



D1.3 Member States Once Only and data strategy baseline

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List of Acronyms

Abbreviation / acronym	Description
API	Application programming interface
CIO	Chief information officer
DE4A	Digital Europe For All
Dx.y	Deliverable number y, belonging to WP number x
EFTA	European Free Trade Area
eID	Electronic Identification
EIF	European Interoperability Framework
EU	European Union
MS	Member State
NIFO	National Interoperability Framework Observatory
OOP	Once-Only Principle
SDG	Single Digital Gateway
WP	Work Package

Executive Summary

The project Digital Europe for All (DE4A) was launched in January 2020 as a result of collaboration of 27 organizations from 11 countries of the European Union. The project is funded by the EU Horizon 2020 research and innovation Framework Programme and is aimed to create an inclusive digital Environment in Europe ensuring the Single Digital Market rights of citizens and businesses by building on secure, privacy-preserving and trustworthy realisation of fundamental once-only, relevant-only and digital by default principles. The DE4A large-scale pilot reinforces the connectivity of national digital endeavours and, building upon the existing infrastructure, it attempts to contribute to an overarching eGovernment network for Europe supporting parallel efforts from the EC and the Member States to realise the Once-Only Principle Technical System in compliance with Single Digital Gateway and aligned with EU eGovernment Action Plan 2016-2020, Tallinn Declaration and EIF Implementation Strategy.

“D1.3 Member States Once Only and data strategy baseline” is one of the formal outputs of WP1 “Inventory of current eGovernment landscape” for the DE4A project. This workpackage which aims to take stock of the existing situation of the deployment of cross-border integrated Digital European Public Services in the Member States participating in DE4A, has produced four deliverables in the first period of the project:

- D1.1 Member state eGovernment Baseline (June 2020)
- D1.3 Member State Once Only and data strategy Baseline (June 2020)
- D1.5 Baseline EU Building Blocks supporting Once Only and standard data sharing patterns (June 2020)
- D1.7 Legal, technical, cultural and managerial barriers (August 2020)

All four documents are conceived as stand-alone documents. This facilitates reading the document of interest but leads to some level of repetition between documents, in particular regarding the sections on theoretical background and methodology.

The purpose of “D1.3 Member States Once Only and data strategy baseline” is to take stock of the existing eGovernment landscape in Europe for implementation of eServices and cross border enablers, identifying existing national eGovernment capacities, major setbacks and potential drivers for the DE4A project implementation. The study is part of a series of 4 studies covering the domains of Electronic Identification (eID), Authentication and Trust services (eIDAS), Single Digital Gateway (SDG), Digital Service Infrastructure (DSI), Once-Only Principle (OOP) and Data strategy, the latter two being the focus of the present study.

The study is based on data from a survey distributed to the chief information officers of the EU and EFTA countries. The response rate was 77.5%, granting the study a solid basis for reporting on the actual status of the domains in focus.

With regards to data strategy and generic access to base registries, the study shows that 50% of the responding countries report not having a strategy for reusing public sector data in place. Furthermore, only few of the base registries are generally accessible by private entities.

The study also shows that transaction fees are implemented in as much as nearly 60% of the countries for private entities. Although the equivalent numbers for public entities are somewhat lower, transactional fees are prevalent and as such, the report concludes, likely to have an adverse effect on the flow of data and hence the realisation of user benefits of the SDG.

Whilst the study reports a positive picture on citizens’ access to data on themselves, the ability for citizens to gain insight into civil servants’ access to data is shown to be rare.

Current levels of the implementation levels of the OOP are shown to be rather low in light of the time horizon for implementing the SDG. The deficiency was identified on regional as well as national levels, and despite implementation levels of the procedures related to the 21 life events of the SDG were

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slightly better, the overall picture remains one of low adoption and implementation. As differences in countries' administrative procedures and the data required for those procedures may reasonably be assumed to add complexity, consequences of that deficiency may be expected to be even more prominent in a cross-border setting.

The study concludes that the status on data harmonisation, free and effective access to data, implementation of the OOP in national and cross-border services and the availability of those services for cross-border use, show severe shortcomings and must be improved drastically within the next three years for the SDG to be implemented as envisaged. As such, any initiative that utilises or depends on cross-border OOP should take into account that implementation of the OOP may not be assumed.

Providing a status on the implementation of eGovernment building blocks, the four studies in this series will serve as input for the development of architectures in the context of "WP2 Architecture vision and framework", namely the Project Start Architecture of D2.4 and the Target architecture recommendations of "D2.7 Optimal interoperability architecture for cross-border procedures and evidence exchange in light of the Single Digital Gateway Regulation". By extension, the studies will provide input to the planning of pilots on Studying Abroad, Moving Abroad and Doing Business Abroad (cf. "WP4 Cross-border Pilots for Citizens and Business and Evaluation", "D4.2 Studying Abroad-Pilot planning", "D4.6 Doing Business Abroad-Pilot planning" and "D4.10 Moving Abroad-Pilot Planning"). Furthermore, the reports will be used as benchmarks for evaluating eGovernment advancement under the upcoming digitalisation initiatives.

During the course of the project, the studies will be updated to provide a second stocktaking of the eGovernment levels.

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1 Introduction

1.1 Purpose of the document

The present report is conducted under the DE4A project and constitutes the deliverable D1.3 Member States Once Only and data strategy baseline. The purpose of this study is to take stock of the existing Once Only capabilities at regional and national level, Once Only capabilities related to cross-border services, and data strategy and generic access to base registry services.

In order to establish a firm foundation for the DE4A-project, e.g. the architecture and pilots, this study is one of four studies designed to chart the current landscape of digitalisation in Europe. The other studies in this series are

- ▶ D1.1 Member State eGovernment Baseline (June 2020), which elaborates on the current advancement of the existing eGovernment landscape
- ▶ D1.5 EU Baseline Building Block Catalogue (June 2020), which identifies main existing building blocks from EU programmes and projects that can enable Once Only implementation and relevant standard data sharing
- ▶ D1.7 Legal, technical, cultural and managerial barriers (expected July 2020), which elaborates on the benefits of, barriers to and general willingness towards implementation of the OOP.

Describing the existing infrastructure, practices, expected benefits and barriers, the reports aim to provide helpful insight for DE4A and serve as input for the subsequent development of pilot projects. They are designed as stand-alone documents, and so necessarily contain some repetition regarding background and methodology.

Each of the studies will be updated during the course of the project.

1.2 Structure of the document

This document is divided into five main chapters:

- ▶ Chapter 1 gives introductory context to the matter of the research;
- ▶ Chapter 2 elaborates on the utilised methodology and data sources for the analysis;
- ▶ Chapter 3 presents the results of the analysis Once Only and data strategy baseline;
- ▶ Chapter 4 discusses the obtained results in an aggregated format;
- ▶ Chapter 5 provides concluding remarks on the research.

The document additionally includes the following annexes:

- ▶ Annex I – Calculation methodology
- ▶ Annex II – Digital Europe for All (DE4A) survey

1.3 Theoretical background

Rapid development of information and communication technologies has given a significant impetus to transformation of public administration and set eGovernment on the political agenda of the European Union (EU).

Formulation of the first large scale eGovernment Action Plan 2011-2015 articulated the necessity for political mobilisation of digital transformation and became one of the milestones towards the establishment of a collaborative network of the EU Member States in the area of government digitalisation [1]. The termination of the Action Plan coincided with the adoption of Digital Single

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Market Strategy, which put forward the necessity to establish seamless functioning of public administration on a cross-border perspective, easing access to public services for citizens and businesses. The new eGovernment Action Plan 2016-2020, building upon the previous achievements in cross-border eEnvironment, underpins user-centricity as one of its main objectives and sets the strategic frame for the current digital initiatives in Europe [2]. The Tallinn Declaration on eGovernment from 2017 complements the undertaken strategy and elaborates on the principles of digital transformation of public administration [3]. Reinforcing the reduction of administrative burden on citizens and businesses, the adopted strategies and declarations establish the OOP as one of the central elements for development of the Digital Single Market.

As different studies on eGovernment suggest, there is an uneven level of eGovernment advancement across the EU Member States. Despite the availability of the common regulatory framework and the launch of large-scale cross-border projects, reports on eGovernment Benchmark demonstrates some countries having a higher adoption rate of eID adoption and availability of public services in a cross-border perspective [4]. Digital Economy and Society Index similarly depicts unequal coverage of internet connectivity and availability of public digital services across Europe [5]. These differences are essential for comprehension of the current European eGovernment landscape.

In light of the goal of creating a single digital space of Europe, the project Digital Europe for All (DE4A) aims to create an inclusive digital environment for the EU citizens and businesses, ensuring their Single Market rights. Supporting the EU Public Administration in addressing the existing challenges to the implementation of the digital cross-border initiatives, the DE4A contributes to the realisation of the Single Digital Gateway Regulation [6], EU eGovernment Action Plan 2016-2020 [9], Tallinn Declaration [10] and EIF Implementation Strategy [11]. As articulated in the project proposal, the goal of the DE4A is to:

«reinforce trust in public institutions and to unleash multiple measurable positive impacts in terms of efficiency gains and reduction of current administrative burden and costs, rooted on a Toolkit for extended semantic interoperability and on secure, privacy-preserving and trustworthy realization of fundamental Once-Only, relevant-only and digital by default principles, through state-of-the-art, usable and high-quality fully online procedures accessible through the Single Digital Gateway (SDG)»

In what follows, the present report will examine the status of three major components that are relevant for understanding EU Member States' advancement in digitalisation: the implementation of the Once-Only Principle on a regional and national level, the implementation of once-only capabilities related to cross-border services, and the presence of national data strategies including generic access to national base registry services.

