



Policy Proposal on
euGovernance:
Digital Integration of the Public Sector

Brussels, 28th of April 2019

Authors: Giovanni Stanga, Tetiana Tovstenko, Marion Meyers, Veronika Grisheckina, Johanna Barton, Carlo Bettini, Tugce Schmitt, Minira Aslanova, Federica Lombardi, Kaoutar Ashour

Tutor: Caroline Calomme

Topic Manager: Francesco Vogeletzang

We would like to thank:

Dr. Serdar Turkeli – Maastricht UNU-Merit University

Dr. Noella Edelmann – University of Krems-Danau

Ms. Martine Schophuizen – Open University

Mr. Joren de Wachter – Member of the Digital Pillar of DiEM 25

Mr. Andrea Servida - Commission Head of Unit 'eGovernment and Trust'

For their input and contributions which have helped to shape the policy proposal.



STUDENT FORUM MAASTRICHT

Student Forum Maastricht (SFM) is an annual student conference held at the Maastricht University Campus in Brussels. The conference is organised by students from Maastricht University in cooperation with different partner organisations. The participants are under- and postgraduate students from all over Europe with diverse academic backgrounds. Based on problem statements provided by European Commission representatives, they develop policy proposals for pressing topics within the Commission. In this process the students receive input and insights from experts from NGOs, academia and the business sector relating to the topic. The 2019 edition of SFM took place from April 24th to 28th. For more information on Student Forum Maastricht, please visit: www.student-forum.eu



Executive summary

The transition to a digital society will not only change the way we live and work but also the way citizens and governments will engage with each other. Indeed, e-governance does not only have the power to bring benefits to the public sector in terms of better resource management, greater efficiency, better transparency and more agility, but can also benefit citizens in building a stronger connection with their government (EESC, 2017). The European Union has the responsibility and power to facilitate and encourage a right transition to this digital society. Hence, this proposal drafts policy recommendation to the European Commission in order to better address two aspects of e-governance.

The first part of this recommendation is based on the observation that while digital tools for the support of public administrations are being installed in all Member States of the European Union, policy makers have underestimated the readiness of use of citizens and public servants. Hence, we propose ways to improve online public services by involving citizens in the creation and testing of digital public services, enhancing digital skills of civil servants, promoting collaboration amongst citizens when using digital services and raising awareness about the existence of the eID and digital public services.

On the other hand, this proposal also aims at investigating ways to enhance democracy through means of digitalization by upholding transparency and accountability, increasing digital literacy and enhancing EU citizens' political participation deliberative capabilities. More specifically, it suggests the implementation of an open access platform aiming at bringing citizens and governments closer together by means of transferrable information and data.

Problem Statement:

On the one hand, we have observed a gap between the development of digital public services and the readiness of citizens and civil servants regarding their actual use. On the other, we believe that e-governance has the potential to enhance citizen engagement and democracy if tackled correctly. Hence, we are investigating the following two questions:

- How to shape society and public administrations for a better use of digital public services?
- How to enhance citizens' participation and engagement with governments through means of digitalization?



Table of Content

- 1. Introduction.....p. 6
- 2. Digital For Better Public Services.....p. 7
 - 2.1 Challenges in digitalizing public services.....p. 7
 - 2.2 Proposals for addressing the challenges.....p. 8
- 3. Digital for Better Participation.....p. 11
 - 3.1 Challenges in enhancing citizens’ participation and engagementp. 11
 - 3.2 Proposals for addressing the challenges via digital technologiesp. 13
- 4. Conclusion.....p. 17
- 5. References.....p. 18



1. Introduction

Managing public administration in a digital way allows countries to take advantage of considerable benefits in terms of governance. These include a substantial increase in resource management, greater efficiency, better transparency and more agility in delivering public services (EESC, 2017). Governance in the digital era is indeed one of the key areas where further integration is required to fully unfold the potential enshrined in the digital single market. As the European Union has the ambition to bring about a closer digital union, there is the need to accompany this trend with a thorough reconstruction of each national public sector. The current state in which national administrations have different digital levels of integration, does not allow the full deployment of the advantages derived from a closer-digital union. For instance, measures in this direction which are by-products of the 4th industrial revolution have not been scaled-up yet horizontally across Member States as they still remain individual episodes at the local level.

