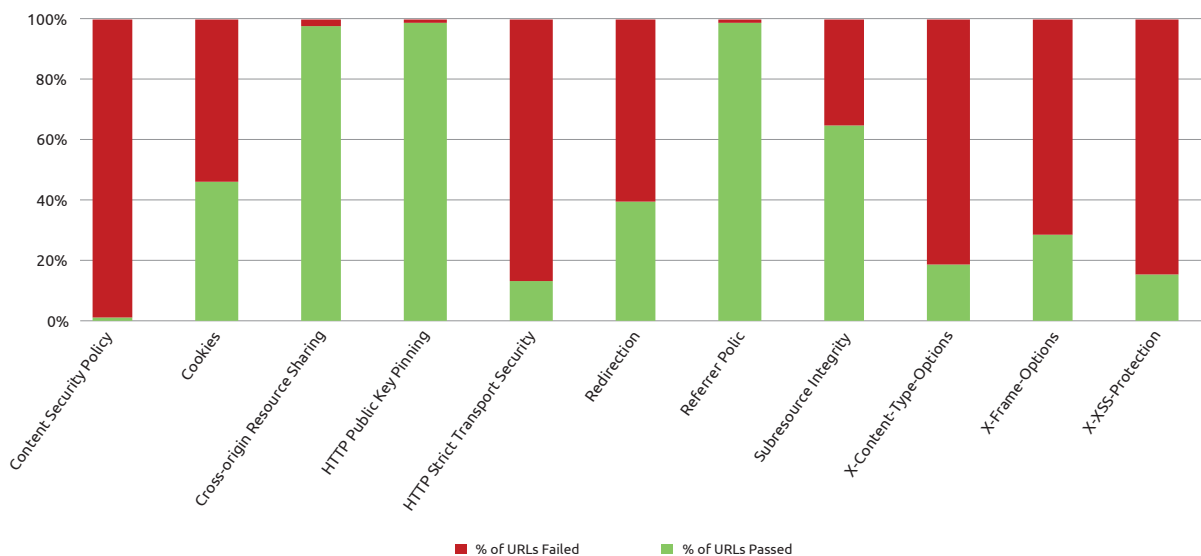


Figure 8.2 Percentage of public websites passing the three tests on cybersecurity on Mozilla

The pilot results show¹⁷ there is still considerable room for improvement when it comes to the cyber security level of public websites across Europe. Cybersecurity is everyone's responsibility, as the EU strategy correctly cites, but public entities in particular must fulfil an exemplary role. Public administrations' behaviour must change to ensure everybody understands the threat, and is equipped with the tools and skills necessary to quickly detect and actively protect themselves against attacks. One member state that already took the effort to improve cyber security is the Netherlands. A tool provided by the Dutch government explicitly seeks to improve the security levels of the public sector. It offers – besides a transparent measurement that triggers authorities to act – concrete support and dialogue.

It is effective: the adoption rate in the Netherlands rose from 30 to 80 in 3 years' time and this level is reflected in the measurement results achieved in both tools in the pilot. Cybersecurity programmes are essential in the evolving risk landscape, and sometimes start with the very basics such as public websites. Besides, activities need to be initiated to skill public administration employees in all levels of the organisation: leadership, IT-departments and the rest of their employees.

The Information Technology and Innovation Foundation (ITIF) has published a benchmark for the US, including a security measurement¹⁸. This allows to make some comparisons. The US benchmark focussed on two security aspects, HTTPS and DNS-

17 There are also ways of protecting against certain risks that the applied tools would not be able to detect. It can be possible that a website is tested as 'insecure', but in reality, is protected. For this reason, the results are shared with the Member States representatives to check with their web developers and cyber security specialist in order to receive feedback on the results and to initiate the discussion on possible risks.

18 Benchmarking U.S. Government Websites, Daniel Castro, Galia Nurko, Alan McQuinn, ITIF, 27 November 2017. Available online: <https://itif.org/publications/2017/11/27/benchmarking-us-government-websites>

SEC. The US websites score a lot better on these aspects than the EU websites. For the US, roughly 70% of the evaluated websites passed the HTTPS test and roughly 90 percent of the evaluated websites enabled DNSSEC. It should be noted however that the internet.nl tool and the Mozilla tool tests provides scores

on more than just HTTPS and DNSSEC. Furthermore, the US benchmark checked only the 500 most popular federal websites, while the European sample included more websites, also from the lower governmental levels and public organisations.

