



Member States Questionnaire (MSQ) for the United Nations E-Government Survey 2020

The objective of this questionnaire is to gather information from the Member States in preparation of the United Nations E-Government Survey 2020. Please note that these responses do not directly affect the UN E-Government Development Index (EGDI), which is a composite index of Online Service Index (OSI), Telecommunications Infrastructure Index (TII) and Human Capital Index (HCI). UNDESA¹ assesses national portals with the assistance of independent researchers to construct OSI, requests data from the International Telecommunications Union (ITU) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) to construct TII and HCI respectively. For any questions about this questionnaire, please contact dpidg@un.org.

Estonia

30.03.2019

I/We hereby authorize UNDESA to publish my/our responses as deemed necessary.

I. Institutional Framework

1. What is the official **e-government² portal** at the national level? If more than one, please list all.

Eesti.ee is the gateway to government information and e-services. Upon logging in, it is possible to view one's personal information, use e-services and read messages sent by government. It is a secure gate to the e-state, providing reliable and up-to-date information for organising your procedures with the state, access to public e-services and information about yourself, and the mailbox of @eesti.ee. Eesti.ee provides information in Estonian, English, and Russian on what to do in different life events, when communication with the state is required, or for starting a business. Eesti.ee provides practical guidance and advice on how to use and find public services. The contact information of ministries, state agencies, local governments, educational institutions, cultural institutions, social welfare institutions, professional associations, etc. is also available on the portal.

URL: <https://www.eesti.ee/en>

2. Please also provide **URLs** for below **specific portals**, if exists:

- a. E-services³:

The aforementioned Eesti.ee portal also serves as the e-services gateway. List of all e-services can be accessed at Riigiteenused.ee which is a tool for service owners to describe and manage public services. In Riigiteenused.ee one can describe services regardless of the channel it is being rendered (webpage, at the bureau etc.).

URL: <https://www.eesti.ee/en>; <https://www.riigiteenused.ee/en/user>

- b. [E-participation⁴](#):

¹ This questionnaire is conducted by the Division of Public Institutions and Digital Government (DPIDG) of the UNDESA.

² **E-government or digital government** will be used interchangeably in this survey and is defined as delivering services online and engaging people by using Information and Communication Technologies (ICTs)

³ A specific portal where you can see the list of all online services available for the public

⁴ **E-Participation** is about fostering civic engagement and open, participatory governance through Information and Communications Technologies (ICTs).

- 1) The purpose of the Estonian civil society development strategy adopted by the parliament is the broader inclusion of citizens and associations of citizens in developing policies and legal acts. Each ministry deals with the matters specified in the Government of the Republic Act. The topics on the participatory website are distributed according to the area of responsibility of each ministry.
The government's objectives are listed in the government coalition programme and the functions of the ministries are specified in the government's activity programme. The websites of ministries likewise provide information regarding the government's plans. Draft legislation sent to the ministries for endorsement shall be published in the legal information environment, known in Estonian as e-õigus (e-law), accessibly (only in Estonian) at:
<http://eelnoud.valitsus.ee/>
- 2) The Citizen Initiative Portal rahvaalgatus.ee enables you to write proposals, hold discussions, compose and send digitally signed collective addresses to the Estonian Parliament (Riigikogu). At rahvaalgatus.ee you can submit a proposal to the Riigikogu on how to amend existing regulations or improve the society. A collective address should have at least 1000 signatures in support, given by at least 16-year-old citizens of Estonia. At rahvaalgatus.ee you can follow the proceeding of the address in the parliament and whether it will become a draft act. See more at: <https://rahvaalgatus.ee/about>
- 3) A participatory democracy website has been set up at www.osale.ee to allow people to take part in government matters and be an active member of civil society. The purpose of the participatory democracy website is to include Estonian civil associations and inhabitants in active participation in dialogue on matters of importance to society.
The participatory website may be used to submit proposals to the government. Relevant, well-grounded opinions and proposals are welcomed, as is criticism regarding aspects that should be changed in the country and ideas as to how to accomplish this.

The following can be done via the participatory website:

- submit ideas and proposals to the government;
- gather signatures for support for civic initiatives;
- express opinions regarding government-sponsored draft legislation;
- search for legal acts or policy documents.

URL-s: <https://eelnoud.valitsus.ee/>; <https://www.osale.ee/>; <http://rahvaalgatus.ee/>;

a. **Open government data:**

Estonia's Open Government Data Portal is accessible at <https://opendata.riik.ee/en/>. The Open Data Portal provides a single point of access for general public to unrestricted public sector data with the permission to re-use and redistribute such data for both commercial and non-commercial purposes. The open data portal is intended to serve as a platform for the dissemination of data by public bodies and for searching and retrieving such datasets by open data users.

On the open data portal, it is possible:

- To search and download open data;
- To publish new open data: to gain access to this functionality, a prior registration with the portal's administrator is required;
- To use it as a storage of datasets by government agencies and local authorities;
- To search and use applications created on the basis of open data;
- To post news, questions and instructions pertaining to open data and to have discussions on relevant topics.

URL: <https://opendata.riik.ee/en/>

b. **Public procurement:**

The Public Procurement Register available at: <https://riigihanked.riik.ee/rhr-web/#/> offers an innovative working environment for buyers to organise public procurements and for tenderers to participate in public procurements. It is a free self-service environment for contracting authorities and economic operators for conducting and participating in public procurements. Anyone can freely browse published procurements, notices, contract information and review committee's decisions. Procurement Register is administered by the Ministry of Finance.