1.3.1 The Once Only Principle

After having primarily served the purpose of improving data quality and avoiding duplication of public sector administrative tasks, with the Tallinn declaration on eGovernment presented in October 2017, reuse of data was brought center stage of digitilisation efforts as a means of supporting user-centricity. Now coined the principle of once only, reuse of data should support user-centricity by ensuring that citizens and business are not asked to provide the same information to public services more than once.

In order to support the realisation of the principle, the 32 signing ministers in charge of eGovernment policy and coordination from countries of the EU and the European Free Trade Area (EFTA) asserted to introducing once only options for citizens and businesses in digital public services in their respective public administrations at national and sub-national level as well as with other countries for cross-border digital public services.

Furthermore, they would take steps to increase the findability, quality and technical accessibility of data in key base registers and/or similar databases, to build up readiness for applying the once only principle for national or cross-border digital public services. They would work to create a culture of re-

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use, including responsible and transparent re-use of data within their administrations, and they would make use of available funding to digitise all necessary key data and implement data exchange services between administrations for applying once only on both national and/or cross-border levels.

1.3.2 Data strategy

High quality data has increasingly been recognised as a prerequisite for wellfunctioning public administrations, and as a means of achieving cost-reductions.

For those purposes, data strategies have for a long time focused on data harmonisation, improving data quality and reusing data within public administrations. Because of the relative lack of communicability of those purposes in a public policy context, data strategies have often been marginal parts of general digitalisation strategies.

However, recent developments have shown a move towards the formulation of data strategies in their own right and the term “data strategy” being used even when containing more communicable forms of digitalisation initiatives, e.g. strategic directions, a framework for future digital development, and initiatives supporting user-centricity and innovation.

Albeit not a prerequisite for achieving the desired outcomes, the presence of data strategies in one format or another, may be considered an important part of achieving coordinated national efforts.

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2 Approach and methodology

2.1 Approach and objectives

The present study aims to contribute with insight to the DE4A architecture and pilots to support the practical realisation of the European Digital Single Market, especially the delivery of better public services that are fully digitalised, user-centric, data-driven, trustworthy and cross-border.

Seeing DE4A aspires to take state-of-the-art as the starting point for further digital transformation, the aim of this study is threefold:

Primarily, the study investigates the existing digital transformation landscape in Europe. Taking stock of current advancement levels, it provides a status of public digital initiatives in Europe, covering the compliance level of the EU Member States with the major cross-European digital initiatives. As a part of the common European endeavor towards the interoperable and seamless cross-border digital space, the study aims to reveal the existing challenges and enablers for the designated transformation.

Secondarily, the present research contributes to the implementation of the pilot projects under the DE4A initiative. Serving as an input to the project team, the survey provides necessary insight into the existing services and practices across Europe, supporting the project with a solid starting ground for further development.

Finally, the results of the study will serve as a point of reference for assessing the DE4A progress throughout the project lifetime. Therefore, as with the other three studies in this series, this study will be updated during the course of the project to evaluate the advancements in once only, digital strategies and access to base registries and against the current landscape.

In accordance with the announced privacy statements, the study outcomes are presented in an aggregated format. Making an inventory of the current once only practices and digital strategies, the report portrays the overall European advancement of the EU Member States and EFTA countries, revealing the most significant developments and pitfalls of the existing European digital space. Based on the obtained results, the study will explore the perception of the participating countries of their digital advancement and suggest a ground for decision making for development of the DE4A pilot cases.

2.2 Scope

In the context of the identified objectives and the other studies in the series, the present study focuses on the landscape of once only and data strategies, including access to base registries.

The geographical scope of the study covers the 27 member states of the EU and the EFTA states (Iceland, Liechtenstein, Norway, and Switzerland).

2.3 Data collection and analysis

For assessing the current implementation levels of once only and the presence of data strategies, including access to base registries, the study used the following data sources:

- *Data collection.* The data collection was carried out by means of a joint survey questionnaire (see Annex II – Digital Europe for All (DE4A) survey) for deliverables D.1.1, D1.3 (present study), and D1.7, and was sent out to 31 state representatives. It was targeted at the current eGovernment advancement of European states and consisted of 4 major subjects: Electronic Identification and Trust Services, Single Digital Gateway, Digital Service Infrastructure, and Once-Only Principle and

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Data Strategy. Of these, the present study investigates the questions relating to the Once-Only Principle and Data Strategy. The online survey was disseminated among chief information officers (CIO) of the EU Member States and EFTA countries and the data was collected between 1 and 24 April 2020. The respondents were requested to self-evaluate the performance of their countries with respect to the indicated topics. Acknowledging the challenge of gathering multifaceted information on eGovernment performance aggregated at the national level, where exact data was not available, respondents were suggested to provide their personal estimates. Furthermore, the questionnaire offered the respondents a possibility to supplement the submitted data with additional comments illustrating country-specific context relevant for understanding the particular eGovernment initiative. Responses were received from 24 countries, corresponding to 77.5% of EU and EFTA countries: Austria, Belgium, Bulgaria, Croatia, Denmark, Finland, Germany, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland. The response rate for the countries participating in the pilot projects amounts to 100%, offering a solid ground for informed development of the pilots announced under the DE4A.

- ▶ *Desk research.* The EU policies stipulating development of the shared European digital space have been used as a guideline for survey design and analysis. At the stage of the response analysis, the data obtained via the survey was supported by contextualization of the EU Member States' eGovernment development through research of relevant national strategies and legislative frameworks supporting digital transformation. Comments from the survey served as supplementary input for further policy and context analysis of the respected country.

Driven by the goal of the DE4A, the survey questions were based on the outlined scope of the project. They were subsequently adjusted based on the availability of the relevant recent information on the subject in other reports and studies, such as eGovernment Benchmark reports [7], the Digital Economy and Society Index [8] and NIFO factsheets [11].

To ensure consistent quality of the analysis data, prior to the analysis, the data was cleansed and checked against the respondents' comments for the purpose of making possible adjustments. If needed, point communication was undertaken to clarify the position of a respondent on a specific question.

As the total number of respondents is below 30, each answer influences the overall results. In order not to introduce additional risks of bias in the reporting, the answers given are reported directly in either absolute numeric values or percentages. Please see the exhaustive list of the calculations per graph in Annex I – Calculation methodology.

2.4 Methodological limitations of the study

The results of the study seek to reflect the current advancement of eGovernment of Europe based on the information provided by the CIOs of European countries.

This method of collecting data, based on self-reporting, carries risks of bias, as respondents may over-report positive behaviour or conversely under-report negative behaviour to gloss over the country's actual status. This risk of bias was mitigated by not asking for the official position of the state combined with assuring no individual answers would be published, hereby relieving any perceived pressure to perform. As the number of e.g. "Do not know"-replies vary greatly, ranging up to 71% of the replies given to a certain question, the approach appears to have been successful.

Furthermore, as respondents were suggested to provide personal estimates where exact data was not available, replies may inadvertently be incorrect. However, the risk of such errors substantially altering overall replies is considered small, as the chosen respondents are experienced, high-ranking officials of the executive digitalisation authorities that may be considered generally knowledgeable about the

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subjects. Furthermore, the high response rate provides a substantial counterweight to such errors, if their allocation across questions and respondents may be presumed equally distributed.

Nonetheless, the aforementioned inherent risks of bias and erroneous replies, cannot be removed completely, and any conclusions based on the findings of the study should take into account the likelihood and implications of those risks.

Regarding the possibility of extrapolation results, despite the survey achieved a 77.5% response rate of the total population of countries, the study cannot be assumed to be exhaustive for the entire population of countries within the geographical scope. However, although the data does not provide sufficient methodological grounds for extrapolating the results to the entire population of EU and EFTA countries, no easily identifiable common denominator of the abstaining countries gives reason to believe that responses from these countries would be significantly different in general from the ones received.

Finally, the data does not provide grounds to infer hard conclusions about neither rationales behind the status nor timehorizon for future development. As such, adoption and implementation levels may rise significantly over the next few years or be at a complete stand still.

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3 Once-Only and data strategy baseline

This part of the report measures the member states' implementation of the OOP and presence of data strategies including generic access to base registries. Enshrined in the eGovernment Action Plan, the OOP implies the reduction of administrative burdens for the EU citizens, businesses, institutions and public administrations by allowing them to provide a certain type of information once and implying the reuse of the collected data upon the consent of all parties. In the following, the data from the survey is presented in three subsections:

- ▶ Data strategy and generic access to base registry services
- ▶ Status on the overall implementation of once-only
- ▶ Status on the implementation of once-only related to cross border services

3.1 Data strategy and generic access to base registry services

In order for the OOP to be successfully implemented, the prerequisite is that member states address the reuse of data within their administrations in one way or another. The survey showed that all responding countries report having adopted a national digital transformation strategy, which sets forth a set of strategic and tactical measures to support eGovernment development. Figure 1 illustrates the different strategic instruments used by the respondents. In regards to the OOP, it can be observed that half of the responding countries have a national strategy of reusing public sector data. However, this also shows that half of the respondents do not have a respective strategy for data reuse in place.

