



# eGovernment in Estonia

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Joinp

- 1. An observatory on interoperability, e-government, e-inclusion and e-health
- 2. A collaborative platform of open communities
- 3. A repository of interoperability solutions

This document is meant to present an overview of the eGoverment status in this country and not to be exhaustive in its references and analysis. Even though every possible care has been taken by the authors to refer to and use valid data from authentic sources, the European Commission does not guarantee the accuracy of the included information, nor does it accept any responsibility for any use thereof.

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## **Country Profile**

**Basic data and indicators** 

## **Basic Data**

Population (1 000): 1,315,819 inhabitants (2014) GDP at market prices: 18,739 million Euros (2013) GDP per inhabitant in PPS (purchasing Power Standards EU 28=100): 72.8 (2013) GDP growth rate: 1.6 % (2013) Inflation rate: 0.5 % (2014) Unemployment rate: 8.6% (2013) General government gross debt (Percentage of GDP): 10.1% (2013) General government deficit/surplus (Percentage of GDP): -0.5% (2013) Area: 45,227 km2 Capital city: Tallinn Official EU language: Estonian Currency: EUR Source: Eurostat

## **Political Structure**

Estonia is a parliamentary republic.

Legislative power lies within the unicameral Parliament, called the State Assembly (*<u>Riigikogu</u>* in Estonian). The Assembly has 101 members, elected by popular vote, to serve four-year terms. Members are elected on the basis of a proportional system, and a 5 % splinter party threshold applies for those wishing to take part in parliamentary activities.

Estonia's Head of State is the <u>President</u>, elected for a five-year term by the *Riigikogu*. The <u>Government</u>, exercising executive power, is formed by the <u>Prime Minister</u>, nominated by the president and a total of 14 ministers. The Government is appointed by the President with the approval of the Parliament.

Estonia is divided into 15 counties and 227 urban and rural municipalities (towns and parishes), whose powers and responsibilities are established by the Local Government Organisation Act of June 1993. The Government of each county is led by a County Governor, who represents the national Government at regional level and is appointed by the Central Government for a term of five years. Local self-government is exercised solely at the municipal level.

The <u>Constitution</u> of the Republic of Estonia was adopted on 28 June 1992.

Estonia became a member of the European Union on 1 May 2004.

Head of State: President Toomas Hendrik Ilves (since 9 October 2006).

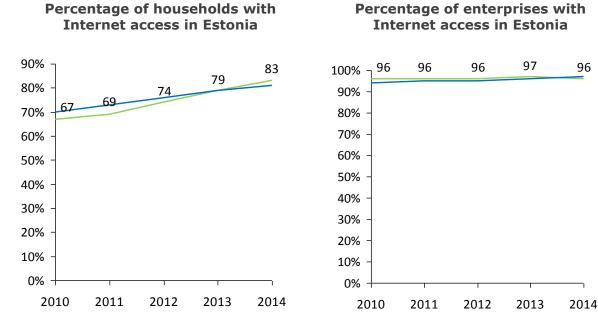
Head of Government: Prime Minister <u>Taavi Rõivas</u> (since 26 March 2014).



## **Information Society Indicators**

## **Generic Indicators**

The following graphs present data for the latest Generic Information Society Indicators for Estonia compared to the EU average. Statistical indicators in this section reflect those of <u>Eurostat</u> at the time the Edition is being prepared.

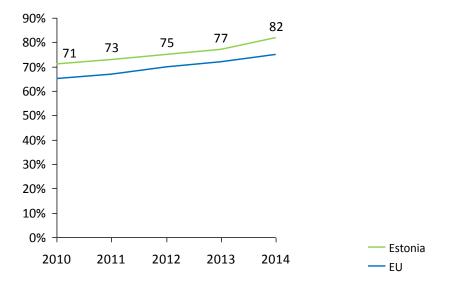


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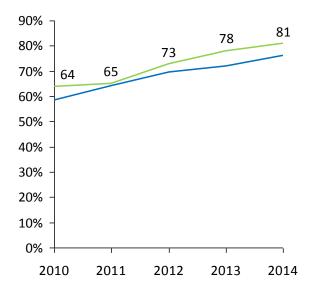
#### Percentage of individuals using the internet at least once a week in Estonia



Source : http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc\_bdek\_di&lang=en



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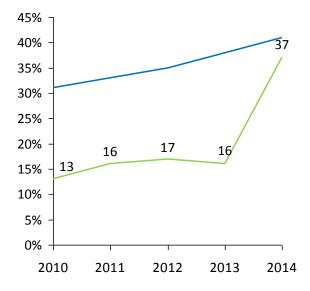


## Percentage of households with a broadband connection in Estonia

Source :

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=iso c\_r\_broad\_h&lang=en

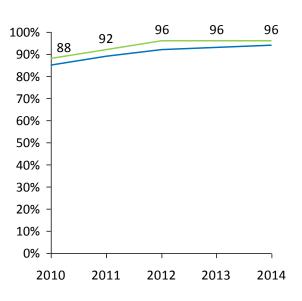
#### Percentage of individuals having purchased/ordered online in the last three months in Estonia



Source:

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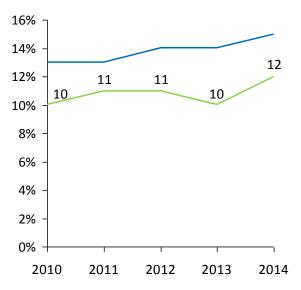
## Percentage of enterprises with a broadband connection in Estonia



Source:

 $\label{eq:http://appso.eurostat.ec.europa.eu/nui/show.do?dataset=iso c_bde15b_e&lang=en$ 

#### Percentage of enterprises having received orders online within the previous year in Estonia



Source :

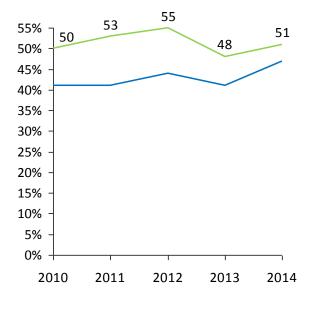
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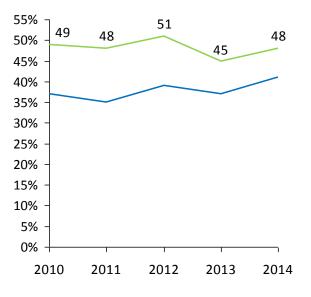
## eGovernment Indicators

The following graphs present data for the latest eGovernment Indicators for Estonia compared to the EU average. Statistical indicators in this section reflect those of <u>Eurostat</u> at the time the Edition is being prepared.

## Percentage of individuals using the internet for interacting with public authorities in Estonia



# Percentage of individuals using the internet for obtaining information from public authorities in Estonia



Source :

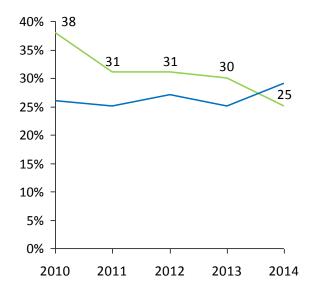
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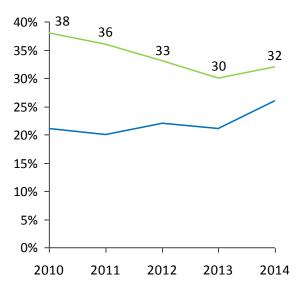
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----- Estonia ----- EU

## Percentage of individuals using the internet for downloading official forms from public authorities in Estonia



#### Percentage of individuals using the internet for sending filled forms to public authorities in Estonia



Source:

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## eGovernment State of Play

The graph below is the result of the latest <u>eGovernment Benchmark<sup>1</sup></u> study, which monitors the development of eGovernment in Europe, based on specific indicators. These indicators are clustered within four main top-level benchmarks:

- **User Centricity** indicates to what extent (information about) a service is provided online and how this is perceived.
- **Transparent Government** indicates to what extent governments is transparent regarding: i) their own responsibilities and performance, ii) the process of service delivery and iii) personal data involved.
- **Cross Border Mobility** indicates to what extent EU citizens can use online services in another country.
- **Key Enablers** indicates the extent to which 5 technical pre-conditions are available online. There are: Electronic Identification (eID), Electronic documents (eDocuments), Authentic Sources, Electronic Safe (eSafe), and Single Sign On (SSO).

These top-level benchmarks are measured using a life-events (e.g. mystery shopping) approach. The following life-events were used for measuring the eGovernment Benchmark top-level indicators: Business start-up and early trading operations, Losing and Finding a Job, Studying, Regular business operations, Moving, Owning and driving a car, and Starting a small claims procedure. The figure below presents the development of eGovernment in Estonia compared to the EU average score.



Source: http://ec.europa.eu/information\_society/newsroom/cf/dae/document.cfm?doc\_id=5550

<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/information\_society/newsroom/cf/dae/document.cfm?doc\_id=5812

## eGovernment History

Main developments and key milestones (in reverse chronological order)

For the latest developments, see: <u>Joinup news</u>.

## **Recent News**

## February 2015

General elections are held in Estonia. At the time of updating this document, the percentage of internet voters (i-voters) in the total number of voters is not yet clear, but a new i-voting record has again clearly been set with 176491 voters having cast their vote electronically.

The Minister of Economic Affairs and Communications and the Minister of Education and Research sign the Science and Technology Pact. The pact is a cooperation agreement between the government, local authorities, educational institutions, the private sector and non-governmental organisations to support the technology and engineering fields. The aim of the Science and Technology Pact is the sustainable development of education and entrepreneurship in the field, as well as the supply of an adequate workforce.

## January 2015

The Minister of Economic Affairs and Communications signs an ambitious plan to increase digital literacy in Estonia, funded by the EU Social Fund. The plan foresees a myriad of reand upper-skilling projects with dual aims of increasing both basic computer literacy skills and fostering the development of ICT-skills for specialists within other sectors.