See also: <https://www.rahendusministeerium.ee/en/public-procurement-policy>

URL: <https://riigihanked.riik.ee/rhr-web/#/>

c. Other major portals at the national level:

While we are actually moving away from having numerous different portals and towards a life-event / business-event based one-stop-shop that eesti.ee portal is transforming to become, here is a selection of the most popular portals at the national level:

1. The **eBusiness Register** available at: <https://ettevotjaportaal.rik.ee/index.py?chlang=eng> is an online environment that allows entrepreneurs to submit electronic applications, documents and annual reports to the Commercial Register. Applications can only be signed using your ID-card or Mobile-ID.
 - a. **The Company Registration Portal** can be used to register private limited companies, general partnerships, limited partnerships and non-profit associations, and enter business as a self-employed person. It further includes e-annual reporting environment which can be used for compiling, signing and submitting annual reports.
 - b. **Central Commercial Register** is an online service based on the central database of Estonian registration department of the court. The central database includes digital data from the commercial register, the commercial pledge register, the register of state agencies and local government institutions, the register of non-profit associations and foundations: <https://ariregister.rik.ee/?lang=eng>
 - c. **E-land register** is a national register into which all registered immovables in the Republic of Estonia have been entered. It offers information about Land Register: cadastral data, owners and restrictions; one can check mortgages over properties data as well as take a tour of the property document, empower others to meet them: <https://uuskinistusraamat.rik.ee/detailparing/Avaleht.aspx?lang=Eng>
2. **Patient Portal** of Estonia allows citizens to manage their public health records and services. Citizens can view their medical data, submit statements of intention, appoint representative(s) for oneself, and act on behalf of the persons who have appointed them as their representative. The Patient Portal is available at: <https://www.digilugu.ee/login.jsessionid=34E2651764D4EFE4C1212ECF5A917213?locale=en>
 - a. **Digital registrar** option added to www.digilugu.ee and for hospitals (see e.g., the one owned by Regional Hospital: <https://www.digiregistratuur.ee/Index.aspx?ReturnUrl=%2f>). Adding the possibility to book ambulatory appointments, pay bills, view and cancel registered ambulatory appointment times. This adds the possibility to conduct different transactions in one view for all health care institutions that interact with the solution. In phase 1 of the solution, the focus is on the specialist (except the GP, dentist) booking time. In the future, bookings for family physicians, dentists can also be added if the service provider has joined the national digital registration. The solution is designed with sufficient flexibility from the perspective of future interfaces and developments.
3. **Online Tax Portal** for the electronic tax filing system set up by **the Estonian Tax and Customs Board**: <https://www.emta.ee/eng>. Each year, around 98 per cent of all tax declarations in Estonia are filed electronically, whereas it takes around 3 minutes to declare taxes as the tax declarations are pre-filled.
4. **Estonian Road Administration** online portal available at: <https://eteenindus.mnt.ee/main.jsf> concludes all information and actions regarding owning, selling, buying a vehicle, and activities related to driver's license. In addition to seeing the data of documents certifying your right to

- drive, to apply for documents (driving licence, instructor's certificate, digital tachograph driver card, etc.), to register for examinations; checking the data of vehicles, formalise a vehicle's sale or purchase, temporarily delete a vehicle from the register, change users, order a registration certificate or a registration number, etc; users can apply for a special carriage permit (for large and/or heavy goods vehicles) and view the data of previously issued special permits.
5. **Identity document portal** available at: <https://etaotlus.politsei.ee/#/login> allows to apply for national identity documents.
 6. The **e-File**: <https://www.e-toimik.ee/> is an online information system which allows procedural parties and their representatives to electronically submit procedural documents to courts and to observe the progress of the proceedings related to them. For example, a single parent can apply for alimony without making a trip to the court house. Only the ID card or the Mobile ID can be used for logging into the e-File system. The e-File system grants the procedural parties access to only those cases which are directly related to the person.
 7. **Government Portal for sharing information**. From June 2014, all ministries will have similarly designed and structured webpages to allow the visitor to access information faster and more easily than before as well as have a clear overview of the goals and activities of the government and governmental authorities. The similarly structured and designed webpages of the Government, Government Office and 11 ministries now form a common online environment – the Government Portal: <https://www.riigikantselei.ee/en>. All Government Portal webpages allow access to the webpages of other ministries – links to all webpages of the ministries are given at the horizontal top menu of the main page.
 8. **Environmental Services Portal of Estonia** that allows the use of various electronic services provided by the Environmental Board, such as submissions of applications for specific permits: <https://eteenus.keskkonnaamet.ee/>
 9. **e-PRIA** is the client portal of the Agricultural Registers and Information Board (ARIB), through which clients can submit documents to ARIB and check their details in ARIB's registers (the register of farm animals and the register of agricultural support and land parcel). The portal represents a convenient way to exchange information online. e-PRIA is located at <https://epria.pria.ee/epria/>
 10. **Admission information system SAIS** available at: <https://sais.ee/Home> has been created for the electronic management of the process of submitting applications to educational institutions. The citizens of Estonia can submit required documentation through the system and educational institutions can manage the information and data of candidates in a systemic way. The information system functions over the solid safe Internet-based and ID card-based information technology environment.
 11. **The Estonian Education Information System (EHIS)** is a national register that collects data on the education system. The register holds information on students, teachers and lecturers, final documents, study grants and scholarships, educational and training institutions, curricula and training and activity licenses, economic activity reports and the right to study: <http://www.ehis.ee/>
 12. **eKool**: https://ekool.eu/index_en.html is a school management tool bringing together pupils and their families, schools and supervisory bodies. eKool supports better learning for the pupil, parents are better aware of their children's progress and the authorities have a good overview of what goes on in schools under their management. The system provides an array of functions for its various users:
 - a. Teachers enter grades and attendance information in the system, post homework, and evaluate student behaviour. They also use it to send messages to parents, students or entire classes.
 - b. Parents use it to stay closely involved in their children's education. With the help of round-the-clock access via the internet, they can see their children's homework assignments, grades, attendance information and teacher's notes, as well as communicate directly with teachers via the system.