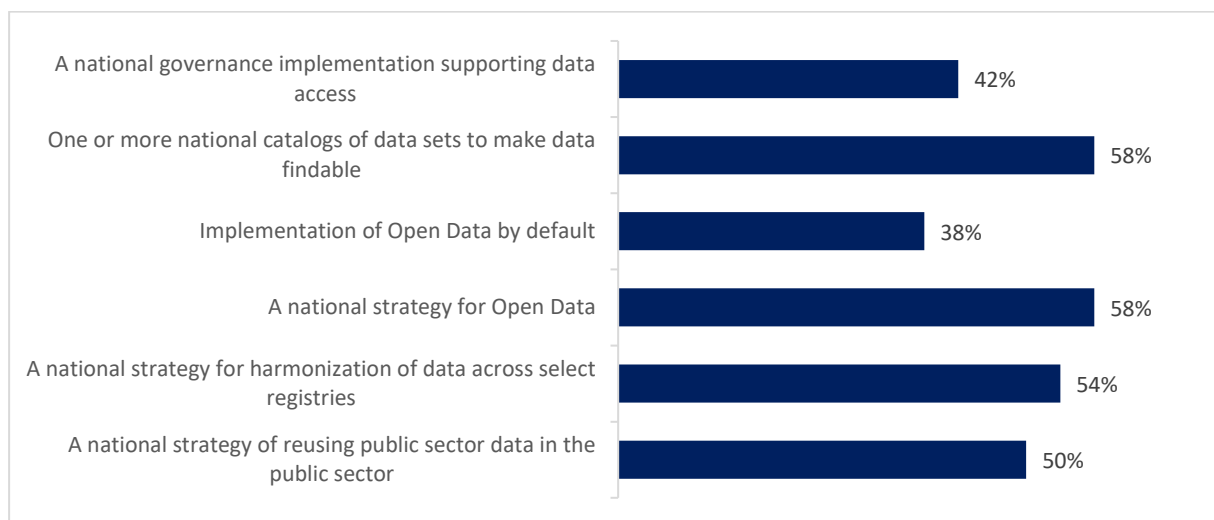


Figure 1: Overview of adopted data strategies

Most respondents use either between 2-3 (42%) or 4-5 (25%) of the in Figure 1 mentioned instruments, whilst 17% have strategic focus on all instruments. Only 17% of the respondents use only one instrument in their digital transformation efforts.

It should also be noted that more than half of the respondents have a strategic focus on making data findable, harmonization and reuse of data. However, almost 60% of the respondents do not have a national governance implementation supporting data access as a strategic focus.

3.1.1 Access to data

A notable amount of self-services for citizens are maintained by private entities through procurement processes. It is therefore important that not only public organizations, but also the private sector has access to the relevant base registries. Figure 2 below shows that two countries, accounting for 8% of

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the respondents, have reported not granting access to base registries for private entities. More than 80% of the respondents have implemented access to registries regarding businesses, cadasters and geographical data. However, the distribution could be attributed to economic interests. Therefore, implementation is most likely linked to economic services rather than public services.

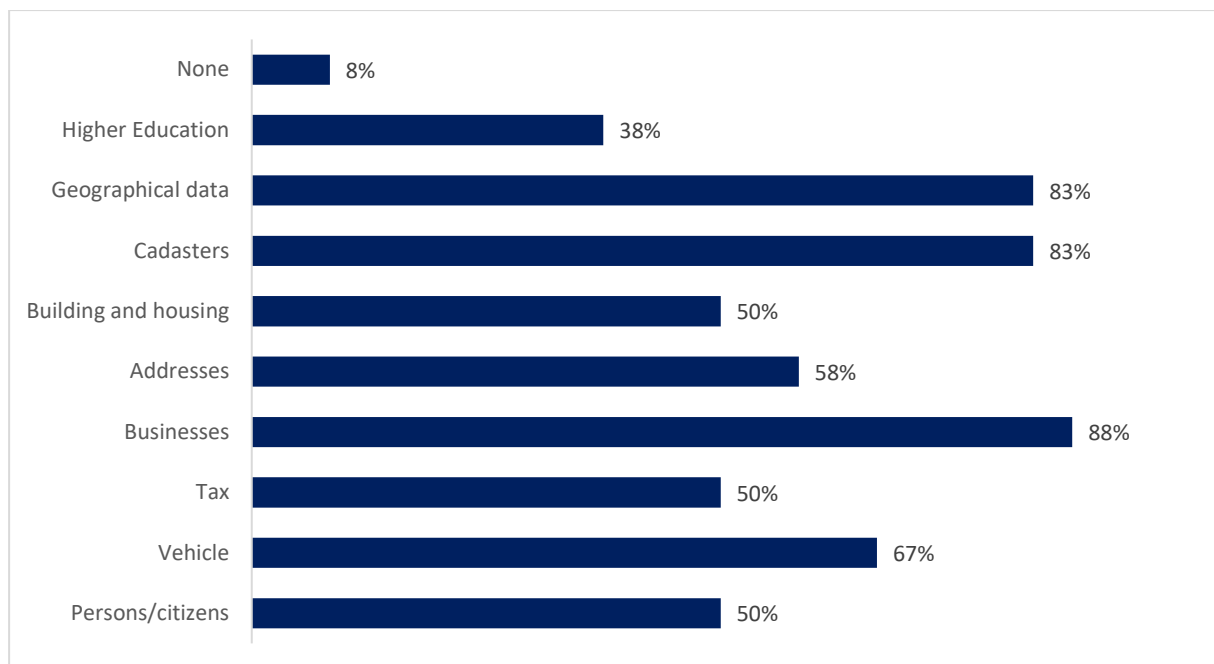


Figure 2: Base registries implemented for national use that can be accessed by private entities

Furthermore, the recently revised Public Sector Information Directive [13] will further push the open data agenda and have an influence on the access to base registries. Member states are expected to implement the directive and be able to reuse high value datasets within business as well as geospatial and meteorological data by July 2021.

However, the data presented in Figure 2 might not be complete, as it contains several qualifications that may skew the results, e.g. the member states' understanding of what the term base registry covers.

An integral part of the SDG implementation process depends on how access to relevant registries is implemented. Especially data lookup through application programming interfaces (APIs) is important to ensure a fast integration of cross-border services. Figure 3 below illustrates, that two thirds of the responding countries organise the access to base registries through APIs, implying that one third of the responding countries do not allow access through APIs.

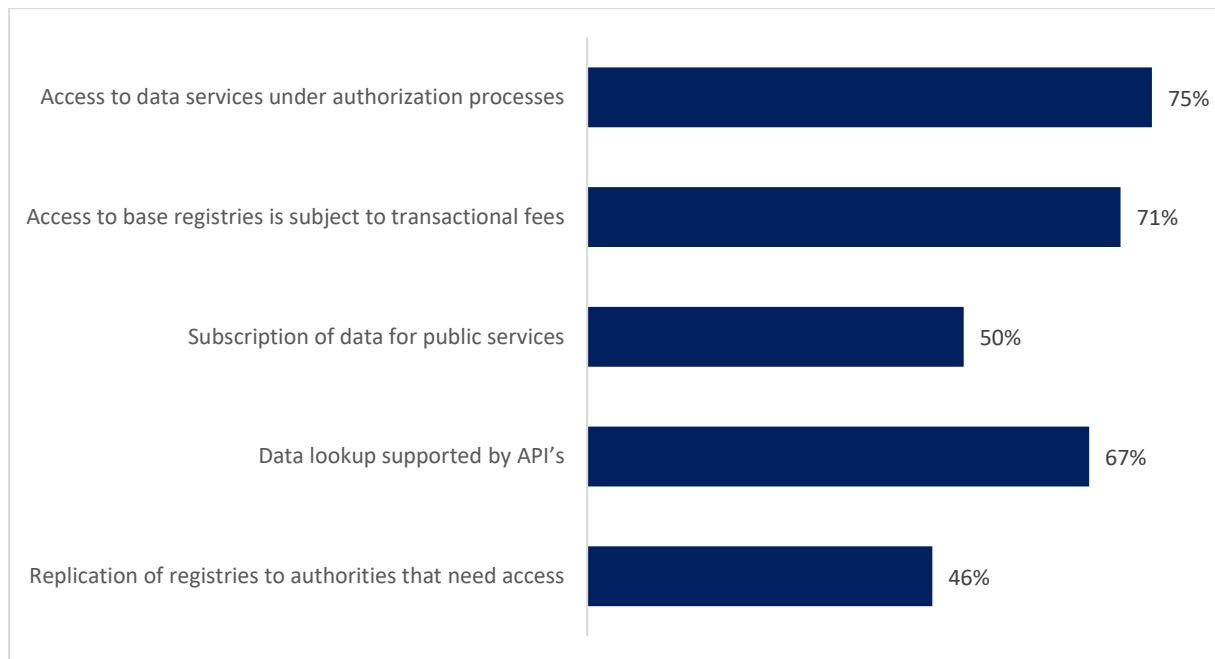


Figure 3: Access to base registers

Another relevant observation in this regard concerns transactional fees, as they most definitely will be a major factor in the implementation process of the SDG. Figure 3 shows that a clear majority of member states, accounting for 71% of the respondents, have introduced transactional fees when accessing base registries.