The Ministry of Economic Affairs and Communications starts cooperation with the University of Oxford (UK) to study the implications of information society and cyberspace and to pass that knowledge on to Estonian students outside ICT-subjects. This is a cutting-edge project being the first systematic research and teaching initiative dedicated to cyber issues within political science at any of the world's major universities.

## December 2014

Estonia becomes a founding member of the D5 alliance of leading e-governance countries. The purpose of the alliance, established in 2014 in London, is to exchange experience about information society and the e-state.

In 2015, D5 will focus on the following topics: best practices of IT procurement, programming studies for children, and connectivity (Internet availability and quality). The 2015 summit of D5 will be held in Estonia.

In addition to Estonia, the network includes the United Kingdom, South Korea, Israel, and New Zealand.

The Government of the Republic approves a Green Paper on Open Data elaborated at the leadership of the Ministry of Economic Affairs and Communications. In addition, a new improved version of open data gateway at <u>https://opendata.riik.ee/ goes live.</u>



## November 2014

Estonia becomes the first country in the world to issue e-residency. People from all over the world now have an opportunity to get digital identity provided by the Estonian government in order to get secure access to world-class digital services from wherever you might be.

E-residency is a state-issued secure digital identity for non-residents that allows digital authentication and the digital signing of documents.

An e-resident will be a physical person who has received the e-resident's digital identity (smart ID-card) from the Republic of Estonia. This will not entail full legal residency or citizenship or right of entry to Estonia.

Instead, e-residency gives secure access to Estonia's digital services and an opportunity to give digital signatures in an electronic environment. Such digital identification and signing is legally fully equal to face-to-face identification and handwritten signatures in the European Union.

## October 2014

The e-Governance Academy of Estonia enters into an agreement with the government of Namibia for the implementation of a data exchange layer similar to X-Road in Namibia over the next two years.

The X-Road will enable Namibian public sector institutions to make secure, Internet-based crossover use of data from different institutions and to develop e-services for the country's residents and companies. Estonia has assisted in the development of an information system similar to the X-Road in Azerbaijan and is currently helping Palestine on this issue.

## September 2014

The Government approves the Cyber Security Strategy for 2014–2017 with the objective of increasing the capacity of the state in the area of cyber security and raising the awareness of the population of cyber risks.

The strategy focuses on ensuring the provision of vital services, raising the efficiency of combating cyber-crimes and development of the national defence capacity. The additional supporting activities are the development of the legal framework, improvement of international cooperation, raising the awareness and ensuring the availability of experts and solutions for cyber security.

## July 2014

An eHealth Task Force is set up at the leadership of the Government Office with a goal to develop a strategic development plan for Estonian eHealth until 2020.

The role of the Task Force is to develop an Estonian eHealth Strategic Development Plan until 2020 along with development activities, a financing plan and a detailed implementation plan for 2015 - 2017.

## June 2014

From June 2014, all ministries 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.

## April 2014

On April 23-30, the first ever <u>Tallinn ICT Week</u> is held in Tallinn. A number of different seminars, conferences and workshops aimed at different target groups, e.g. ICT sector, other sectors of economy, start-up community, policy-makers from all over the world etc is held throughout the week. One of the central events of the ICT Week is the <u>Nordic Digital Agendas Day</u>, organized at the initiative of the Ministry of Economic Affairs and Communications. During the conference, ICT policy-makers from all Nordic countries share their experience in developing information society and discuss regional co-operation in the field. The week ends with a high-level freedom online conference "<u>Free and secure internet for all</u>", organized in co-operation with the Ministry of Foreign Affairs of Estonia and the Freedom Online Coalition.

## March 2014

A new Tallinn-Helsinki cross-border fibre connection is launched between EEnet and Funet, the Estonian and Finnish national research and education networks. The new high capacity optical fibre connection between the two capitals provides major improvement of the available network transmission capacity between the Estonian and Finnish research and education networks. For more information, please see <u>here</u>

The world's most popular programming tool Codecademy.com is now available also in Estonian. The project was carried out at the initiative of the Information Technology Foundation for Education to facilitate teaching and learning of code-writing both in educational institutions and on a wider scale in society. Estonian is one of the first working languages of Codecademy after English language. For more information see <u>here</u>.

## January 2014

The Estonian education minister Jaak Aaviksoo and Finnish education minister Krista Kiuru sign a co-operation memorandum on the <u>creation of a joint Estonian-Finnish Education</u> <u>Cloud</u>. The cloud provides a digital environment for stud materials and good practices, which supports better learning and is open for all students and teachers.

## December 2013

The prime ministers of Estonia and Finland conclude the <u>first digitally signed</u> <u>intergovernmental agreement</u> (Memorandum of Understanding) focusing on joint development of e-services between the two countries. One of the central elements of the memorandum foresees that the state data exchange layer, known in Estonia as the X-Road, will be developed jointly with Finland in the future.



## November 2013

Digital Agenda 2020 for Estonia together with implementation plan for 2014-2015 is approved by the Government of the Republic. The general objective of the Estonian new ICT policy is to ensure a well-functioning environment for the widespread use and development of ICT-solutions, contributing thereby to the economic growth, better public administration and greater well-being of people. The document sets out actions in four target areas: ICT infrastructure, better ICT skills, smarter governance and public administration, and greater awareness of e-Estonia in the world. The strategy that was elaborated in close co-operation with representatives of the private and the non-governmental sector also sets out a vision for information society 2020.

An ambitious project entitled Nutikaitse 20017 is initiated in co-operation between the public and the private sector. The aim of the project is to promote safer use of smart devices and development of secure mobile services. For more information see <u>here</u>.

## October 2013

On October 7, 2013, a specific programme is approved for carrying out different projects aimed at increasing the efficiency and effectiveness of public services via ICT tools. The programme is initiated and implemented at the leadership of the Ministry of Economic Affairs and Communications.

## September 2013

Neelie Kroes, the Vice-President of the European Commission, visits Estonia in order to discuss the development of the digital single market as well as issues related to increasing competitiveness, simplifying doing business and reducing bureaucracy through the use of e-solutions.

When presenting the development of e-services in Estonia to Kroes, the Prime Minister of Estonia, Andrus Ansip, gave her a personalised test-ID card as a gift and the Commissioner could try giving a digital signature, while seeing its simplicity and performance. The goal of Estonia is to reach the recognition and use of digital signatures across Europe.

## May 2013

On May 16, 2013 the Government of the Republic approves the Green Paper on the Organisation of Public Services in Estonia. The document:

- establishes the definition of "public service";
- identifies problems faced by citizens and enterprises in the usage of central and local government services;
- proposes solutions.

On the same month, the Director General of the Estonian Information System's Authority (<u>RIA</u>), Jaan Priisalu, and the Head of the State Portal (<u>eesti.ee</u>), Mihkel Tikk, <u>meet</u> the President of the Portuguese Agency for the Modernisation of the Public Administration (<u>AMA</u>), Paulo Neves, and its representatives. The purpose of the meeting is to exchange best practices on the modernisation of the two states' public administration.

AMA representatives are particularly interested in RIA's Document Exchange Centre (Dokumendivahetuskeskus - DVK, in Estonian). This is an information system that provides



a common central document exchange service for various document management systems as well as other information systems that handle documents. In addition, both RIA and AMA representatives agree to deepen collaboration and make a formal proposal to sign a memorandum of cooperation.

## April 2013

Annual information society conference is held at the initiative of the Ministry of Economic Affairs and Communications. This year's event is designed to contribute to the elaboration of the new ICT strategy and focuses, thus, on the priorities and objectives of information society development in the next seven years.

In the framework of the conference, the winners of a competition "Best e-services in Estonia" were announced. The overall winner of the contest, a company offering money transfer service - Transferwise - was also nominated for the World Summit Award, where it was chosen as one of the 40 best e-services in the world.

## March 2013

The Estonian State Portal <u>eesti.ee</u> celebrates its 10th anniversary.

## February 2013

Estonia and the UK sign a <u>memorandum of understanding</u> for the two countries to exchange experience in creating user-friendly public e-services.

During the same month, a <u>study</u> by the Ministry of Economic Affairs and Communications reveals that the use of electronic solutions has changed the way public services work by being 12 times faster and of higher quality than the conventional services.

Margus Püüa, Ministry's State Information Systems department mentions that despite the limited research conducted so far, a substantive impact analysis pertaining to the use of and satisfaction with eServices has yet to be conducted. He adds that the purpose of the study is to develop a method and use it to assess how much time and money eServices can save.

## News 2012-2001

## 2012

On *27 September 2012*, the Government approves a proposal, drafted by the Estonian Information Society Strategy 2014-2020, which will constitute the basis for the Ministry of Economic Affairs and Communications (Majandus- ja Kommunikatsiooniministeerium - MKM, in Estonian) to prepare a new <u>Information Society Strategy 2020</u>. The greatest benefits of this development include: good Internet accessibility, the use of services to support the development of state information and security for citizens and businesses, as well as the development of electronic services.

In February 2012, since the launch of the national eID card ten years ago (28 January 2002), around 1.6 million cards have been <u>issued</u>, and citizens have well integrated their use into their daily lives. Ms Tatjana Portnova, Estonian Police and Border Guard



Board's service centre director says that people have been showing a multiplied interest in the use of the eID card, on a daily basis.