The Security tests explained

The internet.nl and the Mozilla Observatory tool test a number of items to assess the “basic hygiene” of websites. The items that are assessed by each tool and a short explanation per item are provided below.

Internet.nl tool

<p>IPv6</p> <p>Test for modern internet standard (using IPv6 instead of IPv4)</p>	<p>DNSSEC</p> <p>Test for ensuring no manipulation of translation between domain name and IP-address</p>	<p>HTTPS</p> <p>Test for preventing third parties from reading or changing content send between user and website</p>
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Mozilla Observatory tool

<p>Content security policy</p> <p>Can prevent a wide range of cross-site scripting and clickjacking attacks</p>	<p>Cross-origin resource sharing</p> <p>Prevents foreign sites to read site’s content and access private user information</p>	<p>Redirection</p> <p>Automatically redirect users from HTTP to HTTPS</p>
<p>Subresource integrity</p> <p>Protects against attackers modifying the contents of JavaScript libraries</p>	<p>X-frame options</p> <p>Prevents attacks that allows malicious sites to trick users into clicking links on your site</p>	<p>X-xss protection</p> <p>Stops pages from loading when they detect reflected cross-site scripting (XSS) attacks</p>
<p>Cookies</p> <p>Minimize damage from cross-site scripting (XSS) vulnerabilities</p>	<p>HTTP Strict transport security</p> <p>Notifies user agent to only connect to a given site over HTTPS</p>	<p>X-content type options</p> <p>Prevents loading scripts and stylesheets unless the server indicates the correct MIME type</p>
<p>Referrer Policy</p> <p>Minimizing privacy risks</p>		<p>X-content type options</p> <p>Protecting against unauthorized issuance of certificates</p>

Drivers for eGovernment performance: a benchlearning perspective

Key Insights

- Penetration at European level is 53%, but with a wide spread amongst different countries: there are countries scoring above 75% (Sweden, Finland, Estonia, Denmark, Netherland and United Kingdom) and countries scoring below 30% (Italy, Greece and Czech Republic).
- Digitisation at European level is 63%, the best performer is Malta (95%). Only five countries registered a score lower than 50% (Bulgaria, Greece, Hungary, Croatia as well as Romania).
- eGovernment performances are correlated: countries with better performance in Digitisation seem to have better performance in Penetration and vice versa.
- Penetration is positively correlated with Users characteristics and with Government Quality
- Digitisation is positively correlated with Connectivity and quality of government.

To enhance and improve the insights from the eGovernment Benchmark exercise, this section compares the eGovernment performance of different countries in a Benchlearning exercise. Within the Benchlearning exercise the scores on the eGovernment benchmark indicators are combined with data from additional sources. In this way we are better able to understand which factors hamper or stimulate innovation and how the key characteristics of a country might influence eGovernment performances.

eGovernment performances are measured through **Penetration** and **Digitisation**. **Penetration** captures the extent to which use of the online channel is widespread among users of government services and stems from Eurostat data. **Digitisation** is

a proxy for the Digitisation level of the back- and front-office of Public Administration and its source is the eGovernment benchmark indicators. We refer to Penetration and Digitisation as the *absolute* indicators of countries' performance.

We make a distinction into four groups of countries, based on their Penetration and Digitization levels.

- **Non-consolidated eGovernment:** this scenario contains lower levels of Digitisation and lower levels of Penetration.
- **Unexploited eGovernment:** this scenario contains lower levels of Digitisation combined with higher levels of Penetration.

- **Expandable eGovernment:** this scenario contains higher levels of Digitisation and lower levels of Penetration
- **Fruitful eGovernment:** this scenario contains high levels of both Digitisation and Penetration.

Identifying the main factors that drive innovation allows one to draw different development paths that countries can follow. Insights in these possible development paths allow countries to learn from best performers' experiences. Environment-specific characteristics influence eGovernment policies and strategies in each country. In this report, three categories of Environment-specific characteristics are considered, which we refer to as the *relative* indicators of a country:

- **User characteristics:** this factor measures citizens' willingness to use online services. It includes elements that enable citizens to use online channels, such as the citizens' level of digital knowledge and the overall level of ICT usage, i.e. the variety of activities performed by citizens that are already online. These activities range from using online content (videos, music, games, etc.) to modern communication activities, online shopping and banking.
- **Government characteristics:** the Governance structure, in terms of how public organisations act and are organised, determines the coverage of eGovernment services, investments and efforts made in innovation practices. This factor includes the quality of governments' action and the openness of data and information from an Open Government perspective.
- **Digital context characteristics:** this factor includes some of the external elements that may influence broader eGovernment application:

the deployment of broadband infrastructure and its quality, the digitisation of businesses and their implementation of online sales channels.