As such, the current state of digital fragmentation across public sectors currently hinders citizens' full enjoyment of the advantages derived from an interlocked digital union. For this reason, we believe that there should be a clear strategy to foster the digitalization of public services across Member States, hence making those services more accessible and reliable to citizens.

More specifically, two main observations on the current state of e-governance as well as on its potential future were made. First of all, there seems to be a gap between the technologies already available in the public sector and the actual use that citizens make of them. While more and more services are digitized, citizens do not feel the incentive of using them. This observation lead us to the first aspect of e-governance that will be discussed in this proposal: How to shape society and public administrations for a better use of digital public services? Second of all, we acknowledge the great potential of digitizing the public sector, particularly the potential it has to enhance democracy and citizens' engagement. Hence, the second part of this proposal investigates the following question: How to enhance citizens' participation and engagement with governments trough means of digitalization?



2. Digital For Better Public Services

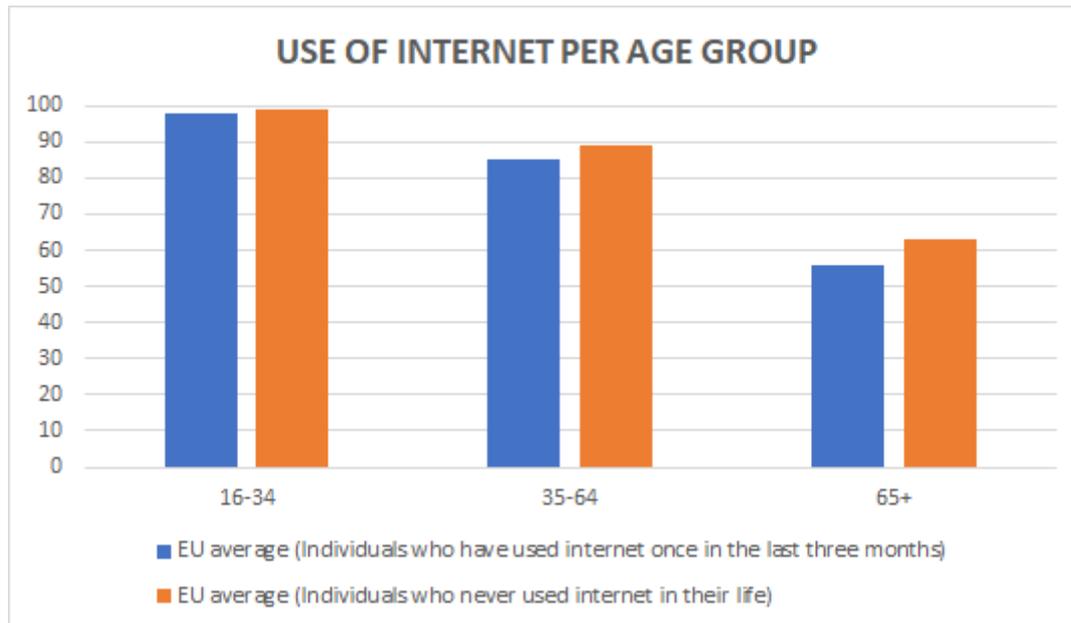
2.1 Challenges in digitalizing public services

The Digital Economy and Society Index (DESI) is a composite index that summarises 30 relevant indicators on Europe's digital performance and tracks the evolution of EU Member States across five main dimensions: Connectivity, Human Capital, Use of Internet, Integration of Digital Technology, Digital Public Services. According to DESI (2015), 43% of Europeans still do not have basic digital skills that enable them to make use of digital public services. Moreover, research clearly shows that the implementation of new technologies often lacks a contextual perspective (Lopes & Dhaou, 2018). We therefore believe that policies on digital public service delivery should contain contextual components, that elaborate on socio-cultural elements and readiness of the society to take in the implemented changes. This is because if the services provided by the Member States do not reach their users, what and who are they created for?