- ▶ A new version of the State Portal '<u>eesti.ee'</u> goes live in November 2011. The development of the portal, led by the State Information System's Authority is based on user involvement and their feedback. One of the major benefits of the new version is that search for information is much faster, as articles, services and contacts are better interconnected.
- During the same month, Tallinn, the capital of Estonia, is awarded with the European Public Sector Award 2011 for citizen eServices.
- On 9 September 2011, a Memorandum on Mutual Assistance is signed between Estonia and Greece. The objective of the co-operation was the reduction of corruption and bureaucracy through ICT.
- Between 26-28 September 2011, an international eGovernment conference ICEGOV (International Conference on Theory and Practice of Electronic Governance) is organised under the auspices of the UN and held in Tallinn, Estonia.
- On 27 September 2011, the annual information society conference was held in Tallinn, focusing on copyright in the information society, aiming to analyse the topic from a balanced viewpoint, taking into account the interests and rights of creators, users and the industry.
- In August 2011, the <u>Information Society Yearbook 2010</u> is compiled by the Department of State Information Systems, Ministry of Economic Affairs and Communications. The Information Society yearbook of 2011-2012 is also <u>available</u>.
- Estonia's <u>eAnnual reporting</u> environment, which enables entrepreneurs to file annual reports electronically is voted and announces a **winner** in the category of 'eGovernment & Institutions' at the global eContent contest <u>World Summit Award</u> (WSA) 2011 on *16 June 2011*. The eReporting environment enables entrepreneurs to submit their compulsory annual reports via the <u>eBusiness Registry Company Registration Portal</u>.
- Following a reorganisation on 1 June 2011, the public authority in charge of Estonia's information systems' security, is renamed from Estonian Informatics Centre to Estonian Information System's Authority (EISA). It will help with and monitor the security of the information systems of private and public sector organisations. It has 11 main functions, but the reorganisation primarily affected the two departments dealing with information security. These are:
  - The <u>Department of Critical Information Infrastructure Protection</u> (CIIP) evaluates the security of information systems in Estonia and carries out risk assessments.
  - The <u>Computer Emergency Response Team Estonia</u> (CERT-EE) handles security issues involving the '.ee' domain.
- In April 2011, a new information system for the management of draft laws is launched. The <u>Draft Information System</u> (*Eelnõude Infosüsteem* - EIS) provides access to all draft laws and other documents that have been submitted by government bodies for consultation and approval or sent to the Government.
- On 6 March 2011, Parliamentary Elections are held in Estonia. For the fifth time in a row, Estonians are able to cast their votes over the Internet during the advanced polling days from 28 February to 2 March 2011.
- The Estonian Government launched the <u>Rural Municipality Portal</u> in *February 2011*. The Portal aims to increase the **transparency** of local governments and expand citizen



participation. The service portal is based on an open source content management tool which allows for easy and uniform site administration.

- On 1 February 2011, the Estonian Police and Border Guard (Politsei- ja Piirivalveamet) made available a new type of digital identity, the mobile-ID, which enables users to provide electronic identification and a digital signature using a mobile phone.
- On 31 January 2011, the Estonian Unemployment Insurance Fund opens its <u>self-service</u> <u>employment portal</u> for public testing. Anyone interested could find and view in the portal public-sector job vacancies. Users can log in by using their ID-card or mobile-ID and then create their own CV, apply for jobs, manage their own work requests, review the statements made to the Unemployment Insurance Fund about the outcomes and decisions, and inform them of any changes to their data or situation.
- In 2011 good progress is <u>made</u> towards the goals of the <u>Estonian broadband strategy</u>, EStWin, aiming to build a country-wide broadband network capable of delivering 100 Mbps connections to the majority of Estonian households and businesses by the end of 2015. The Estonian Broadband Development Foundation (ELA) will be responsible for the EstWin, a project with the aim of <u>bringing</u> the new generation broadband networks into every home, business and institution and so eliminating the digital divide between the Estonian countryside and the biggest cities.

- Since August 2010, the section of the <u>'Eesti.ee</u>', aimed at companies is updated and translated into English to promote cross-border business and public services to the benefit of European companies. The section for companies of <u>'Eesti.ee</u>' works as a Point of Single Contact that enables service providers operating all over Europe to solve the formalities needed for starting or continuing their business activities in the European Union (EU).
- 'Diara' is an open source application that allows public administrations to use the Internet in order to organise polls, referenda, petitions, public inquiries as well as to record electronic votes using electronic identity (eID) cards; its first version went <u>online</u> at the end of *August 2010*.
- On *1 July 2010*, Estonia switches to **digital-TV**.
- On 5 July 2010, new domain rules come into force in Estonia, making the '.ee' country code top-level domain (ccTLD) significantly more accessible. While according to the previous rules, only companies could obtain '.ee' domains, private individuals and foreigners will now be able to obtain them too. In addition, a person will be able to register several domains. The new regime introduces a dual-level registration, the interaction with registrants being delegated to registrars by the Estonian Internet Foundation.
- According to the findings of a research study executed in June 2010, 75 % of the Estonians who used the public electronic services are very satisfied. 1 020 Estonian residents were interviewed for this study, in the framework of the 'Information society awareness' campaign, which is funded by the European Union Structural Funds in Estonia.
- The Estonian Government approved on 1 April 2010 an amendment bill to the <u>Electronic</u> <u>Communications Act</u> and the <u>Information Society Services Act</u> regulating the use of individuals' electronic contact data for sending out commercial emails.
- ▶ In *February 2010*, the Government of Estonia approves the <u>Implementation Plan for</u> <u>2010-2011</u> of the Estonian Information Society Strategy 2013.



- In January 2010, a digital prescriptions system is launched in Estonia, freeing the patients from the fear of losing or forgetting their paper prescriptions and considerably reducing the time doctors and pharmacies spend on them.
- A month-long campaign entitled **'Gateway to eEstonia'** is launched in *January 2010* to promote State Portal <u>eesti.ee</u> both to the general public and to service providers. The campaign's objective is to increase users' awareness of the portal and invite them to provide feedback on how to improve the website and increase its user-friendliness.

### 2009

- On 1 October 2009, the Estonian Informatics Centre EIC (*Riigi Infosüsteemide Arenduskeskus* RIA) opened its Department for Critical Information Infrastructure Protection (CIIP). CIIP aims to create and run the defence system for Estonia's critical information infrastructure.
- In August 2009, Estonia's largest ICT companies establish the Estonian Broadband Development Foundation with the objective that the basic infrastructure of the new generation network in Estonian rural areas is developed by the end of 2015.
- In July 2009, the Government of the Republic approved the amended version of the 'Estonian Information Society Strategy 2007-2013'. The update concerns measure 4.1.1, 'Broadening technological access to digital information' to which a chapter was added on the development of broadband internet. In addition, the Estonian 'Rural Development Plan 2007-2013' is amended in the summer of 2009 to allow for the use of resources of the EU recovery package.
- During the second week of May 2009, the first company in Estonian business history is created in the Company Registration Portal with a Finnish ID card, without the founders of the company having had to leave their desks to have the company officially registered in Estonia. The Estonian Company Registration portal which opened to the users of Finnish ID-cards at the end of last year also accepts digital signatures from Portugal, Belgium and Lithuania.

- In August 2008, entrepreneurs are invited to activate their email address on the <u>eGovernment Portal</u> to avoid **company identity theft** and detect it when it occurs. Businesses which subscribe to the service will receive an automatic notification when the Commercial Register receives an application for altering an entry.
- In May 2008, the Estonian Government adopts a Cyber Security Strategy. Cyber security in Estonia is primarily based on reducing the vulnerability of the cyberspace in the nation as a whole. This is accomplished through the implementation of domestic action plans, but also through an active international cooperation which supports the enhancement of cyber security.
- Since April 2008, residents of the Estonian capital city, Tallinn, can apply for and renew parking permits electronically on <u>https://www.parkimine.ee/en</u> using their eID card, Mobile-ID or Internet banking authorisation codes. The payment of the granted permits is performed online.
- As of 15 February 2008, Estonians have made use of the improved Tax and Customs Board's online <u>service</u> to submit their **tax returns** electronically can benefit from refunds well before those who have chosen to complete theirs on paper.

- During the *last quarter of 2007*, a new version of the <u>Estonian State portal</u> results from the merge of the former State Information portal and the Citizen portal, created a single integrated service. Access to information and eServices on the new portal depends on whether the user is a citizen, entrepreneur or State official.
- During December 2007, a new, user-friendly tax and customs web service is launched. Following a consultation period with Internet users, the website's sections have been designed to match the needs of different user groups, whether they are private persons or representatives of legal entities.
- In November 2007, the Ministry for Economic Affairs and Communications approves the programme 'Raising Awareness about the information society' whose objective is to inform citizens on the possibilities of the information society. The programme is implemented over the period 2007 2013 by the Estonian Informatics Centre with a total budget of 50 million Estonian kroons (approx. € 3.2 million), funded from the EU Structural Funds.
- In September 2007, the Informatics Council an advisory committee for the Government of Estonia approved the<u>http://www.riso.ee/en/files/Implementation Plan 2007-2008 of the Estonian Information Society Strategy 0.pdf</u> Estonian information society Strategy 2013, promoting the development of a citizen-centred and inclusive information society, as well as the advancement of the knowledge-based economy.
- In August 2007, the Estonian Tax and Customs Board begins offering a new eService to local authorities which enables them to make inquiries on the income of the taxpayers living in their area.
- Due to the cyber-attacks against Estonia's governmental and private web pages, the Government approves an Action Plan to fight cyber-attacks in July 2007. The plan, implemented by the Ministries in charge of Economic Affairs and Communications, Defence, Internal Affairs and Justice, aims to create a strong legal basis for fighting cyber-crime and seeks to improve the processes for preparing for such emergencies.
- Furthermore, the <u>Osalusveeb</u> website is launched; it allows everyone (Estonian citizens, associations, civil society stakeholders) who has registered as a user to express opinions on drafts published by the Government.
- Since *June 2007*, Estonian businesses can submit their annual accounting reports electronically through the <u>Company Registration Portal</u>.
- Launch of the Mobile-ID service in *May 2007*. Mobile-ID enables the identification of a person and the signature of digital documents via mobile phone, giving greater freedom for performing transactions that require personal identification.
- ▶ In *April 2007*, Estonia's governmental and private web pages suffer coordinated cyberattacks.
- On 4 March 2007, Estonia holds the world's first national general elections with an Internet voting option. A total of 30 275 citizens uses this option to register their preferences for the Estonian Parliament (Riigikogu).
- In February 2007, the newly launched <u>Company registration portal</u> makes it possible for start-up companies to set up a new company electronically, in just a couple of hours, using an eID card.
- <u>Regulations</u> for X-Road, the middle-tier data exchange layer enabling Government databases to communicate with each other, are also published that month.
- The 'Estonian Information Society Strategy 2013' enters into force on 1 January 2007. It is conceived as a sectoral development plan, setting out the general framework,



objectives and respective action fields for the broad use of ICT in the development of the knowledge-based society and economy in Estonia for the period 2007-2013. The plan focuses on the use of IT to improve quality of life and increase citizen involvement in public life.

