

BLUEPRINT

An Open Government
guide

CLARITY project
H2020
Grant no.:693881





THE CLARITY PROJECT

<https://clarity-csa.eu/>

The CLARITY project supports the up-take of open eGovernment services across Europe. The EU's eGovernment action plans have had a positive impact on this field, however the full benefits of digital services for both citizens and governments are not being realised. The Current EU eGovernment Action Plan 2016-2020 has the vision that by 2020 "public authorities and public institutions across the EU should be open, efficient and inclusive, providing borderless, personalised, user-friendly, end-to-end digital services to all citizens and businesses in the EU." The CLARITY project sought to increase the take-up of open government initiatives to support European Member States in their pursuit for greater trust, transparency and efficiency within government. A blueprint for the future of open eGovernment in Europe, focusing on four key public sector areas touching people's lives:

- General health practice
- Local government services
- Small businesses & self-employed
- Disability services.

"OPEN GOVERNMENT IS AN IDEA IN THE MAKING; WE ARE ITS MAKERS."

The concept of open government suggests increased participation and collaboration of citizens, businesses, employees and other entities in government proceedings, through the use of modern, open technologies

Open Government is a government that places emphasis on government accountability with high levels of transparency.

Technology should be the means not the goal. The use of technological and data trends in open eGovernment implementations does not solve all the issues related to public administration. In many cases, an in-depth transformation of models and procedures underlying eGovernment services is required. However, technology can only support the development of new practices and can boost innovative services or call for new strategies in order to exploit their possibilities.

Security plays a key role in open eGovernment services. People will not trust or use the new services if they are not convinced that their data are protected and that the applications are reliable, tamper-proof and available when required. Public administrations should provide a means so that both users and administrations can be sure that they are interacting with each other.

The implementation of the recommendations should always be aligned with the applicable legislation. In this regard, the General Data Protection Regulation (GDPR) will play a key role since personal data are involved in many of them.

What hinders the transition to open eGovernment to date is:

- * Slow implementation of directives and regulations
- * No clear interaction between the public and the private sectors.
- * Low technology skills of stakeholders.
- * Lack of mobile applications
- * Low interoperability
- * Unavailability of open data

GENERAL RECOMMENDATIONS

eGovernment services facilitate the interaction between public administrations and users

A number of business models are emerging to facilitate the transition to open eGovernment services. These range from co-creation models by public-private partnerships that exploit open data jointly to innovative new eGovernment solutions.



PERSONALISATION, ACCOUNTABILITY, TRANSPARENCY AND TRUST

Personalisation is a way to improve user satisfaction by tailoring a service to specific individuals or segments of individuals' needs. Open eGovernment services should be customisable and adapt to the users' circumstances like age or health-related parameters.

Open eGovernment services should be developed around how users can, want, or need to use those services, if they are to enhance accountability, transparency and trust.

Openness of data and services

Allowing people more control over their data could go a long way to make them more invested in public services and more trusting of government. It could also cut down on information queries and allow faster resolution. Despite GDPR requirements, only 55% of the EU Member States currently provide access to citizens and most public agencies don't know how people would like to interact with their data.

People should be able to provide informed consent about what data can be shared and with whom and become aware of whether their data are linked to data from other services. This recommendation is especially relevant for the once-only principle.

THIS SECTION PROVIDES A SUMMARY OF CHARACTERISTICS, STIMULATING THE CREATION DELIVERY AND USE OF NEW SERVICES

eDemocracy services

eDemocracy tools can enhance citizen and businesses engagement and participation in government decision making processes such as policy making, budgeting and service delivery. They are not just fundamental for user adoption of new services but also for building trust towards the public sector.

Public authorities should embrace eDemocracy and eParticipation and take into account a number of critical factors to ensure their success - a commitment to act on input received; a user-friendly interface; the use of online and offline channels of communication; appropriate security and privacy provisions; and ensuring that the political issues are posed in a way understandable by non-experts. Tools should include features such as web forums, discussion spaces and social media interaction, and make sure that the input is transparently processed.