This section analyses more specifically four challenging dimensions in order to be able to draft the recommendations accordingly. First, while there are ongoing efforts in creating more online public services, citizens are rarely involved in their development. Additionally, there is a lack of tailored evaluation of those services to different citizen target groups. Second, although using digital tools in public services is useful for citizens, effective and efficient in the long run, civil servants usually lack the skills of how to use them. Indeed, while digitalization of public services has the potential to diminish bureaucratisation and improve user-friendliness of public administration, this cannot solely be achieved by supplying the technical infrastructure. There should be educative actions to teach the users how to employ such innovative technologies and enhance their digital literacy.

Third, in order to develop an inclusive Digital Single Market, it is necessary to include all citizens in the European agenda. E-government, digital services and practices are powerful tools that can empower citizens and allow them to better exercise their rights. However, different age groups face different needs when it comes to their use of digital tools. In particular, Eurostat (2018) underlines how elderly use considerably less Internet than the younger generation. Indeed, while 99% of people in the age group [16-34] have used internet in the last 3 months, that is the case for only 55% of the people from 65+. Moreover, in some countries, a consistent number of people never used internet during their life. Specifically, 62% of people from 65+ have never used Internet in their life.





Finally, the services provided by the Member States are there for citizens to benefit from using them as such. In most of the rapidly digitizing states that offer e-services for citizens, the youth is the majority of the population that is aware of the existence of these e-opportunities and is digitally ready to use them (see statistic above). When it comes to the older generations and those who experience digital divide, the challenge is obvious. These citizens are also ready to change but they need to be assisted and informed. The Member States need to be sure that the information of new available online services reaches all citizens.

2.2 Proposals for addressing the challenges

In order to tackle our overarching question : “How to shape society and public administrations for a better use of digital public services?”, and more specifically the 4 challenges mentioned above, we propose four policy recommendations to the European Commission:

1. Involve citizens in the creation and testing of digital public services
2. Enhance digital skills of civil servants
3. Promote collaboration amongst citizens when using digital services
4. Raise awareness about the existence of the eID and digital public services

Policy recommendation 1: Involve citizens in the creation and testing of digital public services

- a. Involve a representative group of citizens in the evaluation process



Citizens who are members of different target groups have different needs and expectations regarding their use of digital public services. Hence, we believe that the provided services have to be tailored accordingly. We propose to involve citizens in the development and evaluation of softwares by recruiting them in the testing teams. More specifically, the so-created teams have to be representative of the entire population in order to account for the feedback from different target groups. This recommendation calls for an entirely new way to evaluate a digital service as if a digital service aims at serving citizens, they should be the ones assessing it.

- b. Enhance the sharing process of best practices between member states regarding how they involve their citizens in the co-creation of online public services

We propose to make use of the 2016 action on “Promoting sharing and reuse of IT solutions” and the JoinUp (2016) initiative. Indeed, one of the actions of project involve the launch of the “Share and Reuse Award” and the evaluation of public administrations IT solutions in 4 different categories. These include the (1) *Most innovative open source software*, (2) *Open source software with the biggest impact on citizens or businesses*, (3) *most innovative shared IT services*, and (4) *shared IT services with the biggest impact on citizens or businesses* (European Commission, 2018). Hence, we propose to introduce “citizen participation in the process of software evaluation” in the competition’s criteria list in order for all submissions to be assessed on this aspect. Furthermore, we believe that ‘JoinUp’ can also be used to promote such criteria more intensely. Indeed, the platform was created as part of the same action as it aims at helping governments to share their IT solutions and best learn from each other’s practices. We propose to once again include and put emphasis on solutions that work towards involving citizens in the evaluation process.

Policy recommendation 2: Enhance digital skills of civil servants

We propose three concrete actions to enhance digital skills of civil servants. They refer to strategic knowledge transfer within and between the Member States as well as online education tools.