Furthermore, close to two thirds of the respondents have introduced fees for private entities, whilst only a third use fees for public organizations on a national level. This ratio between private and public entities can also be observed in fees for cross-border transactions. Even though the trend shows a positive decline in introduced fees for cross-border transactions, the amount of countries that do not introduce fees are the same. This is due to the high amount of uncertainty that is illustrated in the high number of responses of countries that do not know, whether they intend to introduce fees for cross-border transaction.

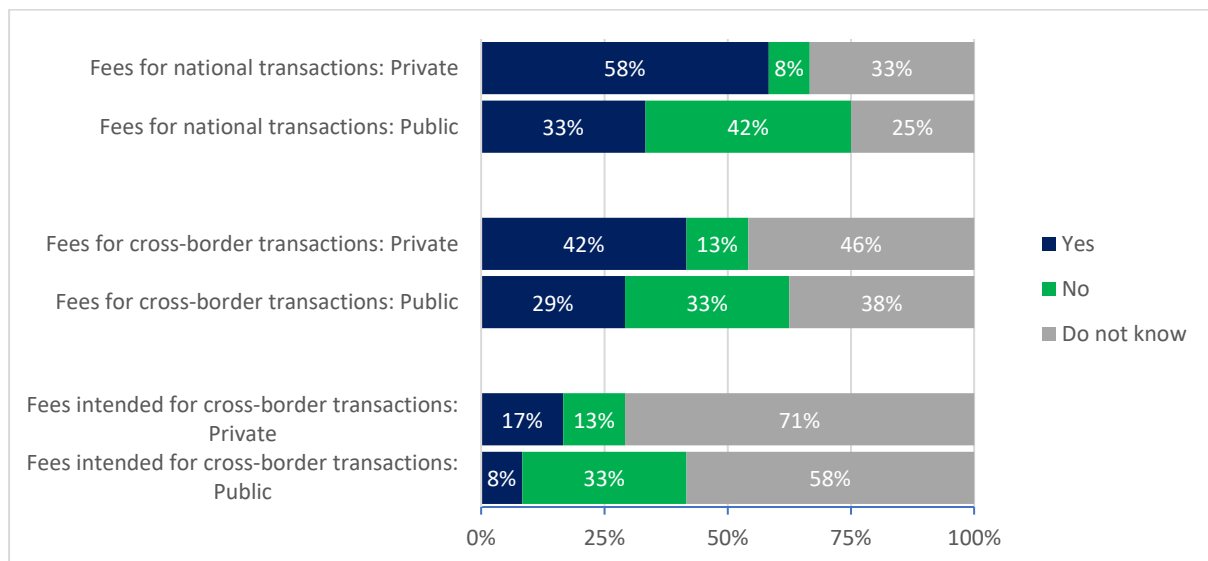


Figure 4: Fees introduced for access to cross border registries

A closer view at the raw data underlying Figure 4 shows that nearly all responding countries are consistent in their answers on fees for national and cross-border transactions. An introduced fee for a public or private organisation will remain, unless connected to the above-mentioned uncertainty. From those answers, it can be derived that most respondents likely have a policy in place governing rules regarding transactional fees. Two countries, accounting for 8% of the respondents, indicate having fees on all transactions for all types organisations, whilst two other respondents avoid transactional fees altogether. Only one respondent indicates to eliminate fees in the future, whereas most other respondents are consistent or simply do not know.

Another aspect for cross-border implementation concerns synchronous and asynchronous communication, the latter being much more time consuming and burdened by delayed responses rather than direct responses within seconds. For an optimal user experience, use of synchronous communication delivering instant replies, would be favourable. On this matter, the survey indicates that all but one country have a mix of both communication patterns. Thus, the survey does not give a clear enough answer to the adoption of the responding countries and depends as such on an identified subject whether a synchronous or asynchronous communication can be provided.

Whether in a national or cross-border context, competent authorities depend on basic information in order to provide relevant public services to its citizens. Giving the citizen access to data about themselves does not only promote transparency, but may likely also contribute to improving the accuracy of data. Figure 5 below illustrates the types of personal information citizens can examine and verify the access to by public officials. The overall observation is that access to personal data from specific areas is widely available. Especially those that require an increase in selfinvolvement by the citizen itself. Tax declarations are for example dependent on citizens reporting their income and certain expenditures. Furthermore, the registration of property (cadasters) also depends on the citizens' active involvement. Nonetheless, the second observation that can be made, concerns the access to personal data by others. It is clearly illustrated that most areas lack the capability to give others access. Furthest is the medical file, which most likely can be attributed to children or caretakers supporting parents or elderlies.

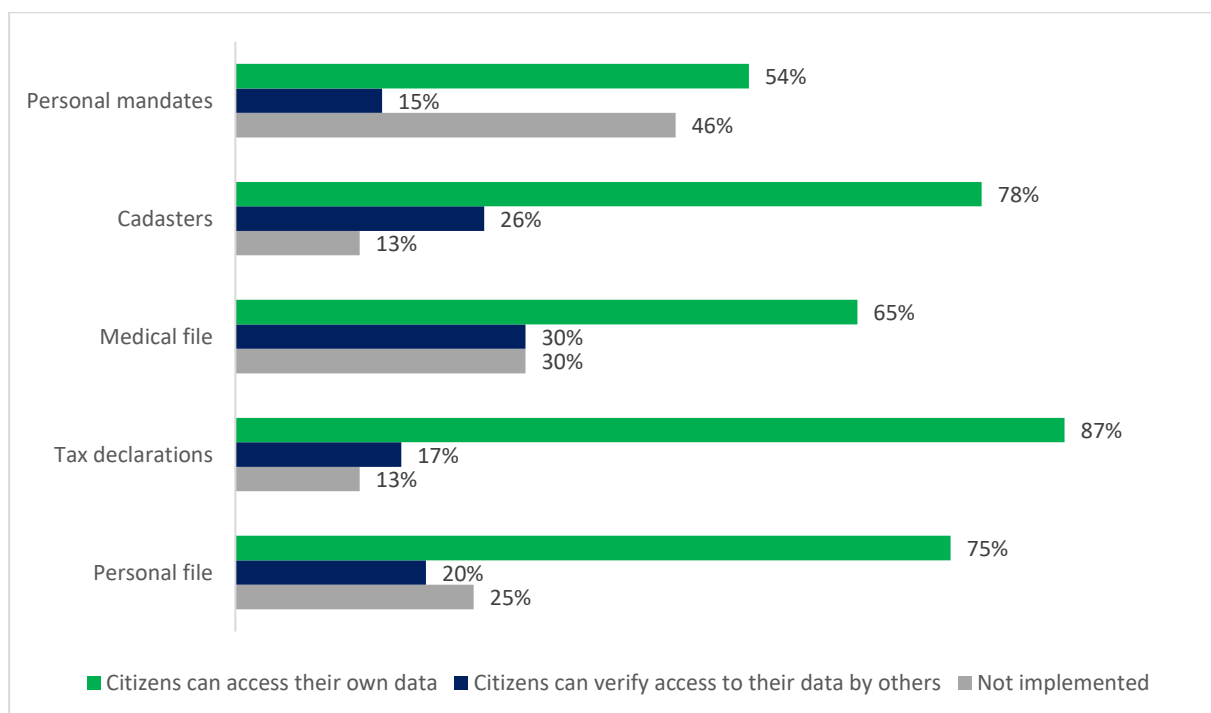


Figure 5: Types of personal information citizens can examine and verify the access to by public officials

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In any case, most responding countries seem to have a strategic focus on making data available for its citizens. This in turn helps in upholding data quality as well as transparency and an increased trust in government in the long run.

3.2 Status on the overall implementation of once-only

As shown in Figure 6 below, the overall implementation of the OOP is still at an early stage. Only one third of the countries have responded that the OOP is implemented broadly at the national level and only one fifth of the countries have implemented the OOP broadly at the regional level. Nonetheless, five countries, corresponding to 21% of the responding countries, have implemented the OOP broadly at all levels of power.