Moreover, citizens can request an electronic voter card through the <u>eGovernment portal</u> for citizens by 31 January 2007. Once registered for the eVoter card, citizens will no longer receive paper voter cards through normal mail.

### 2006

- In December 2006, the Estonian Informatics Centre (RIA) conducts a legal analysis to assess the legitimacy of electronic communications between the State and citizens. The study coincides with the introduction of a new service called the 'Notification Calendar' on the eGovernment <u>portal</u>.
- In July 2006, for the third year in a row, Estonian students taking national examinations can register on the Estonian <u>Citizen's Portal</u> to receive their results either by email or on their mobile phones via SMS. Results reach examinees as soon as the marks are entered into the central database.
- Moreover, the Estonian Government launches a new service enabling Estonian high school graduates to **apply** to universities **online**. This new service is available on the Citizen's portal, or on the new Common Admissions Information Portal (<u>SAIS</u>).
- In May 2006, Estonia's <u>Computer Emergency Response Team (CERT)</u> is officially presented. This new unit of the Estonian Informatics Centre deals with security incidents that occur on Estonian networks, carries out preventive actions and contributes to awareness-raising on Internet security.
- During that same month, leaders of the largest banks and telecommunication companies as well as the Ministry of Economic Affairs and Communications sign a cooperation agreement to launch a nationwide <u>'Computer Protection 2009' initiative</u> so as to increase end-user PC protection in Estonia while making the country the most secure information society in the world by 2009.
- Publication of the <u>Estonian IT Interoperability Framework</u>, (version 2.0) in April 2006.
- In March 2006, the new initiative <u>Küla Tee 3</u> (VillageWay 3) is launched. Its objective is to improve access to permanent Internet connection in sparsely populated rural areas by guaranteeing quality Internet coverage of 90 % of Estonia's territory.
- Moreover, the Estonian Ministry of Economic Affairs and Communications releases the annual report 'IT in Public Administration of Estonia - Yearbook 2005'. It presents the main achievements in the eGovernment field in 2005, the latest figures relating to the information society progress in Estonia and a brief description of the Government's 'Information Policy Action Plan 2004-2006.

- In November 2005, Estonia launches a nation-wide Information Security policy which specifies and coordinates the upcoming eSecurity related initiatives, aiming to create a secure 'eEnvironment' for business and consumers.
- In October 2005, Estonia becomes the first country in the world to enable its citizens to vote over the Internet for political elections. To vote online, users must insert their eID cards into readers connected to their computers and log on to the <u>Internet voting</u> website.



- ▶ In June 2005, the Government adopts the Information Policy Action Plan for 2004-2006.
- In *April 2005*, the Estonian Parliament approves <u>the Estonian Broadband Strategy</u> setting out the principles for the development of fast Internet connections until 2007.

## 2004

In *May 2004*, the Estonian Government adopts a new information society policy called Principles of the Estonian Information Policy 2004-2006. An Information Policy Action Plan for 2004-2006 is also adopted.

## 2003

- In May 2003, Finland and Estonia sign an agreement to harmonise the concepts and practices between the two countries regarding digital signature, document format and exchange. The project, codenamed '<u>OpenXAdES</u>', is an open initiative which promotes the 'universal digital signature'.
- In March 2003, the Estonian Government launches its eGovernment portal <u>eesti.ee</u>. The site is intended to provide a single, one-stop umbrella for the many Government services already online, as well as for all new services being developed.

## 2002

- In the summer of 2002, together with the United Nations Development Programme (UNDP) and the Open Society Institute (OSI), the Estonian Government establishes an <u>eGovernance Academy (EGA)</u> to enable Estonia's neighbours to benefit from its eGovernment experience and expertise.
- ▶ In January 2002, Estonia starts the introduction on national <u>electronic ID cards</u>. The card functions are to be used in any form of business, governmental or private communications.

- In December 2001, the 'X-Road' system ('X-tee' in Estonian) is launched. 'X-Road' is a middle-tier data exchange layer enabling governmental databases to communicate.
- In the summer of 2001, the Estonian Government launches an innovative eDemocracy portal, TOM (*Täna Otsustan Mina* – 'Today I Make Decisions') whose aim is to enhance citizens' participation in the public decision-making process. This portal has since then been renamed to '<u>Osalusveeb</u>'.
- > In *February 2001*, the Government approves an updated Information Policy Action Plan.

## eGovernment Strategy

Main strategic objectives and principles

## **Estonian Information Society Strategy 2014 - 2020**



The <u>Information Society Strategy 2020</u> does not deal with the introduction of ICT in various residential and policy areas, such as the use of ICT in health care or business. Rather it focuses on the use of ICT and smart solutions for the creation of an enabling environment assurance. The higher goal is thus to support the competitiveness of the economy through ICT,

human well-being and an increase in the efficiency of state government.

The Information Society Strategy includes a number of steps necessary for development activities. Indicatively these steps include the following:

- Construct a base ready for the ultra-fast Internet network, enabling that at least 60 % of all Estonians use the Internet on a daily basis.
- Enhance the cross-border capability of eServices in joint cooperation with the Nordic Institute of eGovernment Innovation aiming at developing X-roads, eIdentities, digital signatures, etc.
- Enable that by 2020, 20 % of the population uses the digital signature.
- Provide people with the technological and organisational infrastructure to take control over the use of their data and know at any time who, why, when and how these data are being used by their government.
- Modernise Estonian public eServices and implement uniform quality standards and support reform of old IT solutions.
- > Improve related policies for better decision-making and service provision.
- Launch a virtual or eResidency by issuing a digital identity to non-residents and providing its eServices in a similar way to Switzerland's banking industry.

## Cyber Security Strategy 2014-2017

The <u>Cyber Security Strategy 2014-2017</u> is the basic document for planning Estonia's cyber security and a part of Estonia's broader security strategy. The strategy highlights important recent developments, assesses threats to Estonia's cyber security and presents measures to manage threats. The strategy continues the implementation of many of the goals found in the Cyber Security Strategy 2008-2013.

The new Cyber Security Strategy sets out four objectives:

1) A comprehensive system of security measures, consisting of different levels, will be implemented in Estonia to ensure cyber security at national level.

2) Estonia will be a country that is characterised by a very high level of information security competence and awareness.



3) Proportionate legal regulations serve to support the secure and extensive use of information systems.

4) Estonia will be one of the leading countries in international co-operation to enhance cyber security.

Implementation of the strategy will be coordinated by the Ministry of Economic Affairs and Communications. All ministries and government agencies will participate in its implementation, above all the Ministry of Defence, the Information System Authority, Ministry of Justice, The Police and Border Guard Board, the Government Office, Ministry of Foreign Affairs, Ministry of the Interior and the Ministry of Education and Research. The strategy will be implemented in cooperation with non-governmental organisations, business associations, local governments and educational institutions.

The total cost of implementation of the activities provided in the strategy is approximately EUR 16 million.

## **Previous eGovernment Strategies**

## Estonian Information Society Strategy 2013 (2008-2013)

The 'Estonian Information Society Strategy 2013' was approved on 30 November 2006 by the Estonian Government and entered into force on 1 January 2007. This strategy has been designed as a sectoral development plan, setting out the general framework, the objectives and the respective action fields for the broad use of ICT in the development of a knowledge-based society and economy in Estonia for the period 2008-2013. This latest strategy takes into account the objectives and priorities of the EU-level policy framework, namely: the initiative 'i2010: A European Information society for growth and employment' and the related 'i2010 eGovernment Action Plan'.

The strategy is dedicated to an ICT vision for Estonia, based on the beliefs that the country is a constantly developing, inclusive society, raising the living standard of everyone and that the wide take-up of ICT will improve citizens' quality of life as well as actively involve them in public life. Thus the strategy aims to place more emphasis on: the development of a **citizen-centric** and **inclusive** society, a **knowledge-based economy** as well as a **transparent** and **efficient** Public Administration.

Actions and measures

For each component of this 'Vision', actions and measures are being taken in three **fields of action**, as follows:

Action field I: Development of a citizen-centric and inclusive society

In the information society, most of the information is stored in a universal digital form. To ensure citizen welfare, citizens must possess the skills and have the willingness to use the opportunities created by the information society, while benefiting from a **multi-access channel** to digital information that suits their needs. In line with the strategy, by 2013, 75 % of Estonian residents should be using the Internet, while household Internet penetration should amount to 70 %. Moreover, by 2010, all public sector websites complied with the Web Accessibility Initiative (WAI) criteria. To such an end, the following actions are foreseen:

- broadening technological access to digital information;
- improving skills and widening possibilities for participation.

Action Field II: Development of a knowledge-based economy



The strategy foresees that by 2013, the productivity per employee in Estonian enterprises will account for 75 % of the EU average and that the share of ICT enterprises in the national GDP will amount to 15 %. To reach this objective, the following measures will be taken:

- promoting ICT uptake by enterprises;
- increasing the competitiveness of the Estonian ICT sector.