- a. In-house trainings

The project DigitaliseSME (Digital Enablers in SMEs: Support for Digitalisation to Enhance SMEs’ Capacity to Go International and Innovate) is an EU-funded project that supports the digital transformation of small and medium-sized companies as well as of mid-caps in Europe (DigitaliseSME, 2019). It connects companies to digital experts, which are referred to as “digital enablers”. We propose to have such project not only for enterprises, but also for organisations in public administration in Europe. Qualified technical experts at the EU level can act as multipliers and educate “digital enablers” from each Member State. This, in exchange, can increase harmonization in the Member States’ public

administrations. “Digital enablers” would then educate the civil servants in their own countries.

b. Erasmus+

Erasmus+ is an EU programme to support education, training, youth and sport in Europe. Apart from financial support for individuals, it has opportunities for a wide range of organisations including universities, education and training providers, think-tanks, research organisations, and private businesses. We propose the extension of this programme to public services. In this way, European civil servants working in the same area of interest can learn from each other, take approved best-practices in other Member States as blueprint in their own country and use synergies.

c. MOOC

MOOC (Massive Online Open Courses) is a model for delivering learning content online to any person who wants to take a course without any attendance restriction. Civil servants should be supported to use this tool in order to keep themselves up-to-date regarding technological enhancements. This can be financed as further education programme. One example of a successful application of MOOC is the “*Improving the digital health literacy of European citizens* (IC-Health, 2019) project that has received funding from the European Union’s Horizon 2020 research and innovation programme.

Policy recommendation 3: Promote collaboration amongst citizens when using digital services

One of the roles of public administrations is to reduce the gap between different citizens in order to create an environment in which all have equal access to public services. However, as underlined in the challenges section, different age groups have different skills and aptitudes regarding their use of digital tools. The risk is that once e-governments are implemented, older people could suffer from social exclusion and not fully access their rights.

To counter this risk, we propose the implementation of digital skills volunteer program through the use of The European Solidarity Corps. This platform offers several volunteer experiences to young citizens in order to apply their skills in different contexts within Europe. The creation of a specific task force in charge of spreading digital skills could be used to reduce the intergenerational gap. National states can provide public offices and spots in towns where volunteers and participants can meet, discuss, and deal with the digital problems encountered from citizens. Moreover, the creation of a public space could be an important place in small and remote towns where internet connection is still not provided in an efficient way to all the citizens.

Furthermore, the corps could provide specific and targeted courses in order to develop and boost the digital skills of all target groups. These courses should take into

consideration that "some fundamental aspects for the learning process in older adults are: motivation, experience, need, self-concept, learning usefulness and orientation to learn." (Gonzalez, Ramirez & Viadel, 2015)

Older citizens are often at risk of social exclusion, for several factors such as poverty, disability or social isolation. The participation in civil society could help them to leave this isolation behind and to develop an 'healthy aging', in which they are active in mental and physical actions. Moreover, this intergenerational solidarity could also help the young volunteers, through a bidirectional exchange of information.

Finally, as underlined in the first recommendation, continuous testing processes are necessary, in order to develop the best digital services. These services should reach all the citizens. However, several studies underline that websites usually suffer bad design and poor usability for old citizens and people with disabilities. Thus, in order to better shape social services, the volunteers could monitor old age people and their use of digital tools, underline the potential critical issues, and share the results to public authorities and developers.

Policy recommendation 4: Raise awareness about the existence of the eID and digital public services

With the aim to have better e-services available for all citizens, regardless what age group they are in, the EU should promote awareness-raising campaigns among the Member States. Nowadays, awareness-raising campaigns are mostly conducted on social media, (e.g. eIDAS, 2018), promotion is achieved with webinars on what are eIDAS, how to connect to the eIDAS network with their national eIDs. However, public services should also be marketed via TV spots, radio and newspapers.

The campaign "The State is on the Internet", launched in 2015 by the Ministry of Environmental Protection and Regional Development of the Republic of Latvia (National eAwareness Campaign, 2019) is one of the best practices example. One of the main aims of this campaign was to ensure that citizens become aware of the e-services provided by the Member States as such.