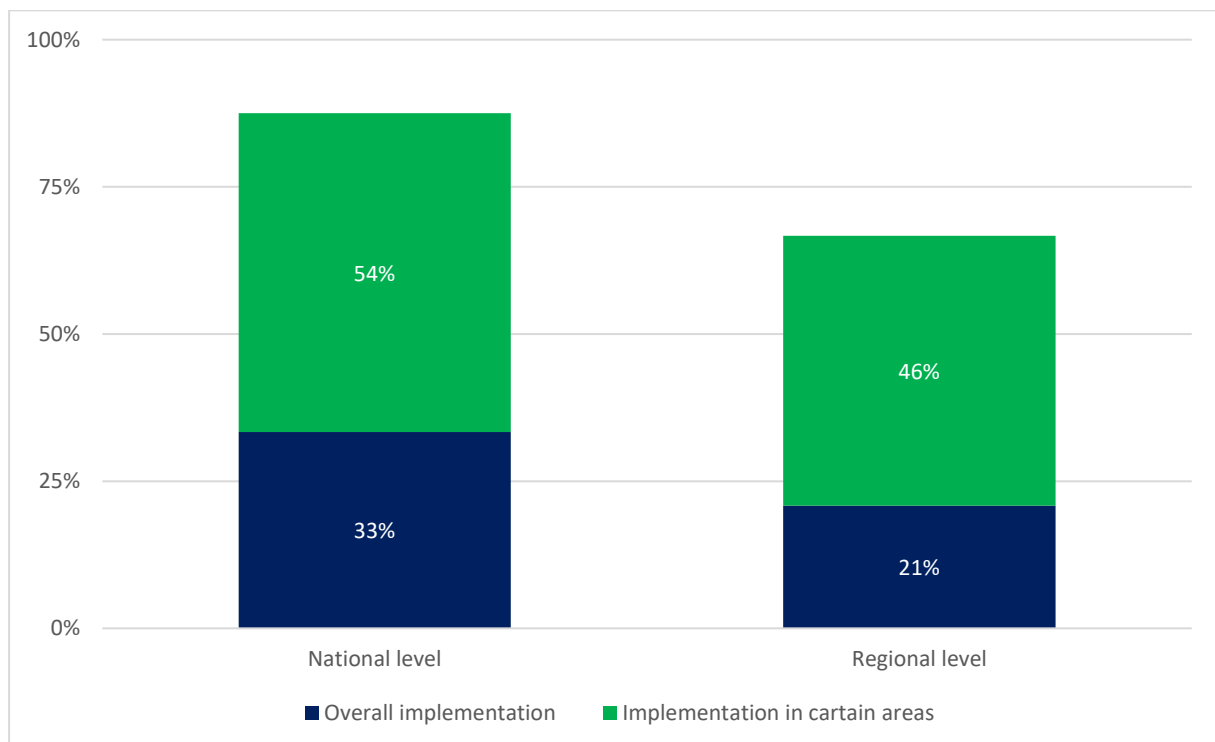


Figure 6: Implementation of the OOP

Implementation in certain areas looks more promising both at the national and regional levels, with approximately half of the countries replying positively for each level of power.

In total, 87% of the countries have replied that the OOP is implemented to some extent at the national level, and 67% have to some extent implemented at the regional level.

Those countries that have indicated a broad implementation at the national level, also report a broad implementation at the regional level. However, two countries, corresponding to 8% of the respondents, have replied not having any implementation of the OOP at all and another six countries, corresponding to 25% of the respondents, have replied only having implemented the OOP in certain areas in one or the other of the two levels of power.

As the countries that have responded a minimum of OOP-implementation correspond to one third of the total respondents, this indicates that the overall implementation levels of the OOP are very heterogeneous and that the results are positively influenced by a select group of countries with very high implementation levels.

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3.3 Status on the implementation of once-only related to cross border services

In the previous paragraph, the overall level of implementation of once-only in a national and regional context respectively was described. In this paragraph, attention will be given to the specific implementation of once-only in the 21 life-events described in Annex II of the Single Digital Gateway Regulation [14].



Figure 7: Implementation of the OOP for cross-border services

Figure 7 shows that implementation of once-only in the 21 life-events is somewhat better than the implementation of once-only in general, as described in the previous chapter. As such, the use of OOP in either unstructured or structured format typically totals 30-40% of the countries. Of those that have implemented once only, the implementation of choice is typically use of structured data, which accounts for 82% of the total count of OOP-implementations. Furthermore, the raw data behind the graph reveal that one country accounts for one third of the total number of instances of use of unstructured data. As such, the data shows that use of structured data is by far the most prevalent way of implementing the OOP across all the countries.

Adding to this, per procedure 2-6 countries, corresponding to 8-25%, report having planned but not technically implemented the OOP.

Per procedure, the number of countries answering “No” is typically 2-5 countries, with one procedure having only 1 reported “No”, and two procedures having 6 and 8 reported “No” respectively. The general picture is then one of 8-20% of the countries not having planned or implemented the OOP per procedure. The procedure “Requesting academic recognition of diplomas, certificates or other proof of studies or courses” has the highest number of countries having reported “No”, and at the same time one of the lowest total counts of implemented reuse of data. This may indicate that alumni themselves are typically responsible for safekeeping the diplomas once issued by the institution.

As could be expected in such a diverse administrative and legal landscape as the European, the procedures are not necessarily applicable in every country. As such, for the majority of procedures between 2 and 5 countries have reported them not applicable. In this respect, three procedures stand out: Obtaining stickers for the use of the national road infrastructure, Obtaining emission stickers issued by a public body or institution, and Notification to the social security schemes of the end of contract with an employee. Especially for the first two procedures, 50% or more of the countries report them not being applicable.

With implementation rates typically in the 30-40% range, the general picture of the implementation of the OOP for cross-border services is better than the previously described overall implementation levels, but still insufficient for an effective implementation of SDG. However, as another 2-6 countries per procedure, with one outlier of 9, have reported not knowing, these numbers may actually be higher. Nonetheless, the general picture and the numbers for each procedure, should be taken into account when designing and implementing OOP-initiatives.

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Respondents have also been asked about the cross-border availability of the 21 life events. Figure 8 below shows that the services are available for cross-border use in on average 8 countries, corresponding to 33% of the countries. However, the availability ranges from merely 2 countries, 8%, to 15 countries, 62%.

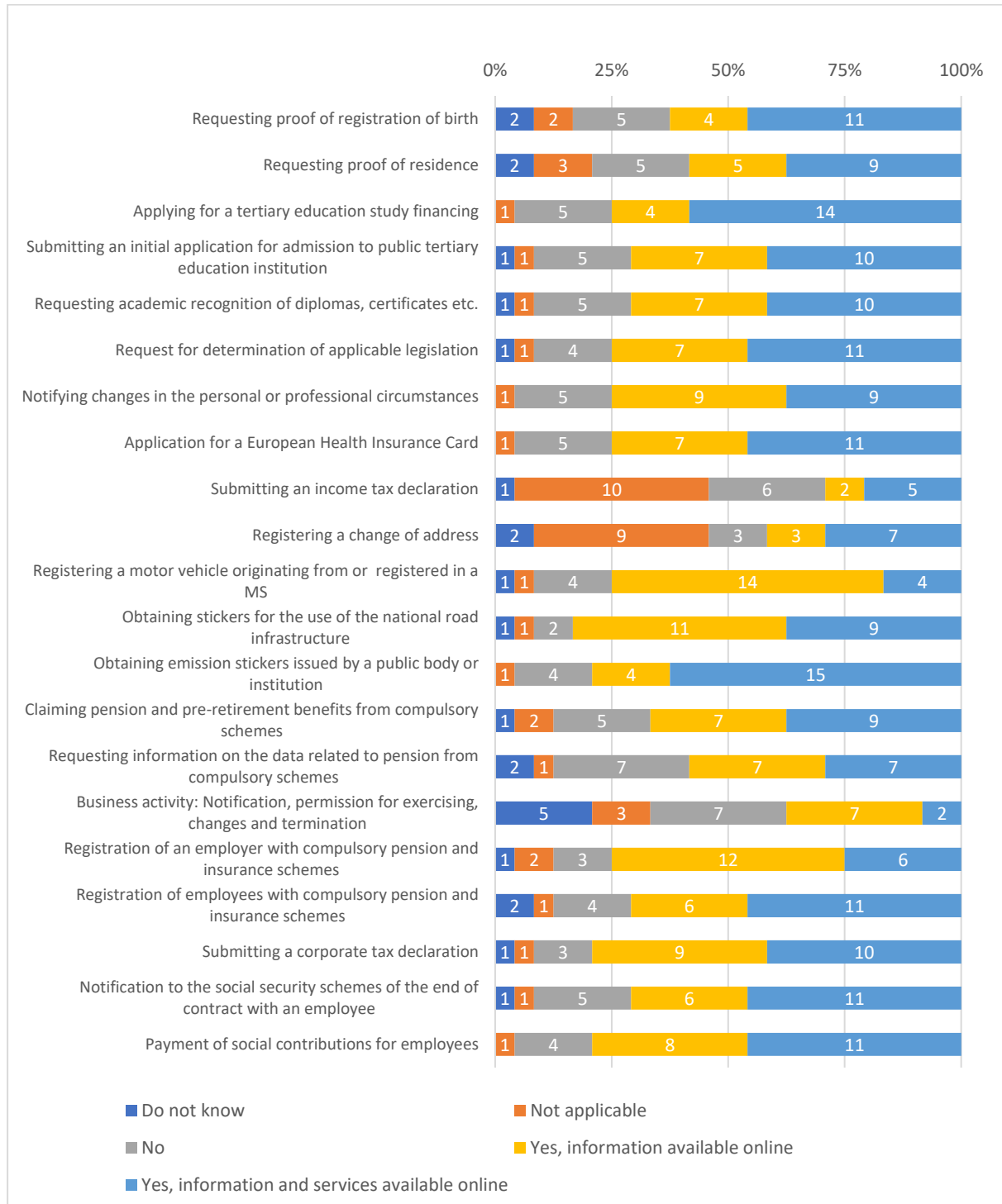


Figure 8: Cross-border availability of services

For 13 of the procedures, between 9 and 11 countries have reported having the services available for cross-border use. Corresponding to 54% of the procedures, the range is the most prevalent and

accounts for the majority of procedures. Two procedures have higher availability numbers than the 9-11 range, and 6 procedures have lower availability numbers.