Action field III: Development of a citizen-centric, transparent and efficient Public Administration

In line with this objective, the Administration should function efficiently while collecting, using and managing data necessary for the provision of public goods in a common and systematic manner. Public sector processes must be transparent and easy to understand. In addition, public services for citizens and businesses must be fully available electronically, widely used and structured around users' needs. By 2013, the strategy sets the objective of 80 % of citizen satisfaction and 95 % of business satisfaction with regard to the use of public sector eServices. In this light, the following measures will be taken:

- improving the efficiency of the public sector;
- providing user-friendly public eServices

## Estonian Cyber Security Strategy 2012

Estonia belongs to the group of highly cyber dependent countries that considers ensuring <u>cyber security</u> a matter of national security and societal welfare. Estonia has actively addressed the question of cyber security on a national level since at least 2007, with the aim of ensuring the security and availability of national institutions and essential services at all times. The <u>National Cyber Security Strategy developed in 2008</u> laid out a national action programme up to 2013.

In 2011, the Estonian Information System's Authority (RIA) was established as Estonia's central cyber security competence and coordination centre with related priorities such as assembling the necessary competence to ensure security, creating and developing cooperation networks, developing specific capabilities (e.g. SCADA/ICS security) and supporting providers of essential services and critical infrastructure administrators in ensuring cyber security. The responsibility for cyber security policy coordination was handed over from the Ministry of Defence to the Ministry of Economic Affairs and Communications in the same year.

On 21 March 2013, the Government approved a proposal according to which the Estonian cyber security strategy for 2014 -2017 will be drawn up.

## Estonian Broadband Strategy 2011

A report was <u>issued</u> in 2011 regarding Estonia's Broadband Strategy, related regulations and developments. The Estonian Broadband Development Foundation (ELA) is <u>responsible</u> for the EstWin, a project with the aim of bringing the new generation broadband networks into every home, business and institution and so eliminating the digital divide between the Estonian countryside and the biggest cities.

The ELA began building the network in rural areas where the private sector was not investing due to its unprofitability. It is expected that the building of the base network will ensure that 98 % of homes, businesses and institutions will be within 1.5 km of fibre optic networks. The ELA does not build connections to end users.

## Estonian Information Society 2004-2006

In 1998 the Estonian Parliament approved the Estonian <u>principles</u> of the initial ICT policy. These principles serve as a basis for making public policy decisions to support the rise of the information society on the basis of an action plan. The Information Policy Action Plan in its turn is the basis for all government agencies to make specific proposals to the Government, including that of schedules, sources of finances, and responsibilities for the implementation of information policy programmes every year. The Action Plan was approved by the Government in April 1998, May 1999 and February 2001.

According to the Government decision of 14 May 2002 the information policy priorities for 2002/2003 are as follows:

- develop services for citizens, business sector and public administration, especially the elaboration of ID-card applications, proceeding also from the list of eGovernment services defined in the eEurope+ Action Plan;
- improve skills and access of social groups in unequal position for using electronically provided services;
- elaborate and introduce of systems for digital document management and archival processing;
- develop of the system and infrastructure of state registers, including the development of systems that ensure the maintenance of databases and the introduction of the data exchange layer (project "X-road") of information systems;
- provide schools with computers to achieve the ultimate goal one computer per 20 students;
- Iaunch of Tiger University program to support the development of information and communication technology (ICT) infrastructure and academic ICT staff, and the infrastructure for post-graduate training.

Further details are available through the related document on the <u>principles</u> of the Estonian Information Policy 2004 - 2006.

## Implementation Plan (2009-2011)

eGovernment in Estonia is part of the broader Information Society Policy under the responsibility of the Ministry of Economic Affairs and Communications. Therefore eGovernment strategy is embodied in strategic documents related/focused on information society and IT. The most relevant recent document is the <u>Implementation Plan for 2009-2011</u> of the <u>Estonian Information Society Strategy 2013</u>, giving an overview of the activities on the Information Technology and Telecommunications front. The main **areas** of focus of the implementation plan include to:

- develop the ICT's export abilities, including international relations, sales and marketing;
- educate labour force on the ICT sector, by popularising the IT field, the quality of professional education, etc.;
- promote intra-association cooperation;
- facilitate of cooperation with other professional associations on the uses of information and communication technology;
- cultivate electronic communications;
- increase ICT companies' social responsibility.



The Plan seeks to ensure that the development of Estonia is understood, reckoned with and appreciated as an information society based on the category of information. Thus it aims at securing the existence of initiatives fostering the development of the information society in the election platforms of Estonian political parties and boosting ICT management capacities in the governing system of Estonia. In this view, the Estonian Association of Information Technology and Telecommunications foresees the creation of a work group focusing on developing the area of information society, participate in defining the parties' expectations on this field, setting the goals and priorities of the activity plan and launching a development process of the ICT sector's development programme.

## Information Security Policy (2009-2011)

In November 2009, Estonia launched a nationwide <u>Information Security Policy</u> that specifies and coordinates the upcoming eSecurity-related initiatives. The policy notably aims to create a secure **'eEnvironment'** for **business** and **consumers**.

The main **goal** of the Estonian Information Security Policy is to found a secure, securityaware, internationally cooperating and enabling Estonian information society. Specific goals include the elimination of non-acceptable risks, the defence of basic human rights, information security awareness and training, participation in international eSecurity-related initiatives, as well as competitiveness of economy.

Secure eGovernment must be based on appropriate **legislation**, **standards** and **procedures**, such as security requirements for databases, services, and State procurement. Regulations in this field are coordinated by the Ministry of Economic Affairs and Communications, together with the Ministry of Internal Affairs.

## Information society Strategy for Local Governments (2008-2011)

In 2008, the Ministry of Internal Affairs elaborated a development plan called <u>'Information</u> <u>society strategy for local governments 2008-2011</u>'.

The main **aims** of the Strategy in question are the following:

- introduce electronic public administration to all local governments;
- develop Internet-based tools for citizens' involvement in the organisation of local life;
- ensure that all local government officials are aware of ICT possibilities;
- develop the preconditions for the use of eServices in all local governments;
- establish organisations for the coordination of information society development in counties.

## Programme for increasing awareness of the information society (2007-2013)

The aim of the <u>programme</u> funded by the Structural Funds of the European Union is to widen the uptake of existing eSolutions; promote the development of new eServices; and ensure, by raising awareness of information security, the sustainable development of the information society.

The target groups of the programme include consumers of both existing and future eServices; parties related to the development of eServices; and entrepreneurs, whose increased awareness of the information society will increase their motivation to apply IT



solutions. In addition, the programme contains activities aimed at increasing the awareness of opinion leaders and representatives of media, contributing thus to increased interest and positive attitudes towards new eSolutions.

The programme's implementation plan for 2007-2008 focused on three action lines:

- inform the general public of electronic functions of the ID card (i.e. electronic authentication and digital signing);
- introduce the possibilities of the state information system;
- increase awareness about information security.

As part of this programme, a number of campaigns were held to increase the use of the electronic functions of the ID card; to increase public awareness about threats related to the use of computers and possibilities to protect oneself against these and to increase awareness about information security both within the public sector and among the general public of Estonia

## Principles of the Estonian Information Policy (2004-2006)

This <u>strategy</u> set three year **long-term objectives** for the Estonian information policy:

- introduce eServices to all state agencies together with respective training and awareness-raising activities for the whole society;
- keep the level of ICT use in Estonia at no less than the average level of the EU, ensuring thus the efficiency of the Estonian economy and society in general;
- increase the export capacity of the IT sector.

The strategic document underlines that for the **short-term**, concerning the years 2004-2006, Estonia would proceed with the following **goals**:

- develop eServices for citizens, entrepreneurs and public sector institutions;
- promote eDemocracy, eLearning and eInclusion;
- increase the efficiency in the public sector;
- facilitate the interaction between the ICT industry and eBusiness;
- establish IT security;
- cultivate a strong position at the international arena.

## Principles of the Estonian Information Policy (1998-2003)

<u>'Principles of the Estonian Information Policy</u>' was the first strategic document to present ICT principles serving as a basis for an action plan for establishing an information society. The action plan, in turn, is the basis for all Government agencies to present specific proposals to the Cabinet, on an annual basis, together with schedules, sources of finances and responsibilities for the implementation of information policy programmes. The Government foresees the development of an information policy that will:

- promote and ensures democracy in the Republic of Estonia;
- support the development of an information infrastructure;
- create of a competitive economy, especially through demonopolisation, speeding up the restitution of property, the development of electronic commerce and electronic banking;
- sustain the development of Estonian culture and language, considering also values deriving from cultural diversity;
- modernise and improve State defence as a result of developments in information technology.



## eGovernment Legal Framework

Main legal texts impacting on the development of eGovernment



## eGovernment\_Legislation

Current status

There is currently no overall eGovernment legislation in Estonia.

## **Freedom of Information Legislation**

#### Public Information Act (2001)

The first version of the <u>Public Information Act</u> (PIA) took effect in January 2001. A newly revised, updated <u>Public Information Act</u> entered into force on 1 January 2015, which has started the transposition of the provisions of the revised Directive (2013/37/EU) into national law. The Act covers State and Local Agencies, legal entities in public law and private entities that are conducting public duties including educational, health care, social or other public services. Any person may make a request for information, which is registered; the holder of information must respond within five working days. Fees may be waived, if the information have the duty to maintain websites and post an extensive list of information on the Web. These entities are also required to ensure that the information is not 'outdated, inaccurate or misleading'. In addition, email requests must be treated as official requests for information. The Act is enforced by the <u>Data Protection Inspectorate</u>. Since 1 January 2008, the Act has also been regulating the field of the former <u>Databases Act</u> (in force from 1997 to 2007).

#### Digital Signatures Act (2000)

Approved on 8 March 2000, the Digital Signatures Act (DSA) entered into force on 15 December 2000. A newly revised, updated Digital Signatures Act entered info force on 1 July 2014. The Act gives the digital and handwritten signatures equal legal value and sets an obligation for all public institutions to accept digitally signed documents and a chapter regulating state supervision and administrative supervision over certification service providers and time-stamping service providers was included. See a more detailed overview at Public Key Infrastructure.