3. Digital for Better Participation

3.1 Challenges in enhancing citizens' participation and engagement

The accessibility of information from government to citizen (G2C) is a condition for democratic participation. Ensuring accessibility implies the embodiment of deeply cherished democratic values, such as transparency, openness and accountability. However, the current public assessment of these features is highly critical, resulting in a further widening of the gap between citizens and their national governments. In view of the EU eGovernment Action Plan 2016-2020 and objectives of digital unification of the European Union (European Commission, 2016), we hold that cultivating a closer relationship between national governments and their citizens takes primacy and acknowledge the potential of digital technologies in mediating improvement. To advance this relationship, as well as democratic participation, we find that the provision of structured information is a crucial condition. Solutions toward this issue will be funded as part of the Digital Europe programme 2021-2017 under area number five; Ensuring a wide use of digital technologies across the economy and society (1.3 billion Euros) (European Commission, 2018).

The identified gap is the absence of organized information at national levels, which hinders citizens' prerogative to engage with the public. We find that organizing information nationally would:

- Improve citizens' access to existing yet decentralized sources of information;
- Promote opportunities for citizens' engagement in an informed manner;
- Provide Member States with an overview of decentralized sources of information and opportunities for enhancement

We see opportunities in the use of digital technologies with regards to the earlier mentioned gap. We propose the development of a platform (i.e. website), functioning as a blank canvas on which relevant information can be organized. The architecture suggested for this canvas will be purely functional, and acts as a building block provided on a European level and available for adoption by each Member State individually. The goal is for Member States to then organize relevant information in ways that suit the national context.

The motivation for the provision of this general framework is twofold. First, it ensures the transferability of the product across the Member States (and is conducive to interoperability objectives). Second, it will allow Member States to tailor the product according to national needs. The EC will offer suggestions for 'add-ons' within various domains in which she has identified potential for digital technologies in mediating the solution. The development of these 'add-ons' will be eligible for the funding budget area mentioned before. Finally, a condition for eligibility of funding to develop the add-ons will be the inability to privatize the add-on. In doing so, the EC complies to the once-only

principle as described in the 2016-2020 Action Plan and enable re-use of tools by ensuring sharing across Member States.

3.2 Proposals for addressing the challenges via digital technologies

In order to tackle our overarching question: “How to enhance citizens’ participation and engagement with governments through means of digitalization?” we propose four policy recommendations to the European Commission. As mentioned above, these suggestions would have to be developed on a platform on which relevant information can be organized, according to Member States’ needs:

1. Access to government documents
2. Urban Connectors
3. Easy and user-friendly access point to the democratic participation opportunities; and information about policies and participatory events
4. Increasing awareness of the functioning of institutions

Policy recommendation 1: Access to government documents

Public administrations are legally obliged to provide access to political documents to citizens. The coordination of access to documents varies across Member States. A suggestion for the enhancement of information accessibility mediated by the platform is to digitalize the document request process from citizens to governments. This entails first the digitalization of documents by public administrations.

We suggest that during these processes, documents are pre-categorized as classified or non-classified and recognized by an infrastructure as such. We suggest the use of Intelligent Automation technologies in recognizing the category under which the requested document falls. Such technologies can then send automated e-mails to the inquirer either denying the request or attaching the requested document. The automation of what is otherwise a routine task will relieve public servants of a task that is eligible for automation. Moreover, immediate responses will shorten the waiting period for such requests.

This suggestion is in line with objective 3.1 in the 2016-2020 eGovernance Action Plan (European Commission, 2016); the Modernization of public administration with ICT and the area mentioned before as part of the intended Digital Europe programme. Efforts toward Member State improvement could draw from the existing European initiative asktheEU.org as a best practice.



Policy recommendation 2: Urban Connectors

Nowadays, diverse social groups feel increasingly isolated, as they perceive their governments and public authorities to be distant from problems they identify as pressing. We deem the underlying critical issue the socio-political disconnect between people to effectively communicate with the public administrations. This systemic disjunction hinders bottom-up input from citizens, who in turn feel neglected by their government. In our view, the societal value of digitalisation could nurture a more democratic, horizontal and citizen-based collective organisation and participation by means of the input process.

In this light, digital transformation holds the potential to streamline the flow of information between the unheard citizens and the public administrators as it is estimated that 68% of the world's population will live in cities by 2050 (United Nations, 2018). Thus, the process of urbanisation demands us to devise feasible and pragmatic solutions to bridge local urban communities and the public competent authorities.