See also: Consul, Kerro-kantasi

User Centric Design

Understanding user expectations is fundamental for redesigning open eGovernment services. Developers should respect how users can, want, or need to use those services in order to design attractive, convenient and useful services, people enjoy to interact with. It is important to understand the service redesign is not only about website interfaces but also about the the processes behind the scenes. Citizens should remain engaged not only to validate design assumptions but also contribute to their continuous improvement. This requires re-training of developers in emerging user-centered design methodologies and tools, as well as co-creation and facilitated eParticipation to actively involve citizens.

Attention should be paid to ensure these processes are inclusive of different groups within society, e.g., migrants, elderly, people with disabilities and computer illiterate.

eProcurement services

The transition towards full eProcurement and use of contract registers is necessary. Providing eProcurement, eTender and eInvoicing services is very important to ease access to the information for both large and small businesses and level the playing field with regards to bidding for public contracts and tenders. Besides, open data on eProcurement guarantees transparency in the management of public funds. As with other eGovernment services, a user focused approach would be necessary to gauge both the interest and the usefulness of such websites and how they can be designed to ensure maximum take-up by businesses.

See also: Euroalert

Meeting the once-only principle

The once-only principle states that a user should not have to supply the same information more than once to public administrations. Open eGovernment services should offer this option to users whenever possible. However, people should not be forced to apply it. Interoperability and identification play a very important role in meeting this principle; that is why the European Interoperability Framework (EIF), and the eIDAS directive are recommended here. The use of open source software, open standards and open APIs will result in more open and scalable ICT systems for public service delivery. This will pave the way for the integration of systems and the implementation of the once-only principle for citizens and businesses. An interesting approach, which is also relevant for people's access to their own data, is to provide a personal-data repository that applications can access when necessary, instead of having applications exchanging personal data.

Universal Accessibility

Universal accessibility is a fundamental requirement for the success of any open eGovernment so that public services 'leave no one behind'. Public administrations should design open eGovernment services that are inclusive by default and cater to the needs of everyone. However, accessibility options are often few and ill-located on open eGovernment services. There are international guidelines such as WCAG 2.0 for the design of accessible websites, such as alternatives for audio content, such as transcripts and captions or sign language; page structure and content, which need to be properly coded so that they can cater to text-to-speech synthesis or audio descriptions; and textual content that follows Easy-to-Read guidelines. The Web Accessibility Directive, which regulates accessibility of public sector websites and mobile applications in the EU, will reduce uncertainty for developers and foster interoperability. The European Accessibility Act, currently under discussion by the EU co-legislators, is expected to make sure that both public and private sectors follow accessibility requirements when designing their products and services. Member States are expected to comply with this directive by September 2018.

Ubiquitous services for computers, mobiles, tablets

In general, only one third of public sector websites in the EU are mobile-friendly. Specifically, there is a lack of mobile apps for eGovernment services. As mobiles are fast becoming the main device through which people access the internet, it is imperative that more services are provided through mobile friendly websites or apps that would open access to a greater number of citizens and businesses. Moreover, public administrations should be up to date on new developments of devices and eGovernment services should be responsive.

Service personalization

Personalisation is a way to improve user satisfaction by tailoring a service to specific individuals or segments of individuals' needs. Open eGovernment services should be customisable and adapt to the user or group of users' profile. Besides, services should be proactive, and notify or prompt a person to use them according to circumstances like age or health-related parameters.

Cross-border services

Cross-border provision of services is based on the freedom of movement, so that nationals of a EU Member State are able to pursue their activities as citizens or businesses in another EU Member State. This goal is included, among others, in the Single Digital Gateway proposal, the interconnection of all Member States' business registers, the electronic interconnection of insolvency registers, the Electronic Exchange of Social Security Information, and the exchange of electronic evidence between judicial authorities.