- c. Students can read their own grades and keep track of what homework has been assigned each day. They also have an option to save their best work in their own personal e-portfolios.
 - d. District administrators have access to the latest statistical reports on demand, making it easy to consolidate data across the district's schools.
13. **RTIP** – government officials' administrative portal, for administrative tasks, including training applications, managing holidays and work trips: <https://www.riigitootaja.ee/rtip-client/login>
14. Museums Public Portal **MUIS**, is the online gateway to Estonian museums, giving everybody an opportunity to study the collections of the museums that have joined the system: https://www.muis.ee/en_GB/
15. **Register of Economic Activities**: <https://mtr.mkm.ee/> is for entrepreneurs operating in the areas of activity subject to special requirements where they can be registered. Users can submit applications for permit, notices of economic activities as well as see an overview of their licenses, notices, and search for authorisations and notifications.

URL-s: <https://ettevotjaportaal.rik.ee/index.py?chlang=eng>; <https://www.digilugu.ee/login?locale=en>; <https://www.emta.ee/eng>; <https://eteenindus.mnt.ee/main.jsf>; <https://etaotlus.politsei.ee/#/login>; <https://sais.ee/Home>; <https://www.e-toimik.ee/>; <https://www.riigikantselei.ee/en>; <https://eteenus.keskkonnaamet.ee/>; <https://epria.pria.ee/epria>; <http://www.ehis.ee/>; https://ekool.eu/index_en.html; <https://www.riigitootaja.ee/rtip-client/login>; https://www.muis.ee/en_GB/; <https://mtr.mkm.ee/>

3. Please provide **name(s) and URL(s)** of the government agency/department/ministry at the national level in charge of e-government.

Government CIO office under the Ministry of Economic Affairs and Communications – is led by Government CIO (officially titled as Deputy SG for IT & Telecom) and comprises of departments under his leadership (currently: the Department of State Information Systems and the Department of Information Society Services Development) <https://www.mkm.ee/en/contact>. The CIO is in charge of digital government and society, also telecommunications and post areas. His role is to set the strategy and policies, to launch and steer strategic development initiatives and regulation, to represent the government in EU and other international organisations or collaboration in his domain.

Also, the **Estonian Information System Authority (RIA)** <https://www.ria.ee/en.html> is under the domain of the ministry and the Government CIO. RIA coordinates the development and administration of the state's information systems and functions as the national cybersecurity agency. RIA develops and manages secure data exchange (X-Road, document exchange) between institutions, an overview of state information systems and data (RIHA), the use of electronic identity, the functioning and protection of the state broadband network, organisation of e-elections, the activities of the State Portal eesti.ee, and the work of the ID card help centre. RIA coordinates the safe implementation of IT infrastructures important for the state and conduct supervision and monitors the Estonian computer network and solves cyber incidents.

URL-s: <https://www.mkm.ee/en>; <https://www.ria.ee/en.html>

4. Does your country have a **Chief Information Officer (CIO)**⁵ to manage national cross-agency e-government programs/strategies?

⁵ **CIO** or a similar senior official with a leadership role, sometimes referred as Chief Technology Officer (**CTO**) or Chief Digital Officer (**CDO**)

Name:	Siim Sikkut
Title:	Government CIO / Deputy Secretary General for IT & Telecom
Organization:	Ministry of Economic Affairs and Communications
E-mail:	Siim.sikkut@mkm.ee
Phone:	(+372) 6256309

5. Please provide **names and URLs** of the government agencies/ministries/departments at the national level in charge of the following:

a. Planning and Development

[Ministry of Finance](#) and [related institutions](#), including the [Information Technology Centre](#) of the Ministry of Finance.

URL: <https://www.rahendusministeerium.ee/en>; <https://www.rmit.ee/>;
https://www.eesti.ee/eng/contacts/ministeeriumid_1/rahendusministeerium

b. Education

[Ministry of Education and Research](#) and [related institutions](#).

URL: <https://www.hm.ee/en>;
https://www.eesti.ee/eng/contacts/ministeeriumid_1/haridus_ja_teadusministeerium

c. Health

[Ministry of Social Affairs](#) and [related institutions](#), including [e-Health and Welfare Information Systems Centre](#) that is in charge of the development of Estonian e-health services and providing ICT services under the Estonian Ministry of Social Affairs, as well as the [Estonian Health Insurance Fund](#).

URL: <https://www.sm.ee/en>; <https://www.tehik.ee/>; <https://www.haigekassa.ee/en>

d. Social Protection and Welfare

[Ministry of Social Affairs](#) and [related institutions](#), including [e-Health and Welfare Information Systems Centre](#) that is in charge of the development of Estonian e-health services and providing ICT services under the Estonian Ministry of Social Affairs, as well as the [Social Insurance Board](#).

URL: <https://www.sm.ee/en>; <https://www.tehik.ee/>; <https://www.sotsiaalkindlustusamet.ee/en>

e. Employment and Decent Work

[Ministry of Social Affairs](#) and [related institutions](#), including [e-Health and Welfare Information Systems Centre](#) that is in charge of the development of Estonian e-health services and providing ICT services under the Estonian Ministry of Social Affairs, as well as the [Estonian Unemployment Insurance Fund](#).

URL: <https://www.sm.ee/en>; <https://www.tehik.ee/>; <https://www.tootukassa.ee/>

f. Environment

[Ministry of the Environment](#) and [related institutions](#), including the [Information Technology Center](#) of the Ministry of the Environment.