These characteristics are based on various data sources additional to the eGovernment benchmark data collection. When comparing *absolute* and *relative* and absolute indicators, three types of countries can be identified:

- **Underperforming countries:** these countries perform below expectations, compared to countries with similar environmental characteristics.
- **Average countries:** these countries perform according to expectation, in line with the European trends of performance.
- **Outperforming countries:** these countries perform above expectations, compared to countries with similar environmental characteristics.

Figure 9.1 shows the results of the analysis. The arrows signal if a country's Digitisation or Performance score does not correspond to expectations in terms of its environmental characteristics (i.e. relative indicators). If the arrow faces upward or to the right the country scores higher than expected, if the arrow faces downward or to the left the country scores lower than expected.

Depending on the scores on the absolute and relative indicators countries can be grouped into one of four categories. Non-consolidated eGovernment is characterised by low levels of Digitisation and Penetration, combined with unexploited ICT opportunities and a small number of online public service users. Unexploited eGovernment is characterised by low levels of Digitisation and high levels of Penetration, combined with an ongoing digital transformation process and many online public service users.

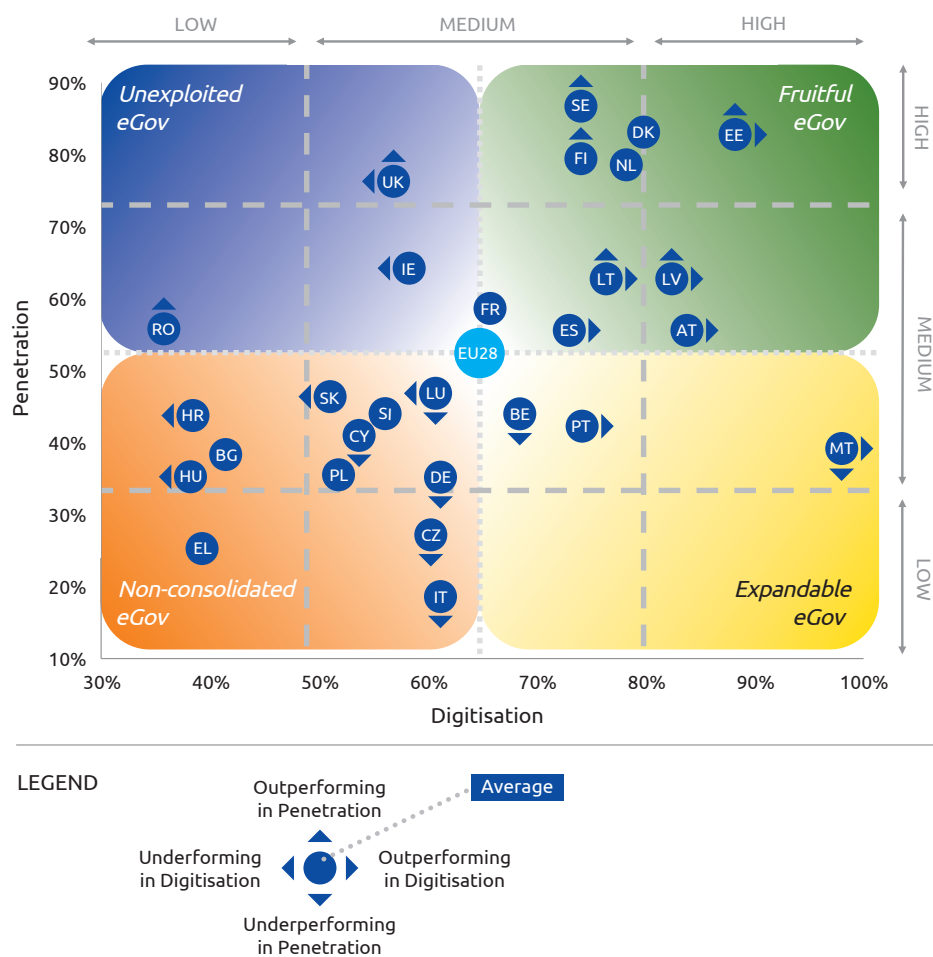


Figure 9.1: Absolute and relative performances

Expandable eGovernment is characterised by high levels of Digitisation and low levels of Penetration, combined with innovative online public services and a small number of online public service users. Fruitful eGovernment is characterised by high levels of Digitisation and Penetration, combined with innovative online public services and many online public service users. Countries with a level of Penetration and Digitisation lower than expected might learn from countries with similar environmental characteristics but better performances in absolute indicators.