Services in multiple languages

A great majority of eGovernment websites in the EU are available only in the native language or in the native language and English; the English version often only provides information and not all the eGovernment services that are provided in the native language. Language support should include not only the translation of website content but also the translation of forms and documents. This is under-developed and it is hindering access to services by non-native speakers.



"OPEN EGOVERNMENT SERVICES FOR THE HEALTH SECTOR CONCERN SERVICES FOR CITIZENS AND HEALTH PRACTITIONERS"

The sensitive nature of health data makes data protection especially important in this sector. Solutions must be developed carefully to ensure that citizens privacy is respected by institutions. Citizens also need to have full access to their own data. To facilitate persons' need for mobility across national border and even across regions in the same country. Reservations about losing ones personal relationship with their doctors, fears of leaving behind those with less access to digital devices, the skills of health administrators and conceptions of quality of life.

GENERAL HEALTH PRACTICE

Electronic prescriptions. Doctors can issue prescriptions for medicines electronically, and pharmacies can dispense medicines according to them. Innovative applications in this area include medicine surplus reuse and control of the delivery of doses to a patient. In Finland, the national Prescription Centre contains all the electronic prescriptions and the corresponding dispensing records entered by pharmacies.



One-stop shop. In some countries, a single entry point to access open eGovernment services for general practice is available together with other health services. Denmark, for example, has an entry point to a number of interactive and transactional services for citizens, including electronic booking of appointments with a general practitioner, viewing appointments with the healthcare services, receiving a reminder prior to visits, sending secure emails to healthcare authorities and renewing drug prescriptions.

Personal sensors and IoT applications. Services based personal sensors and IoT applications can revolutionise healthcare by empowering chronic patients to manage their conditions on their own and alert doctors or emergency units when necessary.

Telemedicine. Telemedicine can improve access to medical services is difficult or expensive, for example, in rural settings where there is limited transport services or for people with mobility difficulties (e.g., elderly or disabled citizens). It can provide an alternative to staffing difficulties, access to experts in critical care and emergency situations or even early diagnosis.

eHealth cards. Health cards that can be used across different health systems and could be used to make payment of medical costs across borders facilitating the movement of people. Austria's Chipkarte e-card, for example, is a system that connects patients, providers, hospitals, and pharmacies' through Europe. Belgium and France's cards enable direct settlement of certain medical costs, while other costs are reimbursed through mandatory/complementary private social insurances. Electronic ID cards could double as health cards storing or providing access to one's health insurance data.

Services for caretakers. In Norway, there is the Action project that stands for Assisting Carers using Telematic Interventions to meet Older Person's Needs. The main aim is to enhance their quality of life via the use of user-friendly information and communication technology in their own homes.



Patient-data repositories. In Malta, patients and their doctors can access the following health data: case summaries, medicines entitlement, lab results, and medical image reports, among others. Portugal's health network, Rede Telemática da Saúde, allows access to clinical information and promotes the communication between certified health professionals, contributing to an improved access to medical care. Spain's digital clinical history, Historia Clínica Digital of the National Health System allows citizens and their general practice doctors to look up their medical reports.