URL: <https://www.envir.ee/en>; <https://www.kemit.ee/>;

g. Energy/Water

Energy: [Ministry of Economic Affairs and Communications](#)
Water: [Ministry of the Environment](#)

URL-s: <https://www.mkm.ee/en/objectives-activities/energy-sector>; <https://www.envir.ee/en/water>

h. Finance/Taxation

[Ministry of Finance](#) and [related institutions](#), including [Estonian Tax and Customs Board](#)

URL: <https://www.rahandusministeerium.ee/en>; <https://www.emta.ee/eng>;

i. Industry/Trade

Industry: [Ministry of Economic Affairs and Communications](#), including [Enterprise Estonia](#). Enterprise Estonia (EAS) promotes business and regional policy in Estonia and is one of the largest institutions within the national support system for entrepreneurship by providing financial assistance, counselling, cooperation opportunities and training for entrepreneurs, research institutions, the public and non-profit sectors.

Trade: [Ministry of Economic Affairs and Communications](#) together with [Ministry of Foreign Affairs](#).

URL-s: <https://www.mkm.ee/en>; <https://www.eas.ee/?lang=en>; <https://vm.ee/en>;

II. Strategy and Implementation

6. Is there a **national development strategy** incorporating the [Sustainable Development Goals \(SDGs\)](#)?
(Maximum 250 words)

Estonia is currently working on drafting the “Estonia 2035” national strategy⁶ that is incorporating our approach to the SDG-s. The purpose of the strategy is to give a long-term, sustainable direction to the development of Estonia.

While Estonia is taking the approach not to have a separate implementation plan for the Sustainable Development Goals, in the current preparatory phase of “Estonia 2035” we are already taking into consideration how it can help effectuate the SDG-s. As of now, Estonia is planning to implement the SDG-s through sectorial development plans / national strategies. Thus, actually all new development plans to be adopted will have to take into consideration their part in implementing the SDG-s in their specific domain.

7. Is there a **national e-government strategy/digital readiness strategy** or equivalent? (Maximum 250 words)

In November 2013, the Government approved the Digital Agenda 2020 for Estonia⁷, which has been used to establish a well-working state information and communication technology environment. In 2018, the strategy underwent a mid-term review process.⁸ Today, the development plan provides the guidance for creating a well-operating national information and communication technology environment. The main goals include an ICT structure that fosters economic growth, national development and welfare of its population, increased number of jobs with higher added value, improved international competitiveness and better life quality, smarter governance and increased awareness of e-governance all over the world.

The strategy does not deal with detailed plans for uptake of ICT in different walks of life and policy areas such as implementation of ICT in healthcare or private enterprise. Instead, the national digital agenda gives overall direction and priorities to mature and secure environment for the widespread use and development of smart ICT solutions throughout the government and society. The overarching aim is to use ICT to support economic competitiveness and to achieve a rise in people’s well-being and effectiveness of public governance. The Digital Agenda includes more detailed sub-objectives in two fields: development of information society and increasing cyber security.

⁶ <https://www.riigikantselei.ee/et/Eesti2035>

⁷ See Information Society related activities: <https://www.mkm.ee/et/tegevused-eesmargid/infouhiskond>

⁸ The reviewed Agenda is available at: https://www.mkm.ee/sites/default/files/digitalagenda2020_final.pdf

URL: https://www.mkm.ee/sites/default/files/digitalagenda2020_final.pdf

8. Please check whichever applies.

National e-government strategy or equivalent:

- has an implementation plan.
- is aligned with the national development strategy
- is aligned with the Sustainable Development Goals (SDGs).
- is aligned with sub-national/local digital development strategy.
- has an emphasis on digital-first principle
- has an emphasis on digital by default; digital by design; mobile-first principle
- has an emphasis on once-only (data) principle
- has an emphasis to 'leave no one offline' or to 'leave no one behind'; or other specific measures to ensure e-government is accessible by the most vulnerable groups⁹
- makes specific reference to e-participation, digital inclusion and/or engagement.
- makes specific reference to the use of social media in the government.
- makes specific reference to the use of new technologies¹⁰ such as artificial intelligence, blockchain, big data

(If any checked, please explain further. Maximum 250 words)

- The eGovernment strategy¹¹ has an implementation plan for 2018-2022.¹² Furthermore, from 2020, we use Activity-based costing (ABC / "TERE" or "tegevuspõhine riigieelarve" in Estonian)¹³ meaning that the implementation plan of state budget is activity-based from 2020 and the implementation plan is annually renewed as part of medium-term budget framework (not compiled and adopted separately anymore).
- The Digital Agenda is based on the two key strategic objectives established in the competitiveness strategy "Estonia 2020"¹⁴: **to achieve growth of productivity through higher value-added goods and services, to increase total employment.** It is further in alignment with the "Sustainable Estonia 21"¹⁵ strategy as well as the UN's Sustainable Development Goals.
- Thus, the overall aim is, in fact, to support competitiveness and sustainably development. The Agenda states: "[...] the point of departure and general objective is the development of a mature and secure environment for the widespread use and development of smart ICT solutions. The overarching aim is to use ICT to support economic competitiveness and to achieve a rise in people's well-being and effectiveness of public governance."
- The principles marked above are all mentioned throughout the agenda, and, e.g., the once only principle is even embedded in national legal framework.¹⁶ Several principles have actions that are explicitly targeted to putting them into practice throughout the government. See, e.g., Sub-Field 1 of the Agenda: Developing Information Society¹⁷, Sub-Field 3 Smart Public Governance,
- Sub-national strategies stem from the national agenda.