On average, 29% of the countries reply to having information available online.

Interestingly, quite a few countries, on average 19%, report having neither information nor services available online.

When comparing the number of reported “Not applicable” in Figure 7 with those of Figure 8, the reported numbers in the former are consistently higher than the latter. It has not been possible to find a generally valid reason for this discrepancy. Therefore, as there may be for each of the procedures valid reasons, it does suggest a cautious interpretation of those replies.

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4 Discussion

The results of chapter 3 have shown that the digitalisation levels of the responding countries vary greatly, but that the overall picture is one of rather low adoption and implementation with respect to data strategy, access to base registries and once only.

Bearing in mind the limitations of the validity of the study's findings, cf. section 2.4, based on the results of chapter 3, a few questions should be considered:

- ▶ The low adoption and implementation levels that in general may be considered obstacles of a timely cross-border implementation of the OOP, questions whether anything but a collective, extraordinary heave could set in motion the necessary development needed for implementing the SDG in time, and if so if that scenario is realistic, or if alternatives should be considered.
- ▶ Assuming public administrations in general work diligently to ensure cost-effectiveness and relevant modernisation of services, the figures described in chapter 3 invites the question, why implementation levels are so low across a vast majority, 77.5 %, of EU and EFTA countries. Although the data does not provide sufficient methodological grounds for extrapolating the results to the entire population of EU and EFTA countries, there is no reason to believe that implementation levels in the abstaining countries would be significantly higher or lower. As such, the report indicates, that there is a gap between the political ambitions of European regulation and the real life implementation in the member states.
- ▶ If the notion of the above mentioned gap is accepted, it should be considered if bridging that gap is done most effectively and efficiently by large, pan-European complex initiatives like the SDG that focus on user benefits, or more narrowly scoped initiatives supporting the individual member states' interests and national efforts.

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5 Conclusions

The purpose of this study was to take stock of the existing Once Only capabilities at regional and national level, Once Only capabilities related to cross-border services, and data strategy and generic access to base registry services. As one of four related studies, this stocktaking seeks to provide a firm foundation for the architecture and pilots of the DE4A-project, and as such to support the implementation of the SDG and the Single Digital Market.

Based on a quantitative study of 77.5% of EU and EFTA countries, this study has provided insight into the presence of datastrategies, including access to base registries, and the actual implementation levels of the OOP.

Regarding data strategy and generic access to base registry services, the report showed that 50% of the countries report not having in place a strategy for reusing public sector data, and that only few of the base registries are generally accessible by private entities.

The report also showed that transaction fees are implemented in as much as nearly 60% of the countries for private entities. Although the equivalent numbers for public are somewhat lower, approximately 30%, transactional fees are likely to have an adverse effect on the flow of data and hence the realisation of user benefits of the SDG.

Regarding citizens' access to data on themselves, the report showed a positive picture of the status, with as many as 87% of countries granting access. However, citizens' ability to gain insight into civil servants' access to data, the report showed this is rarely the case.

Regarding the implementation levels of the OOP, current levels are shown to be rather low in light of the timehorizon for implementing SDG. It is not possible to infer neither rationales behind the status nor timehorizon for future development. As such, implementation levels may rise significantly over the next few years or be at a complete stand still. Therefore, it may only be concluded that any initiative that utilises or depends on cross-border OOP should take into account that implementation of the OOP may not be assumed. The deficiency was identified in regional and national contexts, and despite implementation levels of the 21 procedures were slightly better, the consequences of that deficiency may be expected to be even more prominent in a cross border setting, as differences in countries' administrative procedures and the data required for those procedures, may reasonably be assumed to add complexity.

If perceived as prerequisites for a succesful realisation of SDG, the status on data harmonisation, free and effective access to data, implementation of the OOP in national and cross-border services and the availability of those services for cross-border use, show severe shortcomings and must be improved drastically within the next three years for the SDG to be implemented as envisaged.

Furthermore, the reported implementation levels may be assumed to have a negative impact on the development of the architecture and pilots in DE4A that aim to support the implementation of SDG.

Results of this study are complemented by deliverables "D1.1 Member state eGovernment Baseline", "D1.5 Baseline EU Building Blocks supporting Once Only and standard data sharing patters" and "D1.7 Legal, technical and managerial barriers", and will be used as input for the deliverables of "WP2 Architecture Vision and Framework" and "WP4 Cross-border Pilots for Citizens and Business and Evaluation".

During the course of the project, the study will be updated to provide a second stocktaking of the eGovernment levels.

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- [9] See [2]
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Annexes

Annex I – Calculation methodology

Reference	Chart	Indicator description	Calculation methodology
Data strategy	Figure 1: Overview of adopted data strategies	Distribution of different national digital transformation strategies on data reus.	The number of countries replying to the respective strategy divided by the overall number of respondents. Not included: Answers "Other".
Data strategy	Figure 2: Base registries implemented for national use that can be accessed by private entities	Comparison of availability of national base registries for access by private entities	The number of countries granting access to base registries for private entities divided by the overall number of respondents. Not included: Answers "None", "Other"
Data strategy	Figure 3: Access to base registers	Indication of how the access to base registries is implemented	The number of countries that apply a certain access to base registries by the overall number of respondents. Not included: Answers "Orther".
Data strategy	Figure 4: Fees introduced for access to cross border registries	Comparison of fee policies for national and cross-border transactions for public and private organizations	The number of each type of applied fee policy to access base registries is calculated for public and private organizations. Each of the results is divided by the number of respondents. Not included: Answers "Other"
Data strategy	Figure 5: Types of personal information citizens can examine and verify the access to by public officials	Comparison of types of personal information by their availability for accessing the data by the data subjects and verification of data access by public officials	For each type of personal file following categories were counted: <ul style="list-style-type: none"> • countries that do not grant access to personal files for data subject • countries that implement access for citizens / businesses to their own data • countries that implement process to verify access to personal data by public officials

Reference	Chart	Indicator description	Calculation methodology
			<p>The sum was divided by the number of respondents.</p> <p>Not included: Answers "Do not know", "Not applicable in my country"</p>
OOP	Figure 6: Implementation of the OOP	Comparison of OOP implementation achievement attained at national and regional level of powers	<p>For each level of power (national, regional) the countries reporting to have full or partial OOP implementation was counted. The sum is divided by the number of respondents.</p> <p>Not included: Answers "Do not know", "Other"</p>
OOP	Figure 7: Implementation of the OOP for cross-border services	Distribution of implementation advancement of SDG Life Events by the corresponding level of data reuse	For each data reuse format, total numbers of answers are counted and placed on a stacked bar. An additional axis is placed on the graph, indicating the corresponding percentage of the total numbers.
OOP	Figure 8: Cross-border availability	Distribution of implementation advancement of SDG Life Events by their availability for cross-border use	For each data reuse format, total numbers of answers are counted and placed on a stacked bar. An additional axis is placed on the graph, indicating the corresponding percentage of the total numbers.

Annex II – Digital Europe for All (DE4A) survey

Digital Europe for All (DE4A) survey: *Country*

Purpose of the survey and data protection

Dear member state representatives,

On January 1st of this year, the EU member state-driven project Digital Europe for All (DE4A) started. DE4A aims at creating an open and comprehensive environment and platform to support public administrations in delivering secure, high quality and fully online cross-border procedures for citizens and businesses. You can read more about the project on the project website, <https://www.de4a.eu/>.

The present survey that we kindly ask you to fill in, takes stock of the current deployment of cross-border services, hereby providing insights into the barriers to cross-border interoperability and the enablers to address them. The collected data will be used to analyse the current status of eGovernment in the member states in order to identify the construction base for the target technical architecture and eGovernment environment. Likewise, the derived insights and good practices will serve as practical guidelines for the development and deployment of digital public services for other EU member states.

The survey consists of four major blocks: (1) electronic IDentification, Authentication and trust Services, (2) assessment of Life Events under Single Digital Gateway Regulations, (3) Digital Service Infrastructure, (4) Once-Only Principle and Data strategy.

We kindly ask you to express your opinion on the eGovernment advancement. The collected data will be used to create an aggregated report depicting an overall eGovernment landscape of the EU member states. We encourage you to make use of the comment boxes at the end of every subchapter of the survey in order to indicate legislative, technical, or other particularities relevant for understanding the national context. Please note that we do not request official positions of the EU member states and that no individual responses will be published.