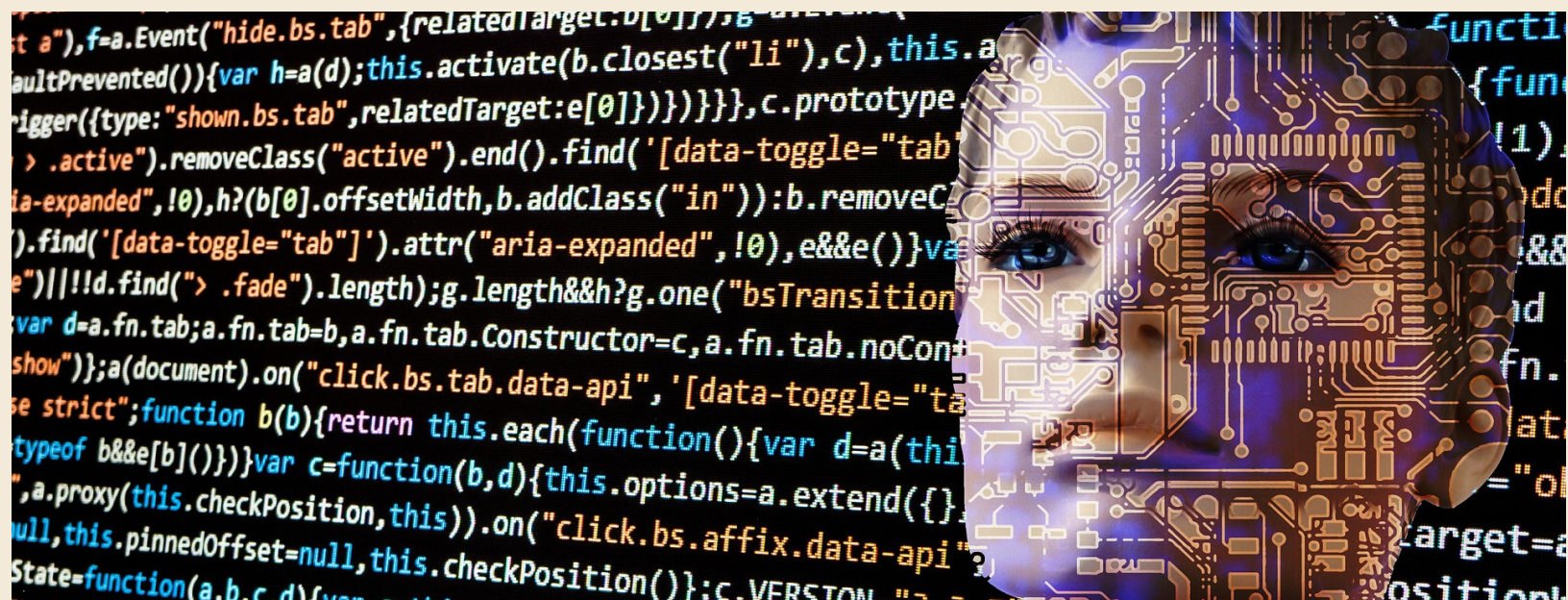
Online registration of practitioners and patients. The Croatian Health Insurance Fund allows the electronic submission of applications for registration, de-registration, and change of information of an insured person. These kinds of services can be useful for practitioners both in order to register themselves and in order to register patients or insured people into the corresponding health system.

Services that exploit open data. Health open data is made available in a way that can be exploited through services that make it accessible to different stakeholders in this sector. For instance, a service to visualize data on general-practice centres (e.g. waiting time and other performance measures) could



Prognosis: The Danish government provides researchers access to anonymous open data (including health indicators and hospitalization data) on individual patients from the 1970s to the present day to improve understanding of the factors leading to disease and improve prevention. Linking medical data can improve the search and retrieval of health-related information from various sources to diagnosis. The NHS in the UK currently uses SNOMED CT as the underlying vocabulary for annotating clinical health records and for browsing those records. The Observational Health Data Sciences and Informatics is a program that aims to integrate (with the support of shared vocabularies) and publish a large amount of observational data, and through large-scale analytics allow the evaluation and detection of diseases.