⁹ Poor, immigrants, older persons, persons with disabilities, women, youth, indigenous people

¹⁰ Also referring to emerging technologies

¹¹ The Digital Agenda 2020 for Estonia, available at: https://www.mkm.ee/sites/default/files/digitalagenda2020_final.pdf

¹² Available only in Estonian at: <https://www.mkm.ee/et/tegevused-eesmargid/infouhiskond> (see Rakendusplaan 2018-2022)

¹³ https://www.mkm.ee/sites/default/files/content-editors/teenuse_moiste_tegevuspohise_riigieelarve_k.pdf

¹⁴ <https://www.riigikantselei.ee/en/supporting-government/national-reform-programme-estonia-2020>

¹⁵ <https://www.riigikantselei.ee/en/sustainable-development>

¹⁶ <https://www.riigiteataja.ee/en/eli/507072017004/consolide> and <https://www.riigiteataja.ee/en/eli/510072017007/consolide>

¹⁷ See also: <https://www.mkm.ee/en/objectives-activities/information-society/it-skills-and-knowledge>

III. Legal Framework

9. Is there any legal framework on:

- access to information such as Freedom of Information Act
- personal data protection including digital security
- open government data
- digital identity
- digital certification/signature
- e-procurement
- digitally publishing government expenditure¹⁸
- data interoperability
- digital government as a right

(If any checked, please provide name of the legislation and links. Maximum 250 words)

- Public Information Act: <https://www.riigiteataja.ee/en/eli/503012019004/consolide> (incl freedom of Information and open government data, data interoperability)
- Personal Data Protection Act: <https://www.riigiteataja.ee/en/eli/523012019001/consolide> (personal data protection) and Cybersecurity Act: <https://www.riigiteataja.ee/en/eli/523052018003/consolide> (digital security)
- Identity Documents Act: <https://www.riigiteataja.ee/en/eli/526042018001/consolide> (digital identity)
- Electronic Identification and Trust Services for Electronic Transactions Act: <https://www.riigiteataja.ee/en/eli/511012019010/consolide> (digital certification/signature)
- Public Procurement Act: <https://www.riigiteataja.ee/en/eli/525032019011/consolide> (e-procurement)
- State Budget Act: <https://www.riigiteataja.ee/en/eli/516012019011/consolide> and the 2019 State Budget Act (only available in Estonian: <https://www.riigiteataja.ee/akt/RES2019> (digitally publishing government expenditure)¹⁹
- Government regulation on State information system management system: <https://www.riigiteataja.ee/akt/129032016006?leiaKehtiv> (only available in Estonian) (data interoperability)²⁰

IV. Usage of online services

10. Do you collect usage statistics of e-government services?

- Yes No

11. If yes, do you publish results online and share those with the public institutions concerned? (Max. 250 words)

Information is accessibly in the State Services Catalogue: <https://www.mkm.ee/en/service-search>. It is a simple web-based tool to generate overview of public services. Public service is direct contact between some public sector institution and its clients: citizen, business or NGO. Catalogue is first of all meant for clients to find services what they are looking for. Secondly it aims to remind public sector who is it working for.

¹⁸ Related to SDG Indicator 16.6.1

¹⁹ See also state budget execution materials published since 2012, available at: <https://www.rahandusministeerium.ee/et/eesmargidtegevused/riigieclarve-ja-majandus/riigieclarve-ja-majandusulevaated> (only in Estonian).

²⁰ See also <https://www.ria.ee/en/cyber-security/it-baseline-security-system-iske.html>

Service catalogue is filled in by each authority. Every service owner is responsible for having up to date service information in catalogue. Centrally is service management and describing coordinated in by Information Society Services Development Department in Ministry of Economic Affairs and Communications.

In total there are about 40 institutions, 11 ministries using service. Project materials are available in Github²¹ (Estonian).

Furthermore, statistics about public services is collected via service catalogue. All data is publicly available via API.²²

For because information is publicly available everybody could use it make dashboards²³ for example.

Information about the Catalogue is accessible at: <http://mkm-itaio.github.io/catalogue/>.

We also collect X-Road v6 usage statistics: members networking visualization, instance EE²⁴.

Information on the information society services in general available: <https://www.mkm.ee/en/objectives-activities/information-society/information-society-services>.

Furthermore, once a year Statistics Office of Estonia conducts a study on the use of ICT-s in households as well as in companies.²⁵

V. User satisfaction

12. Do you measure satisfaction of citizens on e-government services?

Yes No

13. If yes, do you publish results online and share those with the public institutions concerned? (Max. 250 words)

The abovementioned Services Catalogue²⁶ is at first meant for clients to find the services they are looking for and secondly, it provides a tool for service owners in order to describe and manage public services. Every service owner is responsible for having up to date service information in the catalogue. It is managed centrally by Information Society Services Development Department in Ministry of Economic Affairs and Communications.

The Government Regulation "Principles for Managing Services and Governing Information" is in force in Estonia since June 2017. The Regulation sets out the main requirements for management and development of services and information governance in the public sector, including creating measurable or perceptible value for every target group services. Put simply, authorities are required by law to define their service target groups, describe services they offer via different channels and add KPIs to each service channel. All this is necessary for continuous improvement to the quality of services.

The Information Society Services Development Department also advises all authorities on implementing the provisions of the aforementioned Regulation to ensure that authorities interpret these in a uniform manner. Information regarding services and their quality is also shared in the Public Service Council, which is comprised of the representatives of ministries and is meant for supporting the holistic coordination of developing public services in Estonia.

Furthermore, here is access to visualisation of Estonian government services statistics, including user satisfaction, either towards all services (general), by ministry, or by institution is available at: https://ristohinno.shinyapps.io/Riigiteenused_dashboard/.