There are also countries that underperform in either Penetration and/or Digitisation. For Penetration, this applies to Belgium, Cyprus, Czech Republic, Italy, Germany, and Luxembourg. These countries do not necessarily have very low Penetration scores, but one would expect the scores to be higher based on their country characteristics. These countries all appear to have the adequate context, users and government characteristics to achieve better Penetration performances. Possibly these countries would benefit from offering more eGovernment services to their citizens and/or raising awareness

about the opportunity to benefit from eGovernment services. Croatia, Hungary, Ireland, Luxembourg and Slovakia are countries that seem to have the adequate context, users and government characteristics in place to score better in Digitisation performances. So, they might want to invest in digitising the back- and front-offices to realise more efficient and effective procedures and a better services delivery.

Outperforming countries, instead, have Digitisation and Penetration absolute performances above what would be expected given their environmental characteristics. Estonia, Latvia and Lithuania are the outperforming countries in both Digitisation and Penetration. Finland, Sweden and Romania are outperforming in Penetration and score in-line with regards to the Digitisation indicator. The United Kingdom shows good relative performances for Penetration, while current results as regards availability of Key Enablers allow to further improve the Digitisation indicator. Austria, Portugal and Spain are outperforming in Digitisation, and show an in-line performance in Penetration. Malta shows good relative performances for Digitisation but is underperforming in Penetration.

The analysis shows that a digitisation process is driven by a complex mix of different factors. The development of eGovernment is strongly correlated with the development of other factors concerning citizens' preferences and skills, governmental policies and digital context characteristics, such as the relation between public administrations and the private sector.

Referring to Penetration, a positive correlation was found between User characteristics and quality of government. Countries with more skilful citizens and more frequent daily internet use are also the countries with a widespread usage of eGovernment services. This might hint at the value of awareness-raising and edu-

cational activities to potentially increase usage of online public services. Moreover, it seems that whenever citizens perceive public administration service delivery as of high quality, they are more inclined to use online tools and public services.

Referring to Digitisation, strong correlations are apparent with the Connectivity and quality of government indicators. This indicates that countries with high a level of deployment and quality of broadband infrastructures are also the countries with a high level of online public services available. It is likely that ensuring fast broadband-enabled services allows public administrations to share service related data more rapidly and process service requests with more speed, resulting in higher levels of Digitisation. Furthermore, quality of government and Digitisation demonstrate a positive correlation. As mentioned, quality of government is a composite indicator representative of whether people are confident with the decisions and actions of public authorities. It therefore seems that whenever a country has high levels of Digitisation, such eGovernment performances are also reflected in the high-quality way that citizens perceive their government.

The benchlearning exercise offers the possibility for countries that are underperforming to compare themselves with other countries sharing similar contexts, in order to understand which policies and strategies can be implemented to increase their levels of Digitization and Penetration. In particular, if a country is underperforming it might look at countries that have the same set of relative indicators but reach higher performance levels, and secondly the country can think about improving the relative indicators. It would be interesting to further study these countries to find out more precise explanations for their performances. Such exercise could discover the configurational adjustments needed to implement good practices in other contexts.

Way forward: securing eGovernment for all

In the 2017 Tallinn Declaration¹⁹, the ministers in charge of eGovernment in the EU and the EFTA countries have reemphasized the principles of the EU eGovernment Action Plan²⁰. These principles (digital-by-default, inclusiveness, accessibility, once only, trustworthiness and security, openness and transparency and interoperability) also underlie this eGovernment Benchmark. As such, this report provides guidance on how the aspects recognised in the declaration could be lifted to the next level by providing insight into the state-of-play, drivers for eGovernment performance and good practices employed in the EU28+ countries.

eGovernment across Europe has progressed over the years. More information and services are available online, increasingly orchestrated via central portals and one-stop-shops across government tiers. The user centricity principles on availability, accessibility, and digital delivery and interaction are well embraced. Additionally, the gaps between best-performing countries and those lagging are shrinking, be it with small increments over the past five years. eIDAS trust services will likely provide another boost to eGovernment development: nationally, but in particular to establish interoperable cross-border services. The Web Accessibility Directive²¹ coming into force will oblige public sector bodies to design their websites and apps according to international

standards, opening up digital services for approximately 80 million Europeans with a disability. The progress demonstrated in policy monitors such as the eGovernment Benchmark, and the Digital Economy and Society Index (DESI) in a broader sense, is clearly positive and needed to serve a broad range of users.