**IMPROVING PROGNOSIS
CAN IMPROVE THE
QUALITY OF LIFE OF
EVERYONE**

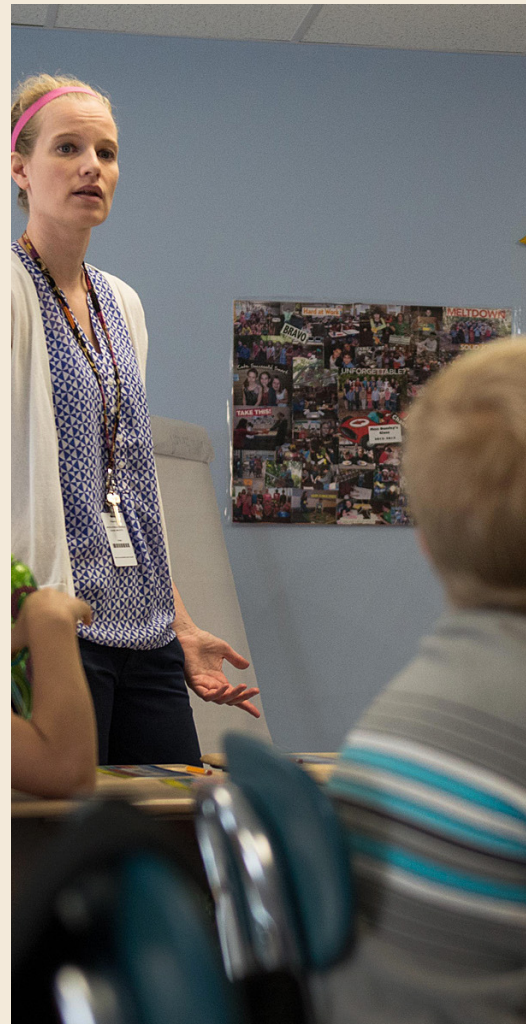


IF GOVERNMENTS ARE TO
FULLY EXPLOIT THE BENEFITS
THAT CAN COME FROM
MATURE EGOVERNMENT
IMPLEMENTATIONS, THEN
LOCAL GOVERNMENT
ELECTRONIC SERVICE
DELIVERY MUST BE SEEN AS A
VITAL COMPONENT



LOCAL GOVERNMENT SERVICES

Local government institutions vary greatly between countries in terms of size, demography, services they must or can provide, etc. In some countries local authorities have autonomy and a relatively independent economy, so they can decide on their projects and budget whereas in other countries, the central government makes most of the decisions. However, there is a general consensus about the fact that local government is the public administration that is closest to citizens, in contrast to regional, state (or even supranational) level governments.



Single notification service. In Spain, there is a convenient way for citizens to inform the public sector. Using a digital certificate citizens can change their address through a single notification service that informs a number of Public Administrations. Similar services in Slovequia, Estonia, Portugal and Sweden.

Personalised services. Skellefteå municipality's "Mitt Skellefteå" (My Skellefteå) is a mobile application containing a number of local government services that can be personalised by the user.

One-stop-shop. From citizen's point of view looking for information across various public service websites can be frustrating. A website where all local open eGovernment services of interest can be pulled together will be a great first step. In Zaragoza, Spain, citizens and companies can access all of the local procedures (e.g. water, taxes) from a single website.

Simplification of administrative procedures can bring efficiencies without compromising on quality

Blockchain-based services. Authentication and issues of identity management has been a major reservation for civil servants. It can be Applied to digital property rights, electronic voting, smart Contracts, land registry and any can revolutionalise a number of local services requiring access to government records. Estonia, for example, used it to ensure the integrity of data stored in government repositories and to protect it data against insider threats.

Big data and artificial intelligence technologies. In general, big data techniques can be used for decision-making processes. Natural language processing can be applied to the interaction of citizens with eGovernment services in their native language. One-stop-shop. Websites where all local open eGovernment services are available to a citizen or business.



Digitalisation of government services will require upskilling of public administrators to support online services and the creation of a new generation of public administrators through education.

It is important to maintain open eGovernment services that contribute to an inclusive society and reduce the digital divide.

**EU STANDS FOR FREE
MOVEMENT OF PEOPLE,
GOVERNMENT SERVICES
SHOULD ALLOW ENTERPRISES
FROM ONE MEMBER STATE TO
SETUP, RUN, AND TRADE IN
ANOTHER MEMBER STATE.**