²¹ <https://github.com/MKM-ITAO/riigiteenused>

²² <https://www.riigiteenused.ee/api/et/all>

²³ https://ristohinno.shinyapps.io/Riigiteenused_dashboard/

²⁴ <https://logs.x-tee.ee/visualizer/EE/>

²⁵ See statistics regarding Information Technology at: <https://www.stat.ee/information-technology>

²⁶ <https://www.mkm.ee/en/service-search>

VI. Social Media

14. How does your government use social media at the national level to interact with and engage people in e-government activities? Please also explain if there were any guidelines for government officials on the use of social media. (Max. 250 words)

The Communications office of the Government Office coordinates horizontally government's communications activities.²⁷ Each ministry and state institution, including local government offices have their own public relations department and own social media channels (most often Facebook, Twitter accounts).²⁸

Additionally, the Digital Agenda 2020 for Estonia refers to the use of social media for more effective functioning and management of public sector institutions, including for **consultation on use of** (e-) services and that they can be made more effective with the use of ICT technologies, inter alia, social media.

What concerns use of social media by government officials, Estonia has a Code of Ethics for government officials²⁹ and an Officials' ethics Council³⁰ whose work also covers the use of social media guided by the principle of freedom of expression.

VII. New Technologies

15. Does your government have a **specific national strategy** on one or more of following new technologies?

- Artificial Intelligence (AI) Blockchain Big data Smart cities
 Robotics Internet of Things (IOT) Quantum computing Virtual reality
 Augmented reality Other:

(Please explain further including relevant links. Maximum 250 words)

Estonia is currently drafting the national strategy on AI. For this purpose, work is done in four different working groups: public sector, private sector, legal, and educational groups. The strategy will be published by May 2019.³¹ As we have made AI a priority topic on the national level based also in the Digital Agenda 2020 for Estonia³², we have stated in the agenda that the general objective is to have at least 50 use-cases of artificial intelligence in the public sector by 2020. We have launched an expert task force, led by Government Office and the Government CIO.

Additionally, the updated national Digital Agenda 2020 further specifies that in order to stimulate innovation, pilot projects for new technologies for the development of new solutions for the state information system and central components will be carried out, such as artificial intelligence, robotics, blockchain, the Internet of Things, and technologies that advance privacy. Even though Estonia does not have separate strategy documents for those new technologies, the working plan of the Government CIO Office features specific action plan in these areas.

Smart cities initiatives fall under the competence and strategies of local governments. One example here is the SmartEnCity project.³³ Estonia further has a Smart City Cluster designed to support the development of smart city solutions in order to improve the life quality in the cities, and also to accelerate the export of

²⁷ <https://www.valitsus.ee/en/press-information-contacts/government-communication>

²⁸ See for instance random selection: Ministry: <https://www.facebook.com/majandusministeerium/>; Local Government: <https://www.facebook.com/parnuofficial/>; Government: <https://twitter.com/StenbockiMaja>;

²⁹ https://www.rahandusministeerium.ee/sites/default/files/ametniku_eetikakoodeks_20.02.2017.pdf

³⁰ <https://www.rahandusministeerium.ee/et/riigi-personalipoliitika/avaliku-teenistuse-eetika>

³¹ See also www.kratid.ee, available only in Estonian.

³² https://www.mkm.ee/sites/default/files/digitalagenda2020_final.pdf

³³ <http://tarkartu.ee/eng/>; <https://smartencity.eu/>

enterprises.³⁴

16. Does your government have any government body³⁵ at the national level working specifically related to the new technologies? (Please explain further including relevant links. Maximum 250 words)

It is part of GCIO office work plan and mandate to steer across government the work on experimentation and adoption of new technologies – through pilot projects, funding mechanisms, technical assistance, evangelism, and more. At the same time, as all ministries are responsible for digitalisation in their own domain, they are in charge of applying new tech specifically in their field – under the steering of GCIO as explained.

VIII. Indicators

17. What is the percentage of the population³⁶ satisfied with their last experience of online public services? (Max. 250 words)

Comprehensive studies on general satisfaction rate are conducted in every few years. Last study available from 2015 indicated that the satisfaction rate had grown from 67% to 71% between 2012 and 2014. For entrepreneurs, the satisfaction rate was 70%, and among smaller companies a much higher 83%.³⁷ Local governments conduct their own satisfaction surveys on a more regular basis. The satisfaction rate of specific services / institutions can be identified through the State Services Catalogue³⁸ mentioned above under questions 11 and 13.

18. What percentage of your GDP is allocated for ICT investment in the public sector? (Max. 250 words)

In 2018, the central and local government combined allocated up to 1,4% equivalent of the state budget for ICT investment. The state budget for 2018 for 10,6 billion euros. Hence, **for ICT investments, Estonia spent about 150 million euros from the state budget** in 2018. Considering that in 2018, the GDP at current prices was 26 billion euros³⁹, it can be stated that **0,6% from the GDP was allocated for ICT investment in Estonian public sector.**

19. What is the proportion of persons employed in central government organizations routinely using ICTs? (Max. 250 words)

As the use of ICTs forms a normal part of day-to-day work in all central government organisations (no exceptions), the proportion would be 100%.

20. What is the proportion of persons employed in central government organizations routinely using the Internet? (Max. 250 words)

As the use of internet forms a normal part of day-to-day work in central government organisations, the proportion would be 100%. Even the Government's cabinet meetings are fully digitised since 2000.⁴⁰ As 99% of public services are available online 24/7, daily work routines require digital authentication and provision of signatures, for instance. Even the drafts laws are only available online⁴¹ and published legal

³⁴ <https://www.estonianclusters.ee/estonian-clusters-2/smart-city-e-and-m-services-cluster-2/>

³⁵ This can be an agency, cabinet, commission, committee, initiative etc.