To tackle this issue, citizens are to be endowed with the ability, the knowledge and the tools to share data and information that are key for a public policy response through an open data system. Our proposal consists of the creation of an open access platform allowing the free flow of data concerning the state and conditions of public services, more specifically public infrastructures in peripheral, marginalised and poor urban areas. This would be a complementary bottom-up approach with the EU eGovernment 2016-2020 Action Plan laid out by the Commission and could be achieved in two following steps according to the necessities of each Member State:

1. The conditional use of part of the EUR 9.2 billion by upholding the principle of interoperability to create streamlined, efficient and effective digital tools to merge together resources and ideas that would ameliorate the quality of public infrastructure (Council of the European Union, 2018). This pathway would entail crowdsourcing, by which citizens can come together and provide their local governments with localised information on the most pressing and urgent interventions. These measures would be tailored to collectively identify actions to be taken to improve, for example, road conditions and decide alternative solutions to the system of viability.
2. Alternatively, the performance and execution of this service, i.e the realisation of this online product, could be outsourced and procured to a third party depending on the specific requirements that would have to be established between the private and the public sector.

Policy recommendation 3:

a) Easy and user-friendly access point to the democratic participation opportunities

Every Member state employs digital solutions to follow the goal of transparency and delivery of the relevant information to the citizens. Despite these efforts, there are obstacles to facilitate the interest and create incentives to use the tools, provided by the government so far. The 2016 report (Europe's Digital Progress, 2017) on digital public services has explored the activity of citizens in submitting the online documents. There were several reasons behind the reluctance of usage of digital tools. The lack of technical proficiency and the mistrust to cybersecurity were the key.

We recommend the EU to offer financial support to the Member State who would like to use digital tools for the purpose of democratic participation. Several requirements should be fulfilled in order to enable the funding.

The citizens sourcing design should be used. We consider citizens' participation a necessary element in the service delivery cycle, particularly in the evaluation of the product in various categories. For example, the group of citizens can take part in testing and commenting on the pilot product in regard to its functionality and efficiency. Member States should make sure that such option is available while it is cooperating with private sector, which is obliged with the provision of the final digital solution.

In addition, the reluctance to the use of digital tools should be tackled. Member States should have a promotional campaign for the digital tools, which would include clear directions about the tool functionality and explanation of the safety and data protection of such utility. The approach towards promotion should address possible generation gap and use multiple tools, including both visual marketing and people-to-people approach. We propose to create the canvas for such platform on the EU level, which each state will be able to modify in accordance to its needs and preferences.

b) Information about policies and participatory events

Political participation plays a fundamental role in safeguarding democracy, as it is the tool through which citizens can be vocal about their concerns and needs. The data collected on the turnout of national elections within Member States show that citizens of the Union are indeed engaged in politics. However, the threat that misinformation and disinformation pose to such political participation must be addressed.

The severe impact of such misleading information has become self-evident in the last few years and it seems to have become a trend in national elections (European Parliament, 2018). The danger of a citizen coming across such information is enhanced by the difficulties one encounters when retrieving reliable and comprehensive information about national politics and policy-making, both at the national and regional level. Such difficulty can be attributed to the lack of a platform where citizens can easily access

reliable information regarding the political status in their Member State. In fact, citizens tend to rely on digital tools when searching political information as the internet allows almost unlimited, fast and cheap access (Anduiza , Cantijoch & Gallego, 2009).

We advise the European Commission to recommend the Member States to provide their citizens with digital tools aimed at facilitating the retrieval of political information. A possible solution would be that of an online platform, which kind should be left to the discretion of the Member States. To the necessary extent, such platform should provide information on two aspects: the agenda of the relevant political parties and the current policy proposals, both at the national and the regional level.

Regarding the agenda of the political parties, information should be provided regarding the key issues at the core of each political program. In regards to the policy proposals, it would be ideal to provide a timeline regarding their status. This will allow the citizens to follow the process in real time by being informed of which policies are currently being evaluated and which ones are to come up next. The platform should also provide citizens with the opportunity of contacting their representatives and questioning them about their policy-making decisions. For instance, such communication could take place through live-streams or online chats, however this is left to the discretion of the Member States. In order to increase the political engagement of citizens, the platform should also provide a calendar with the relevant upcoming events and deadlines.