SMALL BUSINESS AND SELF- EMPLOYMENT

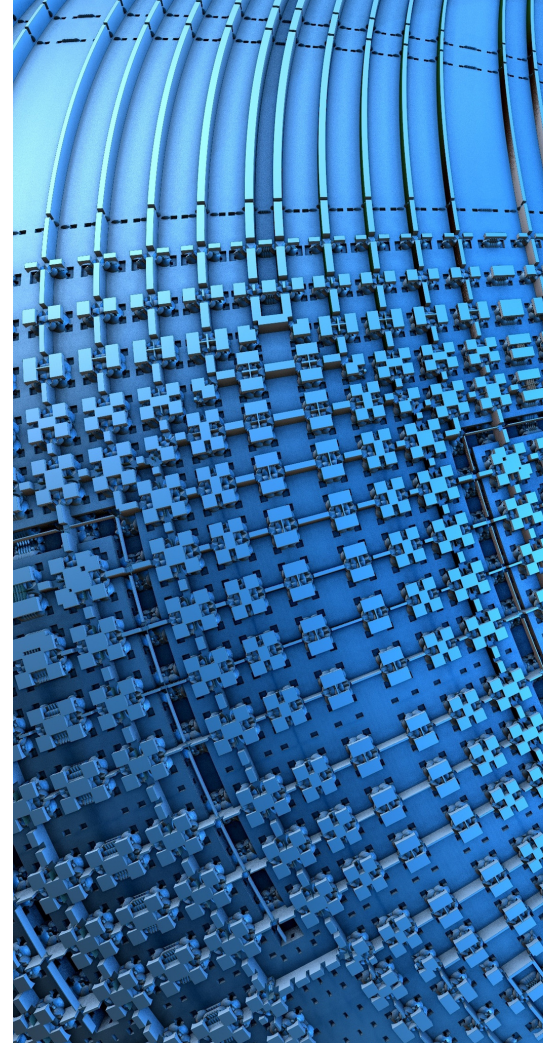
This document focuses on open eGovernment services that are aimed for SMEs and self-employed citizens. Some key government services in this area have focused on reducing the administrative burden and shortening response times so that enterprises can be set up and run effectively. This has been done under the assumption that taking into consideration the size of SMEs, what they struggle with is the strength of expertise they have on board and the limited resources they may have to dedicate to administrative and legal work that is required to set up and run a business.

Open data and open source solutions for the provision of local government services can be rewarding and liberating

Open data services. Gdansk, Ghent and Lisbon, for example, all have Open Data portals publishing data, such as news items, event sections and more importantly features aimed at engaging users, such as feedback mechanisms.

Services that use shared vocabularies and linked data. Linking data facilitates the connection of different information sources and can give rise to new and innovative applications that improve the search and relevance of retrieved information. Finland's multi-facet website search is a brilliant such example, as is Spain's open data government website.

Open source software for public services. Open source software can reduce local government expenses by providing low cost website authoring, collaboration, and administration tools. Estonia's Rural Municipality Website is based on open source content management and site administration tools. Another open code system, the FixMyStreet Platform, allows people to report street problems like potholes and broken streetlights, making road auditing and maintenance easier.



eDemocracy and eParticipation services.

Applications that make it easy for citizens to participate in decision-making and voice their views is fundamental for Open eGovernment. Reykjavik's Betri (Iceland) is an online participatory social network; citizens can present their ideas on municipal issues ranging from services to operations of the city; it enables citizens to voice, debate and prioritise ideas to improve their city. The Stem Van West participation platform in the Netherlands is a participatory platform where people can share their ideas about the city and do participatory budgeting. In Zaragoza (Spain) there is a Participatory Budgeting program, where citizens can help the council know and prioritise their needs and demands. The platform Decide Madrid allows citizens participate in proposals for the city improvement, public debate, and participative budgeting, among others. It uses the free software Consul as the platform for the different modes of eParticipation.

Applications for accountability. Applications that present information on where money is spent and how well public services are performing allow people to hold government accountable, but it can also help to improve efficiency, give people a choice in using public services and contribute to economic growth. In UK, the Performance platform presents the performance of government services: cost per transaction, user satisfaction, digital take-up, and completion rate. Open Budget in Florence, Italy, presents data on the city's annual budget, "so that people can see clearly all costs". Open Cohesion in Italy provides data on the implementation of investments programmed by Regions and State Central Administrations via cohesion policy resources. Public administrations can draw on platforms such as the OpenBudgets platform, which offers several applications: from easy-to-use budget visualisations to performance comparisons between cities and participatory budgeting mechanisms.