Data protection statement

This survey is performed in the frame of the Digital Europe for All Project (DE4A - <https://www.de4a.eu/>), which has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870635.

Please note that your participation in this survey implies the processing of your personal data. We will process your personal data in compliance with the Regulation (EU) n° 2016/679 on the processing of personal data (the GDPR). The input you provide will only be shared outside of the DE4A consortium in the form of de-identified aggregated data. Within the DE4A consortium, we will process your data in order to analyse your answers as foreseen in accordance with the grant agreement, on the basis of our public interest tasks. For further information or to exercise your rights, you may contact our project DPO via privacy@de4a.eu. These rights include requesting copies, correction, or deletion of your personal data, or restricting/objecting to further processing (all within the constraints of the grant agreement). You have the right to lodge a complaint with the competent data protection authority.

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eIDAS: notified eID-schemes

This part of the questionnaire takes stock of the implementation of national eID scheme under eIDAS Regulation (EU) No 910/2014.

1. Please check the accuracy of the available information of your national eID scheme presented at the eID User Community:

National eID scheme	Level of assurance	Status	eID means
Notified_national_eID_scheme_1	LOA_1	Status_1	eID_means_1
Notified_national_eID_scheme_2	LOA_2	Status_2	eID_means_2
Notified_national_eID_scheme_3	LOA_3	Status_3	eID_means_3

If there are any updates with regards to the (pre-)notified eID scheme(s) (e.g., level of assurance, current notification status), please leave a comment in the following text box.

.....

2. The eID scheme is operated by:

	Public entity	Private entity	Public-private partnership	Do not know / Other (please specify)
Notified_national_eID_scheme_1				
Notified_national_eID_scheme_2				
Notified_national_eID_scheme_3				

Other (please specify)

3. The implementation level of eID scheme is:

	Not implemented	Necessary legislation adopted	Implemented for national use	Implemented for cross-border use	Do not know / Other (please specify)
Notified_national_eID_scheme_1					
Notified_national_eID_scheme_2					
Notified_national_eID_scheme_3					

Other (please specify)

4. The eID scheme grants access to:

	National public services	Public services from regional / local authorities	Non-governmental services (e.g. Banking, Telecom) - please specify	Do not know

Notified_national_eID_scheme_1				
Notified_national_eID_scheme_2				
Notified_national_eID_scheme_3				

Other (please specify)

5. Please indicate possession rate for all the listed eID schemes.
Possessions rate is a ratio of total number of eID holders to total number of inhabitants (citizens + foreign residents).

Notified_national_eID_scheme_1
 Notified_national_eID_scheme_2
 Notified_national_eID_scheme_3

6. Please indicate activation rate for all the listed eID schemes where applicable.
Activation rate is a cumulative ratio of activated eIDs to total number of eIDs.

Notified_national_eID_scheme_1
 Notified_national_eID_scheme_2
 Notified_national_eID_scheme_3

7. Please indicate use rate for all the listed eID schemes where applicable.
Use rate is a cumulative ratio of eIDs which have been used at least once to access a public service to the total number of eIDs.

Notified_national_eID_scheme_1
 Notified_national_eID_scheme_2
 Notified_national_eID_scheme_3

8. Please provide any further information which, in your opinion, is important for our understanding of your country's context with regards to the topics mentioned in this subchapter.

.....

9. Are there any other national eID schemes in operation which have not been listed in this subchapter?

eIDAS: new eID schemes

This subchapter only appears, if in question 9 answer "yes" is selected

Please provide information concerning operating national eID schemes.

10. Please insert below the name(s) of your new national eID scheme(s):

eID_scheme_1
 eID_scheme_2
 eID_scheme_3
 eID_scheme_4
 eID_scheme_5

11. Please indicate the corresponding level of assurance of the eID scheme(s):

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	Low	Low	High	Not relevant / Do not know
eID scheme (1)				
eID scheme (2)				
eID scheme (3)				
eID scheme (4)				
eID scheme (5)				

Other (please specify)

12. Please identify the level implementation of the eID scheme(s):

	Necessary legislation adopted	Implemented for national use	Implemented for cross-border use	Not relevant / do not know
eID scheme (1)				
eID scheme (2)				
eID scheme (3)				
eID scheme (4)				
eID scheme (5)				

Other (please specify)

13. The eID scheme(s) is/are operated by:

	Public entity	Private entity	Public-private partnership	Not relevant / Do not know
eID scheme (1)				
eID scheme (2)				
eID scheme (3)				
eID scheme (4)				
eID scheme (5)				

Other (please specify)

14. The eID scheme(s) grant(s) access to:

	National public services	Public services by regional / local authorities	Non-governmental services (e.g. Banking, Telecom) - please specify	Not relevant / Do not know
eID scheme (1)				
eID scheme (2)				
eID scheme (3)				
eID scheme (4)				
eID scheme (5)				

Other (please specify)

15. Please indicate possession rate for all the listed eID schemes. *Possessions rate is a ratio of total number of eID holders to total number of inhabitants (citizens + foreign residents).*

- eID_scheme_1
- eID_scheme_2
- eID_scheme_3
- eID_scheme_4
- eID_scheme_5

16. Please indicate activation rate for all the listed eID schemes where applicable. *Activation rate is a cumulative ratio of activated eIDs to total number of eIDs.*

- eID_scheme_1
- eID_scheme_2
- eID_scheme_3
- eID_scheme_4
- eID_scheme_5

17. Please indicate use rate for all the listed eID schemes where applicable. *Use rate is a cumulative ratio of eIDs which have been used at least once to access a public service to the total number of eIDs.*

- eID_scheme_1
- eID_scheme_2
- eID_scheme_3
- eID_scheme_4
- eID_scheme_5

18. Please provide any further information which, in your opinion, is important for our understanding of your country's context with regards to the topics mentioned in this subchapter.

.....

eIDAS: eIDAS-Node and trust services

19. Does your eIDAS-node support using your national eID's abroad?

.....

20. Does your eIDAS-node support foreign eIDs's to be used for services in your country?

.....

21. The Regulation on electronic identification and trust services (eIDAS) foresees the implementation of eSignature, eSeal and Timestamps. Please identify the advancement level of those services in your country:

	Do not know	Not implemented	Necessary legislative	Implemented for national use	Implemented for cross-border use
--	-------------	-----------------	-----------------------	------------------------------	----------------------------------

			procedures adopted		
Electronic Signature					
Advanced Electronic Signature					
Qualified Electronic Signature					
Electronic Seal					
Advanced Electronic Seal					
Qualified Electronic Seal					
Electronic TimeStamp					
Qualified Electronic TimeStamp					

22. Please provide any further information which, in your opinion, is important for our understanding of your country's context with regards to the topics mentioned in this subchapter.

Single Digital Gateway: Life Events

The Single Digital Gateway Regulation specifies a list of 21 procedures, covering the major life events of the EU citizens: Birth, Residence, Studying, Working, Moving, Retiring, Running a business. Please provide the current status of the digital presence and mobile availability of the 21 procedures in your country.

23. Please indicate the level of online availability of information, service and assistance with respect to the mentioned procedures:

Online authentication, possible answers from drop-down list: (1) Personal presence, (2) Online, non-eID, (3) Online, eID-enabled, (4) Do not know, (5) Not applicable

Implementation of the OOP (data reuse), possible answers from drop-down list: (1) No, (2) Planned, not technically implemented, (3) Yes, reuse of unstructured data, (4) Yes, reuse of structured data, (5) Do not know, (6) Not applicable

Mobile accessibility, possible answers from drop-down list: (1) No, (2) Only desktop enabled website, (3) Mobile-enabled website, (4) Dedicated eGov app, (5) Do not know, (6) Not applicable

Online availability for cross-border use, possible answers from drop-down list: (1) No, (2) Yes, information available online, (3) Yes, information and services available online, (5) Do not know, (6) Not applicable

	Online authentication	Implementation of the OOP (data reuse)	Mobile accessibility	Online availability for cross-border use
Requesting proof of registration of birth				
Requesting proof of residence				
Applying for a tertiary education study financing				
Submitting an initial application for admission to				

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public tertiary education institution				
Requesting academic recognition of diplomas, certificates or other proof of studies or courses				
Request for determination of applicable legislation in accordance with Title II of Regulation (EC) No 883/2004 (1)				
Notifying changes in the personal or professional circumstances of the person receiving social security benefits				
Application for a European Health Insurance Card				
Submitting an income tax declaration				
Registering a change of address				
Registering a motor vehicle originating from or already registered in a Member State				
Obtaining stickers for the use of the national road infrastructure				
Obtaining emission stickers issued by a public body or institution				
Claiming pension and pre-retirement benefits from compulsory schemes				
Requesting information on the data related to pension from compulsory schemes				
Business activity: Notification, permission for exercising, changes and termination				
Registration of an employer with compulsory pension and insurance schemes				

Registration of employees with compulsory pension and insurance schemes				
Submitting a corporate tax declaration				
Notification to the social security schemes of the end of contract with an employee				
Payment of social contributions for employees				

24. Are there any procedural frameworks in place, which reckon for involvement of other parties (e.g., private entities, end-users etc.) in the process of co-creation?

.....