³⁶ Related to SDG Indicator 16.6.2 Proportion of population satisfied with their last experience of public services. See for all indicators: https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%20refinement_Eng.pdf

³⁷ See for instance: <https://www.mkm.ee/et/uudised/rahulolu-eeesti-e-teenustega-kasvanud;>

https://mkm.ee/sites/default/files/aruanne2_2015.pdf;

https://www.siseministeerium.ee/sites/default/files/dokumendid/Uuringud/Regionaalhaldus_ja_maavalitsused/2014_elanike_rahulolu_kohalike_avalike_teenustega.pdf

³⁸ <https://www.mkm.ee/en/service-search>

³⁹ The value added in information and communication (10.6%), see at: <https://www.stat.ee/news-release-2019-022>

⁴⁰ <https://koosolekud.valitsus.ee/kabinet/>

⁴¹ <https://eelnoud.valitsus.ee/main#nzmpQhpE>

texts are also available only digitally via the State Gazette.⁴² The government officials use the government officials' self-service portal for administrative tasks, including training applications, managing holidays and work trips.⁴³

21. If any, what kind of indicators do you collect/use to track digital literacy at the national level? (Max. 250 words)

We use national statistics to keep track on digital literacy on high level – we especially look at internet usage rate, including in different age groups and other cohorts. Decrease of rate of nonusers has been set as one of headline goals of national digital agenda, too.

In 2018, 88% of 16–74-year-old residents of Estonia used the internet – compared to the previous year, this share increased by 1 percentage point. Of all internet users, 90% used the internet and 85% used computers daily, indicating that besides computers, internet users have started using the internet also on other devices such as smart phones, smart TVs, etc.⁴⁴

In addition, we regularly look at results of more precise digital skill surveys (e.g. PIIAC as well as newly introduced digital skills tests in general schools) to understand what skills people do concretely have beyond just internet use. In Estonia it is highly prioritized that children graduating from schools have sufficient level of digital skills relevant to their age. Accordingly, national level test is carried out to assess digital competence of students in the end of basic school, upper secondary school and similar level of vocational education (since 2018).

The OECD assessment instrument PIAAC has been used among adults to assess their competence for solving problems in technology-enriched environment (2015). Similar assessment was carried out among teachers in 2018.

Furthermore – the Statistics Estonia has monitored the following data sets on yearly basis:

1. Computer users aged 16-74 by computer skill and group of individuals and
2. Households having a computer and internet connection at home by type of household and place of residence
3. Computer and internet users aged 16-74 by group of individuals
4. Users of internet commerce aged 16-74 by group of individuals and last online purchase
5. Users of internet commerce aged 16-74 by group of individuals, frequency of buying/ordering and expenditure during the last three months

IX. International and Regional Cooperation⁴⁵

22. Is your government part of any sub-regional, regional or international cooperation on e-government? (Max. 250 words)

- Estonia is part of the **European Union** since 2004. During the Council of the EU Presidency in 2017, one of the priorities for Estonia was **A digital Europe and the free movement of data**.⁴⁶ Specifically in the sphere of eGovernment, under the Presidency, all the EU Member States and EFTA countries signed the Tallinn Declaration on eGovernment.⁴⁷ When it comes to day-to-day involvement, we are part of joint projects, cross-border interoperability initiatives (CEF, ISA2), and at the policy level belong to the eGovernment Steering Board, etc.
- Estonia is part of the **OECD** since 2010. Since 2018, the Government CIO of Estonia chairs the

⁴² <https://www.riigiteataja.ee/index.html>

⁴³ <https://www.riigitootaja.ee/rtip-client/login>

⁴⁴ See more at: https://www.stat.ee/valjaanne-2018_eesti-statistika-kvartalikirj-2-18; see also:

<https://www.hm.ee/en/activities/statistics-and-analysis/piaac>

⁴⁵ WSIS Action Line C.11 - International and regional cooperation - <https://publicadministration.un.org/wsis10/WSIS-Action-Lines-and-Facilitators>

⁴⁶ <https://www.eu2017.ee/node/921.html#data>

⁴⁷ <https://ec.europa.eu/digital-single-market/en/news/ministerial-declaration-egovernment-tallinn-declaration>

OECD's e-leaders group – officially called Working Party of Senior Digital Government Officials.

- Estonia is the founding country of **Digital 9**⁴⁸, a collaborative network of the world's leading digital governments with a common goal of harnessing digital technology to improve citizens' lives (established in 2014).
- Estonia is part of the Nordic-Baltic Nordic Council of Ministers for Digitalisation 2017-2020 (**MR-DIGITAL**) since its formation in 2017.⁴⁹ MR-Digital is working on cross-border digitalisation projects including eID, digital services, 5G development, as well as AI.
- Nordic Institute for Interoperability Solutions (**NIIS**) is an association founded jointly by Estonia and Finland, with Iceland and others on track to join in. Its mission is to ensure the development and strategic management of the X-Road (the core data exchange platform) and other cross-border components for eGovernment infrastructure. This, in fact, makes Estonia is the first in the world to interconnect decentralized components of the state and public sector databases on an international level. A public sector data exchange facility between Finland and Estonia was created in 2017.
- Estonia also is the location for the **NATO Cooperative Cyber Defence Centre of Excellence**⁵⁰ as well as the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (**eu-LISA**)⁵¹.