#### Archives Act (1998)

The Archives Act entered into force on 1 May 1998. The Act sets the principles for collecting, evaluating, archiving, preserving, accessing archival documents and for archiving activities. It furthermore sets the guidelines for private records entered in the archives' register and the transfer of ownership of private records also entered in the archives' register.

## **Data Protection/Privacy Legislation**

System of Security Measures for Information Systems (2008)



This Regulation entered into force on 1 January 2008 and establishes the system of security measures for information systems used for processing the data contained in state and local government databases and for information assets related therewith. The system consists of the procedure for the specification of security measures and the description of organisational, physical and IT security measures to protect data. However, it is underlined that this Regulation does not apply to security of information systems processing state secrets.

#### Consumer Protection Act (2004)

This Act entered into force on 15 April 2004 and it regulates the offering and sale, or marketing in any other manner, of goods and services to consumers by traders. Furthermore, it determines the rights of consumers as the purchasers or users of goods or services, and provides for the organisation and supervision of consumer protection and liability for violations of this Act. Some minor amendments were included and entered into force on 1 January 2015 (proceedings and punishments for legal persons).

#### Personal Data Protection Act (1996)

The Personal Data Protection Act (PDPA) entered into force on 19 July 1996. The Act was amended in 2003, to be made fully compliant with the **EU Data Protection Directive** <u>95/46/EC</u>, and once again <u>amended</u> in January 2008. The Act protects the fundamental rights and freedoms of persons with respect to the processing of their personal data, in accordance with the right of individuals to obtain freely any information that is disseminated for public use.

The <u>2008 version</u> of the Act introduced several changes. Firstly, the previous classification of personal data into three groups (non-sensitive personal data, private personal data and sensitive personal data) has been replaced by two data categories: (1) 'personal data' and (2) 'sensitive personal data', the latter being the sub-class under special protection. Secondly, all processed personal data are protected and registered by Chief processors (i.e. controllers) with the <u>Data Protection Inspectorate</u>, the data protection supervision authority. Moreover, the new PDPA Act extends all general principles applying to the processing of personal data and to the processing of the **personal identification code** (the unique number assigned to every Estonian citizen and resident). From 1 January 2015 the Data Protection Inspectorate may submit reports concerning significant matters which have an extensive effect or need prompt settlement which become known in the course of supervision over compliance with the Act to the Constitutional Committee of the Riigikogu and the Legal Chancellor.

#### System of Security Measures for Information Systems (2008)

This Regulation entered into force on 1 January 2008 and establishes the system of security measures for information systems used for processing the data contained in state and local government databases and for information assets related therewith. The system consists of the procedure for the specification of security measures and the description of organisational, physical and IT security measures to protect data. However, it is underlined that this Regulation does not apply to security of information systems processing state secrets.

## eSignatures Legislation

#### Digital Signatures Act (2000)

Approved on 8 March 2000, the Digital Signatures Act (DSA) entered into force on 15 December 2000. The Act provides for the use of digital signatures and digital ink, and the conditions of certification and oversight procedures for time-stamping services. It, basically, grants similar legal value to digital and handwritten signatures while setting an obligation for all public institutions to accept digitally signed documents. The Act introduces the use of



digital stamps, namely, the technical and organisational means to set up data collection system, which uses digital ink-holder of the certificate to prove the integrity of the digital document and a document of their relationship. The Act was <u>amended</u> on 31 December 2007, and its last <u>amendment</u> took place on 31 December 2010.

## eCommerce Legislation

#### Information Society Services Act (2004)

The information society services act was passed on 14 April 2004 and entered into force on 1 May 2004. It implements EU Directive <u>2000/31/EC</u> on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market. It establishes the requirements pertaining to information society service providers, as well as the organisation of supervision and liability in the case of violation of these requirements. The Act was lastly <u>amended</u> on 21 January 2010.

## eCommunications Legislation

#### National Broadcasting Act (2007)

The National Broadcasting Act entered into force on 1 June 2007, providing the legal status, objective, functions, financing, and organisation of management and activities of the Estonian National Broadcasting. The objective of National Broadcasting is to assist in the performance of the functions of the Estonian state provided by the Constitution of the Republic of Estonia.

#### Electronic Communications Act (2004)

The Electronic Communications Act was passed on 8 December 2004 and entered into force on 1 January 2005 in order to implement the <u>EU Regulatory Framework for Electronic Communications</u>.

The purpose of this Act is to create the necessary conditions to promote the development of electronic communications networks and communications services while ensuring the protection of the interests of users of such services. The Act provides requirements for: publicly available electronic communications networks and communications services; radio-communication; management of radio frequencies and numbering; apparatus and State supervision over the compliance with the requirements. The Act was lastly amended on 16 January 2011 and <u>entered</u> into force on 1 January 2015. It is already known that there will be new amendments which will enter into force 1 January 2016.

## eProcurement Legislation

#### Public Procurement Act (2007)

A new Public Procurement Act came into force in May 2007, thus transposing the EU Directives on public procurement (<u>2004/17/EC</u> and <u>2004/18/EC</u>). It includes legal provisions enabling the further development of eProcurement (eAuctions, Dynamic Purchasing System, eCatalogues etc.) so as to give better opportunities for taking forward a fully electronic Procurement tendering process.

It is worth mentioning that the <u>previous version</u> of the Public Procurement Act (October 2000) had already established rules for the eNotification of public tenders through the country's Public Procurement State Register.



In order to implement EU directives 2014/24/EC, 2014/25/EC and 2014/23/EC the legislative process is currently under way and the new Public Procurement Act should come into force 1 April 2016.

## **Re-use of Public Sector Information (PSI)**

#### Public Information Act (2001)

The Public Information Act covers the provisions of the EU Directive <u>2003/98/EC</u> on the reuse of public sector information (PSI). Estonia thus notified full transposition of the PSIdirective in July 2009.

Transposition of the EU Directive 2013/37/EU into Estonian legislation is currently under way.

## eGovernment Actors

### Main roles and responsibilities

## **National eGovernment**

Policy/Strategy

#### **Ministry of Economic Affairs and Communications**

The Ministry of Economic Affairs and Communications holds political responsibility for the development of the State information policy. It elaborates the state's economic policy and economic development plans, while also drafts the respective legislation bills, in a variety of fields, among which, informatics, development of state information systems, research, and development and innovation.

#### **Department of State Information Systems (RISO)**

The Department of State Information Systems (RISO) of the Ministry of Economic Affairs and Communications plays a major role in the elaboration of the Estonian information society Policy. It embarks on developing information society-related activities in the field of information technology and on the preparation of draft legislation in the relevant fields. RIO's strategic tasks include the coordination of state IT-policy actions and development plans in the field of state administrative information systems (IS), such as state IT budgets, IT legislation, coordination of IT projects, IT audits, standardisation, IT procurement procedures and international cooperation in the field of state IS.

#### Estonian Association of Information Technology and Telecommunications (ITL)

The ITL is a non-profit organisation, aiming to unite the Estonian information technology and telecommunications companies; to promote their co-operation in Estonia's development towards information society; to represent and protect the interests of its member companies and to express their common positions.

The main activities of the association include the popularisation of information and communication technology (ICT), promotion of vocational education and amendment of legislation.

#### e-Estonia Council

The e-Estonia Council created in 2014 (formerly Estonian Informatics Council) is a government committee that directs the development of digital society and e-governance in Estonia.

Five experts and ICT sector representatives and three ministers are members of the Council. It is chaired by Prime Minister. Other government institutions and experts are involved in the work upon need.

#### Coordination

#### Department of State Information Systems (RISO)

The Department of State Information Systems (RISO), as part of the Ministry of Economic Affairs and Communications, is the main actor in coordinating governmental ICT policy and information society policy. In more detail, RISO coordinates: the state information policy and the consequent development of sustainable energy development projects in the initiation and implementation of information society; the development of national



information systems regarding international cooperation within its jurisdiction and the initiated national information systems related to IT standardisation.

#### **Department of Information Society Services (ITAO)**

ITAO, also a department of the Ministry of Economic Affairs and Communications, coordinates the development of public sector services. It elaborates and disseminates different guidelines and manuals regarding common quality criteria for public services, lifecycle approach to public service development, choice of service channels etc.

#### Estonian Information System's Authority (EISA)

Since 1 June 2011, the Estonian Informatics Centre has been re-organised to the Estonian Information System's Authority (EISA). The Authority's mission is to "coordinate the development and management information system so that Esthonian citizens are served in the best possible way." It coordinates all Public Key Infrastructures related to the operation of ICT and Information Technology, like the State portal <u>www.eesti.ee</u>, the middleware system X-Road, the Government backbone network EEBone, the administration system of the State information system (RIHA) and the electronic document exchange centre (DVK). It is also liable to coordinate the state information system development projects and the preparation and participation in international projects. Finally, EISA also monitors the legislation process concerning the management information system requirements.

#### Estonian Association of Information Technology and Telecommunications (ITL)

The ITL is a non-profit organisation whose primary objectives are to: coordinate the cooperation of the Estonian information technology and telecommunications companies, educational institutions and promote their co-operation towards the development of information society in Estonia. Main activities of the association include the popularisation of ICT and the amendment of legislation. The central coordination provided by ITL, deals with strategic planning, setting priorities, ensuring financing and creating cooperation networks while ensuring their functionality.

#### <u>e-Estonia Council</u>

The e-Estonia Council created in 2014 (formerly Estonian Informatics Council) is a government committee that directs the development of digital society and e-governance in Estonia.

Five experts and ICT sector representatives and three ministers are members of the Council. It is chaired by Prime Minister. Other government institutions and experts are involved in the work upon need.