Automatic workflows in eGovernment websites.

Automatic workflows for relevant procedures guide businesses through the steps involved in creating and running them. Croatia's eGovernment website, for example, offers a number of transverse workflows where the flow automatically finds the forms that are relevant to each user. It works on top of a workflow engine, meaning that forms can be collected and then distributed within Government offices, tracking progress and informing the applicant accordingly.

Personalisation of websites and services.

Interfaces that are adaptive to the user's profile and requirements. Italy's eGovernment website for businesses provides personalised access to a virtual desk of "integrated services" i.e. services provided by different authorities but relating to a unique goal for the user.

Business opportunities for SMEs and self-employed. Services that use blockchain technologies. For instance, in the context of SMEs and self-employed, **Smart Contracts apply blockchain technologies to enable credible transactions in a conflict-free way, avoiding services of a middleman.**

Services that apply big data and artificial intelligence technologies. Big data can be used to analyse market provisions and help SMEs and self-employed to find and take advantage of new business opportunities. Marketplace for the exchange of skills and expertise among SMEs and self-employed. A platform that would incentivize joint ventures among stakeholders in this area. Better and more transparent eProcurement

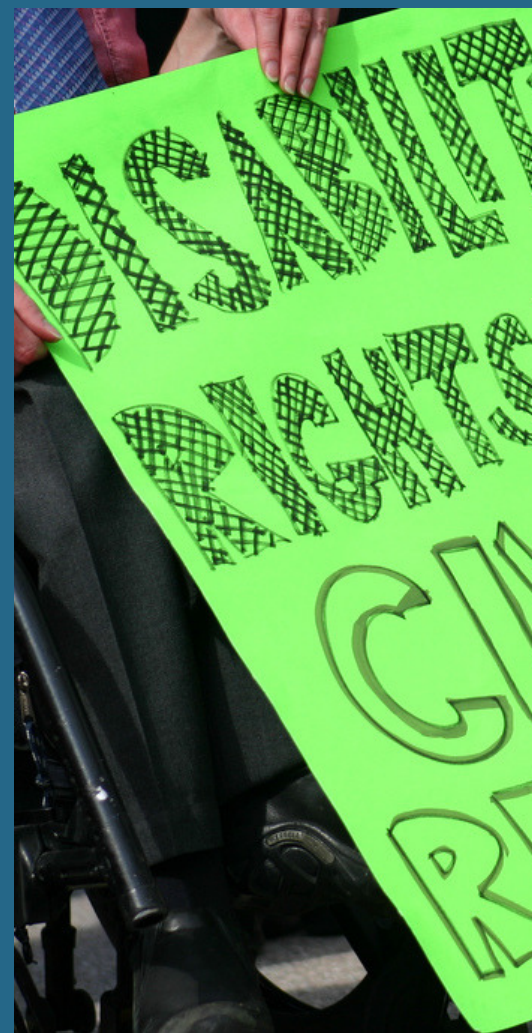
eProcurement platforms. Platforms based on open European standards and EC directives that automatically find the forms that are relevant to each user with information on eProcurement opportunities and procedures, and with access to digital eProcurement services. The Belgian eTenders website is deployed together with an eNotification platform to alert on eProcurement opportunities. The TED website (Tenders Electronic Daily), dedicated to European public procurement, allows the user to browse, search and sort procurement notices by country, region, and business sector.

Services that exploit open eProcurement data. Procurement open data is made available in a way that can be exploited through services that make them accessible to SMEs and self-employed. These services would help SMEs and self-employed to participate in procurement that is tailored to their area and expertise. For example, an alert system that notifies users whenever relevant new procurement opportunities arise. The platform euroalert has contents related to EU funding, law, events and tenders for SMEs.