The advantage behind the creation of such platform would be not only that to provide citizens with the relevant political information, but also that to strengthen their trust in the government by providing accountability and transparency.

Policy recommendation 4: Increasing awareness of the functioning of institutions

One of the drawbacks we highlight is the lack of political awareness and functioning processes of European and national institutions. This is because people's inability to understand how public institutions work is directly related to their trust and loyalty. As such, we recommend the European Commission to spearhead efforts aimed at improving the dialogue between governments and their citizens.

We propose to use digital technology in order to make the implementation of such solutions entertaining for citizens. Thus, the latter permits to include the game element in order to make the learning process more easy and efficient. This would also permit to customise the platform to meet the citizens' demands, needs and preferences. For instance, this could possibly entail the distribution of virtual interactive cards with brief information about the functioning of political institutions but also interesting facts and news about them. This program should be adapted for all electronic devices, but to mobile phones especially as they are the most utilized by citizens.

Conclusion

The two primary goals of the proposals above are to provide better digital public services and to enhance citizen participation through digital tools.

While digital tools for the support of public administrations are being installed in all Member States of the European Union, up to this point policy makers have underestimated the readiness of use of citizens and public servants. Our four proposals regarding providing better digital public services aim at closing this existing gap through involving citizens in the creation and testing of digital public services, enhancing digital skills of civil servants, promoting collaboration amongst citizens when using digital services and raising awareness about the existence of the eID and digital public services.

While a top-down approach in delivering efficient, transparent, open and less costly public services is needed, complementary bottom-up civic participation involving citizens to make them more politically and socially engaged is also of paramount importance. The digital tools which we have devised are multifaceted, tackling various nuances related to the issues of democratic deficit and information gap. By means of developing a user-friendly editable online platform with transferable data and information managed by the public sectors, citizens can grasp a better understanding of the democratic processes and institutions, and ultimately increase their trust and loyalty.

While being aware that the given measures in this policy proposal are not enough to fully address the problem about the current state of digital fragmentation across public sectors in Member States, we attempt to provide effective solutions to a pressing need in order to pave the way for a more comprehensive strategy in the near future. In order to receive the best outcome, the sustainability of those proposed solutions are required.

References

- Anduiza, E., Cantijoch, M., & Gallego, A. (2009). Political Participaiton and the Internet. *Information, Communication & Society*, 12(6), pp. 860-878
- Council of the European Union (Council). (2018). Retrieved from: <https://data.consilium.europa.eu/doc/document/ST-14488-2018-REV-1/en/pdf>
- Digital Economy and Society Index (DESI). (2015). Retrieved from: <https://digital-agenda-data.eu/datasets/desi/visualizations>
- DigitaliseSME. (2019). Retrieved from: <https://digitalisesme.eu/it/home-3/>
- eIDAS. (2018). Retrieved from: <https://eidas2018.eu>
- Eurostat. (2018). Retrieved from: https://ec.europa.eu/eurostat/web/products_datasets/product?code=tin00028
- European Commission . (2016). Retrieved from: ec.europa.eu/newsroom/document.cfm?doc_id=44393
- European Commission. (2018). Retrieved from: https://ec.europa.eu/isa2/actions/promoting-sharing-and-reuse-interoperability_solutions_en
- European Economic and Social Committee (EESC).(2017). Retrieved from: <https://www.eesc.europa.eu/sites/default/files/files/qe-06-17-193-en-n.pdf>
- Gonzalez, A., Ramirez, M. P., & Viadel, V. (2015). ICT learning by older adults and their attitudes toward computer use. *Current Gerontology and Geriatrics Research*
- IC-Health. (2019). Retrieved from: <https://ichealth.eu>
- JoinUp. (2016). Retrieved from: https://joinup.ec.europa.eu/document/national_eawareness-campaign-state-internet-stateisoninternet
- Lopes, N., & Dhaou, S. (2018). Public Service Delivery Framework: Case of Canada, China and Estonia, *ICEGOV'18*, pp. 101-110
- United Nations. (2018). Retrieved from: <https://www.un.org/development/desa/publications/2018-revision-of-world-urbanization-prospects.html>