#### Implementation

#### **Department of State Information Systems (RISO)**

The Department of State Information Systems, part of the Ministry of Economic Affairs and Communications, is responsible for the development and the implementation of State IT strategies at central level.

#### Estonian Information System's Authority (EISA)

EISA implements Estonia's national eGovernment strategy, through the State portal <u>www.eesti.ee</u>, the EEBone network, the State information system (RIHA) and the electronic document exchange centre.

Government Departments and Agencies

Government Departments and Agencies are responsible for the implementation of the departmental eGovernment projects falling within their respective fields of competence. Since Estonia is a highly decentralised country when it comes to the information society



organisation, they play a very important role in the implementation of action plans and projects.

#### Support

#### **Estonian Informatics Council**

Besides its role in coordination and policy formulation, the Estonian Informatics Council is an expert committee advising the Government on ICT matters in a horizontal manner.

#### **CERT Estonia**

The Computer Emergency Response Team of Estonia (CERT Estonia), established in 2006, is an organisation responsible for the management of security incidents in '.ee' computer networks. Its duty is to assist Estonian Internet users in the implementation of preventive measures in order to reduce possible damage from security incidents and to help them in responding to potential security threats. CERT Estonia deals with security incidents that occur in Estonian networks or incidents that have been notified of by citizens, or institutions either in Estonia or abroad.

#### Estonian Information Technology Foundation (EITF)

EITF is a non-profit organisation aiming to assist in the preparation of the highly qualified IT specialists and to support information and communication technology-related developments in Estonia. For these purposes, the Foundation has established and manages the Estonian IT College and administers 'Tiger University', the National Support Programme for ICT in Higher Education.

#### eGovernance Academy

The eGovernance Academy is a non-governmental, non-profit organisation, which aims to promote the use of ICT in the work of Government and in democratic practices. Its mission is to train and advise leaders and stakeholders in using information and communication technology (ICT) to increase government efficiency and to improve democratic processes with the aim of building open information societies. The Academy is a regional learning centre set up by the Republic of Estonia, the <u>United Nations Development Programme</u> (UNDP) and the Information Programme of the Open Society Institute.

#### Audit/Assurance

#### **National Audit Office**

The role of the National Audit Office (*Riigikontroll*) is to promote reforms while supporting public bodies in their efforts to create, through their activities and services, best value for the taxpayers. In this context, the National Audit Office assesses the performance (economy, efficiency and effectiveness) and regularity of the activities of Public Administration, and furthermore provides recommendations to assist the Parliament and the Government in improving the operation of the State.

#### Data Protection

#### Personal Data Protection Inspectorate (DPI)

The Personal Data Protection Inspectorate is an independent agency placed under the authority of the Ministry of Justice. The DPI supervises the legality of the processing of personal data and databases, as well as the organisation of data protection activities. To accomplish that, it acts as: a commissioner (ombudsman) and preliminary court; an auditor and a licensor; an educator and consultant; a designer of legal practices; a political consultant and an enforcer and a punisher.

#### AS Sertifitseerimiskeskus



AS Sertifitseerimiskeskus (SK) is the Certification Authority (CA) providing certificates for the Estonian electronic ID card and related services pertaining to the use of these certificates while giving legally-binding digital signatures. The authority's mission is to ensure the reliability and integrity of the electronic infrastructure underpinning the Estonian 'eID card' project, and to offer reliable certification and time-stamping services. It also functions as a competence centre for the eID card and spreads the knowledge necessary for creating electronic applications for the card. To this end, AS Sertifitseerimiskeskus has created 'DigiDoc', a universal system for giving, processing and verifying digital signatures. 'DigiDoc' can be connected to any existing or new software, but its components are also a stand-alone client programme and web portal.

## **Regional & Local eGovernment**

#### Policy/Strategy

#### **Estonian Ministry of the Interior**

The Estonian Ministry of the Interior has prepared a <u>Municipalities Information Society</u> <u>Programme'</u> for the period 2008-2011 and an <u>Action Plan</u> for the years 2008-2011.

#### Other

#### Association of Estonian Cities

The Association of Estonian Cities is a voluntary union established for representing the common interests and arranging co-operation among cities and rural municipalities. The Association's main goal is to ensure the development of Local Governments through joint activities. The Association is also in charge of the Local Government Portal (KOP) created 2003, providing information, news and any development related to local government.

#### Association of Municipalities of Estonia

This Association gathers the majority of Estonian rural municipalities within the 15 Estonian counties, communicating between them through a dedicated Intranet system, bringing together local government units, and contributing to the development and strengthening of self-government administration and decentralisation of power under the principles of democracy.

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## eGovernment Who's Who

Main eGovernment decision-makers and executives

## **Minister responsible for eGovernment**



Urve Palo Minister for Economic Affairs and Communications

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## **Government CIO**



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## **Head of eGovernment**



Aet Rahe

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Head of State Information Systems Department (RISO)

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## **National ICT Policy Advisor**



Siim Sikkut

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## **Information Society Services**



Janek Rõzov

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## **Head of Information Society Division**



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# **National ICT Coordinator**



Ave Lauringson

State Information Systems Department (RISO)

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## e-Government executive

Taimar Peterkop Director General of the Estonian Information System's Authority (EISA)

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# eGovernment Infrastructure

## Main eGovernment infrastructure components

# Portals

### 'eesti.ee': eGovernment portal

Estonia's eGovernment portal was first launched in March 2003 on the basis of the 'eCitizen' project which was initiated in 2002. Since then, the portal has been constantly renewed. In the last quarter of 2007, a new version of the portal merged the former 'State Information portal' and the 'Citizen portal', creating a **single** integrated service. This portal coordinates the information provided and the services offered by various State institutions. It features a safe Internet environment for communication with the State and offers reliable information and **eSolutions** for citizens, entrepreneurs and officials respectively. The access to relevant information and eServices on the portal indeed depends on whether the user is a citizen, entrepreneur or State official.

The State portal's environment allows users authenticated with their national eID card to: access and check their personal details; perform transactions with municipal and Government bodies; complete and convey online forms and applications; sign documents digitally; create email addresses with the suffix @eesti.ee; and receive email or SMS notifications. In addition, it gives access to other registry services (e.g. the Forest Registry) on more than 20 national databases. Based on the data held in the State Commercial Register, entrepreneurs using the portal can access **transactional services** for businesses.

#### 'DigiDoc' portal

'DigiDoc' portal is available for Estonian ID-card and Estonian and Lithuanian Mobile-ID users and allows for digital signing, verification of validity of digital signatures, forwarding of documents to other users of the portal and receiving documents from other users of the portal. The <u>DigiDocService</u> provides a quick and easy way to raise the security of any web service to meet the highest demands. It makes it possible to carry out authentication based on strong authentication devices from different vendors and provides service providers with the opportunity to enter legal signatures on any created data within their service, which provides long-term validity and proof of action in courts across the EU.

#### Rural Municipality Portal

The portal was launched in February 2011 by the Estonian Government, with the view to increase the transparency of local governments and expand citizen participation. The concept of the portal is innovative as it is based on an open source content management tool, which allows for easy and uniform site administration. The developed solution includes a standard website structure for local governments, tools for site administration and built-in interfacing with public registers.

# Network

### ASOnet's 'EEBone'

'EEBone' (*PeaTee*) is the broadband network of data communication among Government institutions. It is a Government-wide backbone network, connecting more than 20 000 computers from all Government offices across the country, providing secure access to the Internet and the Government's Intranet. The network was launched in October 1998, and



its development was based on the **backbone network 'ASONet'** elaborated by the Border Guard Administration, the Customs Board and the Police Board in 1993. The network currently provides approximately 50 % of all administrative services to the various associations.

The Estonian Information System's Authority (EISA) is highly involved in running the network, either as a mediator of customised value-added data services, or as a provider of customer service. The use of the backbone network is financed centrally from the State budget and is free-of-charge for subscribed clients. Clients only have to pay to access the backbone network and to determine the access connection service themselves.

#### X-Road Middleware

Launched in December 2001, the **'X-Road'** (*X-Tee*) is a middle-tier data exchange layer enabling Government databases to communicate with each other. It was initially developed as an environment facilitating the formulation of queries to different databases in a standardised way. The system allows officials, as well as legal and natural entities to search data from national databases over the Internet within the limits of their authority, using a unified user interface.

In addition, the system has been further developed to enable the creation of eServices capable of **simultaneously** using data held in different databases. Several extensions have thus been developed for the 'X-Road' system. These include: writing operations to databases, transmitting huge data sets between information systems, performing successive search operations of data in different data sheets, providing services via web portals.

The 'X-Road', as one of the cornerstones of the Estonian State Information system, offers the following services: authentication; authorisation; MISP (mini-portal system); register of simple queries; queries to various databases and registers; opportunities to write registers; sending large amounts of data over the Internet; secure data interchange, recording logs and search tracking option; running of citizen portal and operator's portal; central and local monitoring and collection service description in a special database (WSDL mode).

# eIdentification/eAuthentication

#### Electronic ID card

Estonia started issuing national ID cards in January 2002. The card, which fulfils the requirements of Estonia's Digital Signatures Act, is mandatory for all Estonian citizens and residing foreigners over 15 years of age; applications can be made <u>online</u>. It is meant to be the **primary document** for identifying citizens and residents and is used in any form of business – governmental or private communications. It is furthermore a valid travel document within the EU. Since 1 January 2007, the card issued by the Citizenship and Migration Board, has become valid for 5 years (instead of 10 years in the past). The ID-card can be <u>used</u> to vote electronically (since 2005), create a business, verify banking transactions, be used as a virtual ticket, and view medical history (since 2010). As of January 2012, more than 1.1 million people in Estonia (almost 90 % of inhabitants) have ID cards.