23. Is your government offering (or planning to offer) support to other countries in the area of e-government? (Max. 250 words)

- Estonia has been active in disseminating and assisting the development of e-Government solutions globally.
- On government level, we regularly share our practices and experience with other governments – during their study visits to Estonia, sometimes concrete technical assistance programmes or trainings, etc.
- In addition to work done at the government level, Estonian experts, from e-Governance Academy and private companies, have been transferring Estonian digital know-how and solutions to around 130 countries around the world.
- Government of Estonia has also invested our development cooperation funds and assistance into digital government and cybersecurity capacity building around the world. We have consistently voiced our view that globally more funds and attention should be targeted into this area, especially keeping in mind the Sustainable Development Goals. Considering this, Estonia proposed the launch of a Global Digital Government Fund in 2019, through which Estonia's e-solutions could be exported to at least 60 countries around the world.⁵²

Today, Estonia has shared its e-governance journey with 60 governments and exported its solutions to over 130 countries around the world. For example, it has exported its digital knowledge to Finland, Oman, Ukraine, the Faroe Islands, Macedonia, Albania, Moldova, Palestine, Montenegro, Namibia, Tunisia, Georgia, Armenia, Iceland, India, Cyprus and Azerbaijan among the others.⁵³

⁴⁸ Website under development, meanwhile Wikipedia article can be used as a reference:

https://en.wikipedia.org/wiki/Digital_9.

⁴⁹ <https://www.norden.org/en/mr-digital>

⁵⁰ <https://ccdcoe.org/>

⁵¹ <https://www.eulisa.europa.eu/>

⁵² <https://e-estonia.com/global-digital-society-fund/>; <https://www.mkm.ee/et/uudised/eesti-digiriigi-eksportimiseks-soovitakse-luua-fond>

⁵³ Supporting development initiatives with developing countries include:

- Support for small island developing countries - funded by the Estonian MFA (and Australian MFA) and implemented by the E-Governance Academy Foundation. Aim is to capacitate the ICT sector of SIDS. The project "Awareness Raising of Pacific Island Development Aid Countries on Digital Service Delivery Opportunities" was launched in 2018 and has the objective to build the e-governance capacity in the Indo-Pacific region. The project will take place in Fiji, Samoa, Vanuatu, Solomon Islands, Papua New-Guinea, Tonga. The project will last until 2019.
- Estonia-UNDP cooperation (November 2018 - December 2019) that aims to support digital transformation as a

24. Are there any ongoing public-private partnerships and multistakeholder partnerships, focusing on e-government? (Max. 250 words)

In Estonia, the development of digital government and its solutions has always been a joint effort effectuated through public-private-partnerships. Our IT sector has over 20 years of expertise and experience in automating public and private sector services. Today, our ICT Cluster is a crucial partner developing Estonia's e-governance solutions.⁵⁴ Whether it's the development of x-Road, the national data exchange layer, issuing certificates⁵⁵ for national identity documents, forming a strong partnership between public and private companies for creating the Look@World Foundation⁵⁶ for raising ICT awareness in Estonia, developing KSI blockchain⁵⁷ as a result of 2007 cyber attacks in Estonia, or organising cyber exercises⁵⁸, our public sector is engaged in continuous cooperation with the private sector.

Furthermore, the Prime Minister meets regularly with representatives of start-up companies to discuss possibilities of making the Estonian start-up field more attractive – several proposals for changing legislations more entrepreneur-friendly will soon be applied.⁵⁹

Due to the absence of a specific law for PPPs and concessions, private participation in infrastructure projects is largely regulated by the Public Procurement Act.⁶⁰

X. Contact and Additional Information

Name:	Sandra Särav
Title:	Global Affairs Director of Government CIO Office
Email:	Sandra.sarav@mkm.ee
Organization:	Ministry of Economic Affairs and Communications

1. Please select whichever applies:

- A group of government agencies responded to the questionnaire collectively.
- I am authorized and fully knowledgeable to respond to this questionnaire.
- I did not have the full information to respond to this questionnaire
- I mostly provided my own opinion/assessment rather than official information.
- Other: (Max. 250 words)

pathway for advancing sustainable development across regions. The cooperation leverages the e-governance experience of Estonia, which helped Estonia evolve from being recipient of development aid to donor. The cooperation will advance knowledge exchange and collaboration among the wider UN membership, assist effort to build capacities of developing countries to transform their own societies and economies through development-anchored digital strategies, and help share the digital foundation of efficient and effective governance systems and mechanisms crucial to inclusive and lasting progress.

- Estonia – African Union cooperation program on the basis of a MoU signed in 2017 aiming at: supporting e-Governance and Digital Transformation in Africa; developing secure data exchange and interoperability solutions; raising awareness on Cyber Security; establishment of the African Union e-Governance training programs and regional competence hubs for the AU Member States, promoting cooperation of ICT companies for implementing e-services.

⁵⁴ <https://e-estonia.com/solution/>

⁵⁵ <https://www.sk.ee/en/about/>

⁵⁶ <http://www.vaatamaailma.ee/>

⁵⁷ <https://e-estonia.com/wp-content/uploads/faq-ksi-blockchain-1-1.pdf>

⁵⁸ <https://e-estonia.com/cyber-exercise-for-private-sector-tallinn/>

⁵⁹ <https://www.valitsus.ee/en/news/ratas-competitiveness-estonian-start-environment-can-be-further-enhanced>

⁶⁰ <https://www.riigiteataja.ee/en/eli/ee/505092017003/consolide/current>

United Nations E-Government Survey 2020 - Member States Questionnaire (MSQ)

2. How did you hear about this questionnaire?

- Directly from UN DESA
- From the Mission of my country to the United Nations
- United Nations E-Government Survey website
- LinkedIn
- Facebook
- Other: *(Max. 250 words)*

Thank you for taking the time to fill out the Member States Questionnaire (MSQ) 2020.
We appreciate your participation.