25. What is approximate percentage of services available digitally as compared to overall number of public, administrative services

at national level.....

at regional/local level.....

26. What is approximate percentage of digital-only services (services available exclusively online)?

at national level.....

at regional/local level.....

27. Please provide any further information which, in your opinion, is important for our understanding of your country's context with regards to the topics mentioned in this subchapter.

.....

Digital Service Infrastructure

The aim of this subchapter is to identify the level of advancement of Digital Service Infrastructures (DSIs). The DE4A project will be implemented in compliance with the existing DSIs, with the goal of delivering a network of public services available for citizens, businesses and public administrations.

28. Please indicate the level of advancement of the DSIs listed below:

	Do not know	Not implemented	Necessary legislative procedures adopted	Fully/partially Implemented for national use
EU Student eCard				
eDelivery				
eInvoicing				
Access to re-usable public sector information – Public Open Data				
Automated Translation				
Critical digital infrastructures support – Cybersecurity				

eProcurement				
eHealth - ePrescriptions				
eHealth - cross-border patient data sharing				
Business registers interconnection system				
Electronic exchange of social security information				
e-Justice - Use case of citizens				
e-Justice - Use case of businesses				
Online Dispute Resolution				

29. Please indicate implemented and running use cases of Blockchain technology for the purpose of provision of public services (name and a brief description of its implication - e.g. public procurement, internal financial audit etc.):

.....

30. Please provide any further information which, in your opinion, is important for our understanding of your country's context with regards to the topics mentioned in this subchapter.

.....

Once-Only Principle and Data strategy

This part of the questionnaire measures the member states' implementation of the Once-Only Principle (OOP) and reuse of data principle. Enshrined in the eGovernment Action Plan, the OOP implies the reduction of administrative burdens for the EU citizens, businesses, institutions and public administrations by allowing them to provide a certain type of information once and implying the reuse of the collected data upon the consent of all parties.

31. Is there any national digital transformation strategy which sets forth a set of strategic and tactical measures to support eGovernment development?

Do not know

No

Yes (please provide a link)

32. To what extent has your country adopted a data strategy? Check all that apply.

A national strategy of reusing public sector data in the public sector

A national strategy for harmonization of data across select registries

A national strategy for Open Data

Implementation of Open Data by default

One or more national catalogs of data sets to make data findable

A national governance implementation supporting data access

Other (please specify)

33. Which base registries implemented for national use can be accessed by private entities?

Persons/citizens

Vehicle

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- Tax
- Businesses
- Addresses
- Building and housing
- Cadasters
- Geographical data
- Higher Education
- None
- Other (please specify)

34. Please elaborate on the types of private companies which can access base registries and the access conditions:

.....

35. Please indicate how the access to base registries is implemented. Check all that apply.

- Replication of registries to authorities that need access
- Data lookup supported by API's
- Subscription of data for public services
- Access to base registries is subject to transactional fees
- Access to data services under authorization processes
- Other (please specify)

36. Are there any fees introduced for access to cross-border registries for private and public organizations?

Possible answers of drop-down lists: (1) Yes, (2) No, (3) Do not know

	Public organizations	Private organizations
Are there fees applied for national transactions?		
Are there fees applied for cross-border transactions?		
Are there fees intended to be applied for cross-border transactions?		

Other (please specify)

37. What communication patterns are supported in the offering of public services in your country?

- Synchronous (direct response to a request, typically within seconds)
- Asynchronous (delayed response, hours or even days)
- A mix of both
- Do not know

38. Please check the types of personal information citizens can examine and verify the access to by public officials:

	Not implemented	Citizens can access their own data	Citizens can verify access to their data by others	Not applicable in my country	Do not know
Personal file					

Tax declarations					
Medical file					
Cadasters (private property)					
Personal mandates					
None					

Other (please specify)

39. To what extend is OOP implemented in your country? Check all that apply.

- OOP is implemented broadly at the national level
- OOP is implemented in certain areas or organisations at the national level
- OOP is implemented broadly at the regional level
- OOP is implemented in certain areas/organisations at the regional level
- OOP is implemented at all levels of power
- Do not know
- Other (please specify)

40. In what cross-border OOP initiatives is/has your country been involved? Check all that apply.

- The Once-Only-Principle (TOOP)
- Business Registers Interconnection System (BRIS)
- Stakeholder Community Once-Only Principle for Citizens (SCOOP4C)
- European Criminal Records Information System (ECRIS)
- European Data Interchange for Waste Notification Systems (EUDIN)
- Connecting European Facility (CEF) programs
- Simple Procedures Online for Cross-Border Services (SPOCS)
- Interoperability solutions and common frameworks for European public administrations, businesses and citizens (ISA2)
- None
- Other (please specify)

41. In your opinion, what would be beneficial outcomes of national implementation of the OOP? Please specify in the textbox below any further expected benefits for your government from the national OOP implementation:

	Very unlikely	Unlikely	Neutral	Likely	Very likely
Efficiency					
Administrative simplification					
Time savings					
Cost savings					
Increased collaboration between agencies					

Better governance					
Avoidance of duplication of tasks					
Increased data quality and reliability					
Increased interoperability					
Increased transparency and accountability					
Fraud reduction					

Other (please specify)

42. In your opinion, what would be beneficial outcomes of cross-border implementation of the OOP? Please specify in the textbox below any further expected benefits for your government from the cross-border OOP implementation:

	Very unlikely	Unlikely	Neutral	Likely	Very likely
Efficiency					
Administrative simplification					
Time savings					
Cost savings					
Increased collaboration between agencies					
Better governance					
Avoidance of duplication of tasks					
Increased data quality and reliability					
Increased interoperability					
Increased transparency and accountability					
Fraud reduction					

Other (please specify)

43. How would you evaluate the likelihood of the following national, administrative factors to impede the European OOP implementation for your government?

	Not a barrier	Moderate barrier	Substantial barrier	Extreme barrier
Absence / insufficiency of national legislative framework				
Incompatibility of national legislative frameworks of the EU member states				
Administrative complexity / Organizational silos				
Organizational resistance to changes				
Organizational and cultural differences among stakeholders				

Lack of financial resources				
Asymmetric costs distribution in the cross-border context				
Costs of sustaining the services in the long-term				
Lack of relevant human resources				
Political vulnerability and lack of political support				
Low take-up, low expectancy of number of potential users				
Different OOP levels in other EU member states				

Other (please specify)

44. How would you evaluate the likelihood of the following technical factors to impede the OOP implementation for your government?

	Not a barrier	Moderate barrier	Substantial barrier	Extreme barrier
Incompatibility of IT-processes / IT-standards / used technologies				
Data incompatibility				
Deficient data quality				
Semantic incompatibility of information systems and used datasets				
Uneven quality of used technologies to ensure quality and security of the transferred and used data				

Other (please specify)

45. Is there specific legislation in your country at the national or federal level governing the OOP, i.e. legislation that allows or requires a public administration to exchange information in relation to a specific user directly from a trustworthy source to another public administration?

No

Do not know

Yes (please provide a link to the relevant law)

46. What sources of data are covered (i.e. what databases or data sources fall under the once-only principle and can be exchanged under the principle) by the respective legislation?

.....

47. What are the procedural requirements or preconditions for an exchange under the respective legislation? Check all that apply.

No conditions – any party may receive and use our data as-is without restrictions or prior authentication (data is shared as open data)

Prior request from the user

Authorization must be written into the law

Authorization must be obtained from an authority designated in the law

Agreement between the sending and receiving administrations

Obligation to use certain data formats

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Obligation to use certain intermediary authorities to organise the exchanges

Obligation to use certain security measures in relation to the data

Limitations on the permitted use of the data

Other (please specify)

48. Does the law make a distinction between requests coming from public administrations in your own country compared to from other countries? Specifically, is there any part of the law that makes it impossible or harder for your administrations to apply the OOP towards requesting administrations in or from other countries than your own (e.g. no transfer is allowed to foreign administrations, or there is a procedural requirement that in practice cannot cover foreign administrations)? If so, please describe the relevant provisions.

.....

59. What are other sources of OOP regulation in your country? Check all that apply.

None

Non-legislative measures (strategies, green / white papers, etc.)

Written guidelines or recommendations

OOP is an unwritten rule / practice

Other (please specify)

50. How would you evaluate the general attitude and willingness in your country towards the following aspects of OOP?

	Unsure / no information	Very cautious	Somewhat cautious	Mostly open	Very open
Sharing data with public organizations within the country					
Sharing data with private organizations within the country					
Sharing data with other countries					
Sharing personal data with public organizations in the country					
Sharing personal data with private organizations in the country					
Sharing personal data with other countries					
Changing existing organizational processes, procedures and structures to enable OOP nationally					
Changing existing organizational processes, procedures and structures to enable cross-border OOP					
Changing existing technological solutions (information systems, architectures), etc. to enable OOP nationally					
Changing existing technological solutions (information systems, architectures), etc. to enable cross-border OOP					

51. Please provide any further information which, in your opinion, is important for our understanding of your country's context with regards to the topics mentioned in this subchapter.

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Contact information

52. Please provide contact details of people (name, email and/or phone number) who we could contact in case we would need some additional clarification or for the purpose of a personal interview:

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