At the same time however, the development of eGovernment has created new vulnerabilities as well. The results from the cyber security assessment of approximately 3500 public websites conducted in this year's evaluation clearly calls for action from the European governments. The principle of trustworthiness and security in the Tallinn Declaration is well defined²², but from the pilot results it can be concluded that 'state-of-the-art solutions' are required immediately. Ensuring basic security levels cannot wait until 2020.

Personalisation could be crucial to stimulate take-up of eGovernment services. Why aren't more people using eGovernment services when they are available? How can eGovernment services better match users' needs? What can governments do to reach all their businesses, and citizens as well as fellow-Europeans working or living in their country? Personalisation is a key concept in answering these questions, and to ensure that the opportunities for all citizens are growing.

19 Tallinn Declaration on eGovernment, available online: http://ec.europa.eu/newsroom/document.cfm?doc_id=47559

20 EU eGovernment Action Plan 2016-2020, available online: http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=15268

21 See: <https://ec.europa.eu/digital-single-market/en/web-accessibility>

22 On Page 3: 'For the principle of trustworthiness and security, we will: ensure that information security and privacy needs are taken into consideration when designing public services and public administration information and communication technology (ICT) solutions, following a risk-based approach and using state-of-the-art solutions'

Europe is not there yet though: the number of pro-actively delivered services has been stagnate for years in a row, and re-use of data ('once-only') is certainly not applied in every public domain. An exploratory pilot conducted in this benchmark found huge differences between member states in the number of information fields that starting entrepreneurs are required to fill when registering their business with government. This highlights the opportunity to both simplify forms (reduce fields) as well as to re-use data more efficiently.

The limited progress made on Transparency indicators is worrisome. Basic information about the service process, essential for optimal user experience, is only available in half of the cases as this benchmark shows. But perhaps more important is the transparency of personal data: when European economies and societies are increasingly digital, and also public sectors increasingly re-uses personal data to optimise service delivery, a certain control over data is required for the person involved. This goes beyond GDPR in a way. Personalisation then leads to ethical issues as citizens are in a dependence relationship with governments who might be considered too much 'big brother'. The Tallinn principle on openness and transparency is crucial to maintain a trust basis. The ambition to *'make it possible for citizens and businesses to digitally manage their personal data held by the public administration'*, is at the moment however foremost just an ambition, as the benchmark results demonstrate.

The Tallinn Declaration provides guidance and political commitment on eGovernment principles and reminds

us that: *'It is time to start laying the foundation for further digital evolution and joint actions beyond 2020'*. This is pivotal for securing eGovernment for all.

Digitisation is the direction; the path is undefined²³. And so, more is needed, if we read the above conclusions well. Plans are worthless, but planning is everything²⁴. Eisenhower used this quote to illustrate that when you are planning for an emergency, you must start with this one thing: the very definition of emergency is that it is unexpected, and therefore it is not going to happen the way you are planning. In a way, technology is similar: it is developing so rapidly that it is difficult to anticipate what it will bring in the (near) future. Securing eGovernment for all is hence not (just) about planning the foundations for the future. It is much more about changing attitudes and routines which are deeply rooted into public institutions. Digital Government requires agility and flexibility and pioneering to adopt new technologies and bring them into practice. Public policy making is radically changing and requires different attitudes from public entities and civil servants. It might be challenging to compete with the private sector for digital talent, but the public sector does offer a unique position for making societal impact. Technology no longer is something for IT professionals alone. It demands attention from all professionals. Politicians, government leaders and policy makers need to be skilled and understand the impact of technology. This would equip governments with the right skills to start planning securing eGovernment for all.

²³ Builds on quote by the Dutch State Secretary: <http://specials.publiekdenken.nl/special-ioverheid#!/visie-staatssecretaris-raymond-knops>

²⁴ Quote by: Dwight D. Eisenhower, November 1957







European Commission

**eGovernment Benchmark 2018
Securing eGovernment for all**

Insight report

Luxembourg, Publications Office of the European Union

2018 - 56 pages.

ISBN: 978-92-79-96381-0

DOI: 10.2759/371003

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