A NATION'S
GREATNESS IS
MEASURED BY HOW IT
TREATS ITS WEAKEST
MEMBERS

DISABILITY SERVICES

Open eGovernment for people with disabilities is related to the design of services that are inclusive by default and cater to the needs of people with disabilities and should cater also for their families and carers of supporting organisations. With 44 million persons with disabilities in the EU and rising due to ageing this is of paramount priority. Open eGovernment should ensure that people with disabilities can maintain their dignity, individual autonomy and independence, are given full access to public services and goods, and can fully participate in society including employment and education.



Specialized websites. Currently important information about important care and social security provisions for people with disabilities, chronic illnesses and the elderly is scattered around different public sector websites. One-stop websites that presents information about disability services in one place, e.g. legal documents, links to advisory services, dedicated to the needs of people with disabilities, their families and support staff can be of great help. Such site exist in the Netherlands, different regions in Spain and the UK. UK provides information on disability benefits through a Disability helpline.

Accessible eGovernment websites. It is fundamental for people with disabilities to have full access to public information to maintain their autonomy, as is economically viable for the public sector as numbers are expected to rise due to ageing. Hence, applying the WCAG 2.0 accessibility standard that makes web content more accessible is a priority. Zaragoza council's eGovernment website, for example, follows the WCAG 2.0 and is certified officially by the Spanish Agency for Normalization and Certification (AENOR); many other city council websites comply with these norms. Brazil website for people with disabilities. Accessibility however may have to do with easily understood language and access via afforded means. For example, while most disabled people have mobile phones, they often do not have computers. Hence, mobile apps might be of greater convenience.

Third parties websites for people with disabilities. As service provision nowadays is an orchestration of public and private organisations, accessibility standards need to be ensured by private parties. Discapnet, for example, a website dedicated to employment services for people with disabilities has been build by the ONCE foundation and in collaboration with public agencies following universal accessibility (WCAG) guidelines.

Apps for mobility of people with disability. Simon Mobile is a navigation application designed for impaired users. In Madrid, Parma and Lisbon, for example, it provides access to important accessibility information such as the location of disabled parking spots or the location of elevators and ramps to access subway stations. With Simon Mobile, you can compute walking, driving and transit routes and use step-by-step navigation during your trip.

Accessibility = Equality. Open eGovernment services accessible by people with disabilities contribute towards social inequality and provide good examples for others to follow.

Disability rights=Human Rights. All people be educated to care about disability-related issues and demand open eGovernment services that are universally accessible
The changes in the labor force due to open eGovernment services should not increase unemployment for people with disabilities.

From policy to action. Despite the existence of policies and penalties, there is no real attitudinal change or action-based work to promote access to ICTs, including the Internet, for people with disabilities. The European Accessibility Act, currently under discussion by the EU is expected to drive universal design to promote and monitor compliance and implementation of such penalties is lacking.

UNIVERSAL DESIGN IS ABOUT EQUALITY IT IS A DESIGN FOR ALL

Low technology skills for people with disabilities, their family and support staff. Training is needed, on the one hand, to understand the advantages and disadvantages of using ICTs and, on the other hand, to develop the capabilities needed to address the constant evolution of services and applications. Besides, service providers should be instructed on accessibility so that they know how to develop services that can be used by as many people as possible.

Include the users. In order to create valuable and useful open eGovernment services for the disability sector, developers should attend the needs and expectations of all stakeholders, e.g. users with disabilities, families and support staff. These services should be developed around how users can, want to, or need to use those services, rather than forcing people to use a service that does not meet their expectations. It is important to note that user-centred-design processes that include people with disabilities will enable open eGovernment applications that not only cater to people in this sector, but also to the average population.

clarity

Open eGovernment Services



This project has received funding from the European Union's Horizon 2020 programme SOCIETALCHALLENGES - Europe In A Changing World - Inclusive, Innovative And Reflective Societies, under grant agreement no. 693881.