In addition to being a physical identification document, the card has advanced electronic functions facilitating secure authentication and providing a legally binding digital signature for public and private online services. An electronic processor chip contains a personal data file, a certificate for authentication (along with a permanent email address Name.Surname@eesti.ee for eCommunications with the public sector), a certificate for digital signature, and their associated private keys, protected with PIN codes. The certificates contain only the holder's name and personal code (national ID code). The data



file is valid as long as the identity card is, and so are the certificates, which thus have to be renewed every five years.

#### Mobile-ID

'Mobile-ID' is the ID-card based identity verification and digital signature solution for users of mobile phones in Estonia. This means that the mobile phone, based on a standardised SIM application, will act as a secure signing device. Thus, similarly to the eID card, the mobile-ID enables **authentication** and **digital signing** of documents, bearing the same legal value. The user's certificates are maintained on the telecom operator's SIM card; to use them, the user has to enter a PIN code.

The new mobile-ID service (wireless PKI) was launched in May 2007 by the mobile operator <u>EMT</u>, in co-operation with several banks and the Certification Centre, <u>AS</u> <u>Sertifitseerimiskeskus</u>. This service allows accessing **Internet banking services** without entering eBanking codes. To authenticate oneself securely with the mobile-ID, the user will click on a dedicated button in the web environment. Upon completion of this action, s/he will be requested to enter his/her authentication PIN number. Once this operation has been completed, authentication is performed. The same process applies to the signing of digital documents. In addition, mobile phones can be used to pay for car parking (<u>m-parking</u>) by phoning a certain number or sending an SMS. To inform the parking controller that the payment is being effected by phone, an m-parking sticker is stuck on the windshield or the right-side window of the vehicle. The **m-ticket** service allows the user to purchase a ticket on public transport without cash. It is also possible to buy theatre tickets and pay at the grocery store using a mobile phone.

The main advantages of the mobile-ID include **user-friendliness** and **convenience**; the computer no longer needs to be equipped with a card reader, or have a special additional software installed.

#### <u>ePassport</u>

To comply with EU regulation <u>2252/2004/EC</u> on standards for security features and biometrics in passports and travel documents issued by Member States, the systems of the Estonian Citizenship and Migration Board (CMB) have undergone considerable changes that have been implemented step-by-step. The **first biometric passports** were delivered as of 22 May 2007, containing the holder's biometrical data. Changes in the organisation of work and supporting systems of the CMB are planned to occur at both customer service and document issuance systems' levels.

## eProcurement

#### eProcurement Estonia

The Estonian eProcurement environment enables Contracting Authorities to carry out a procurement procedure from start to end in the same web environment - prepare and publish notices, upload tender documents, receive eTenders, award contracts and carry out dynamic purchasing systems and eAuctions. Authorities are also able to communicate with interested persons and tenderers and carry out inquiries into other state registers, for example to check payment of taxes or registration in the Commercial Register. The environment is divided into the Information Portal and the Public Procurement Register. Instructions and guides are available in the portal while procurements are published in the Public Procurement Register.

#### Public Procurement State Register

Established in 2001 and maintained by the Public Procurement Office, the Public Procurement State Register is a register where all public procurement notices are published



electronically. The register uses CPV standards in the catalogue, and all the information in the register is publicly accessible over the Internet, free-of-charge.

# Knowledge Management

#### Document Exchange Centre (DVK)

The document exchange centre is an information system providing a common central document exchange service for various enterprise content management (ECM) systems, as well as other information systems dealing with documents. The Centre is responsible for interfacing dispersed information systems (via the X-Road Middleware); preserving documents in the short-term; processing documents in the near future; and support services in the proceeding of documents.

The DVK is an infrastructure for the transmission of documents (i.e. a mediation layer for document exchange services of information systems) relying on the X-Road as a transportlevel infrastructure. These can be letters, draft legislation, financial documents (including eInvoices and payment orders), electronic forms and documents related to public procurement procedures).

#### '<u>eKool</u>' web application

'eKool' is a simple web application that connects all education stakeholders in an easy way over the Internet, helping them to collaborate and organise their teaching/learning related information. 'eKool' is available as either a direct web service for end users, or as a hosted white label service for distributing/promoting partners.

## **Other Infrastructure**

Administration System of the State information system (RIHA)

The objective of RIHA is to ensure the **interoperability** of public sector information systems and the **re-use** of technical, organisational and semantic resources, so as to give a clear view of the State registers and the services provided by them. The creation and maintenance of Government databases is governed by the <u>Public Information Act of 2007</u> which establishes an Administration System for State information systems (RIHA), where all the databases and information systems must be registered.

RIHA includes metadata about existing public sector databases – ranging from the information on the administrators of the databases to the eServices offered and the technical data concerning the environment/platform. **Registration** in RIHA is **web-based**; the user is authenticated and permissions are given by using the national electronic ID card.

In the same web-based environment, requests to other information systems can be made in order to launch a **new X-road-based service**. RIHA additionally administers two supporting systems of State registers: the system of classificators and the address data system. The system of integrated registers allows applying new principles of administrative arrangements: citizen-orientation, flexibility, swiftness, as well as cost and time effectiveness for both the citizens and the State.

# eGovernment Services for Citizens

## Availability and sophistication of eServices for Citizens

The information in this section presents an overview of the 20 basic public services, which were identified by the European Commission and Member States, in the <u>eEurope initiative</u> <u>of 2000</u>, to measure the take-up by businesses and citizens of electronically-available public services.

The 12 services for citizens are as follows:

- 1. Income taxes: declaration, notification of assessment
- 2. Job search services by labour offices
- 3. Social security benefits
- 4. Personal documents: passport and driver's licence
- 5. Car registration (new, used, imported cars)
- 6. Application for building permission
- 7. Declaration to the police (e.g. in case of theft)
- 8. Public libraries (availability of catalogues, search tools)
- 9. Certificates (birth and marriage): request and delivery
- 10. Enrolment in higher education/university
- 11. Announcement of moving (change of address)
- 12. Health related services (interactive advice on the availability of services in different hospitals; appointments for hospitals)

#### **1.** Income taxes: declaration, notification of assessment

Responsibility: Central Government, Tax and Customs Board

Website: <u>http://www.emta.ee/?lang=en</u>

Description: The eTaxBoard (*eMaksuamet*) enables taxpayers to file, view and correct their income tax returns online and to check their tax account balances. Citizens can use their electronic ID card as the identification method for accessing eTaxBoard. Those having submitted their tax returns online can benefit from accelerated tax refunds.

#### 2. Job search services by labour offices

Responsibility: Central Government, Unemployment Insurance Fund

Website: <u>http://www.tootukassa.ee/?lang=en</u>

Description: The website provides an updated list of all job offers at national and regional labour offices in Estonia, with a short description of each job, deadlines for application and contacts for applying.



#### 3. Social security benefits

a. Unemployment benefits

Responsibility: Central Government, Estonian Unemployment Insurance Fund

Website: <u>http://www.tootukassa.ee/?lang=en</u>

Description: Information and forms to download.

b. Child allowances

Responsibility: Central Government, Social Insurance Board

 Website:
 http://www.eesti.ee/eng/teemad/perekond/riigi
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Description: Pursuant to the Parental Benefit Act, the online Parental Benefit service was launched at the beginning of 2004. The service is 100 % electronic: persons without Internet access can go to the Social Insurance Board to submit their application, but even there the application is filed electronically with the assistance of Insurance Board employees. The whole process is paperless. Based on the X-road middleware system connecting different State databases, this service does not require citizens to submit data already known by the State.

c. Medical costs (reimbursement or direct settlement)

Responsibility: Central Government, Estonian Health Insurance Fund

Website: <u>http://www.eesti.ee/eng/teemad/health\_care/health\_insurance/</u>

- Description: The Health Insurance Fund covers the cost of health services required in case of illness regardless of the amount of social tax paid by each citizen. Since there is no refund system in Estonia, if the health service provider has a contract with the Estonian Health Insurance Fund, then all costs are directly paid to him/her by the Fund. The patient pays only a reduced personal, non-refundable contribution. If the health service provider does not have a contract, the patient must pay for the health service himself/herself. Internet banking clients or holders of the Estonian eID card can use eServices available through the national portal to check the validity of their health insurance, their address and the payment of sickness benefits.
- d. Student grants
- Responsibility: Central Government, Ministry of Education and Research, Higher Education institutions

Website: <u>http://www.hm.ee/?1</u>

Description: With the <u>Study Allowances and Study Loans Act</u> (2003), Estonia has established a system of study allowances and created the possibilities to obtain study loans. The main objective of the system of study allowances, only accessible at a certain level of income and for students who successfully progress in their studies, is to motivate students to study full time and successfully complete the study programme within the nominal period. Study loans secured by the State intend to give full-time students who are not entitled to receive study allowances the possibility to finance their studies. Applications, attributions and payments of study grants are managed directly by Higher Education institutions.

#### **4.** Personal documents: passport and driver's licence

a. Passport

Responsibility: Central Government, Police and Border Guard Board

 
 Website:
 http://www.politsei.ee/en/teenused/isikut-toendavad-dokumendid/eestikodaniku-pass/

Description: Information and application forms to download. The website allows for online application for ID documents. This service requires the use of an electronic signature.

b. Driver's licence

Responsibility: Central Government, Estonian Road Administration Department

Website: <u>http://www.mnt.ee/index.php?id=12659</u>

Description: Information only. Applications must be submitted in person at the Estonian Road Administration Department.

#### 5. Car registration (new, used, imported cars)

Responsibility: Central Government, Estonian Road Administration Department

Website: <u>http://www.mnt.ee/index.php?id=10663</u>

Description: Information and forms to download. Car registration applications must be submitted in person at the Estonian Road Administration Department (ARK).

### **6.** Application for building permission

Responsibility: Local Government

 Website:
 http://www.eesti.ee/eng/teemad/eluase/eluaseme\_soetamine/ehitus\_ja\_re

 mont/

Description: Information only. Planning permission applications are handled by local authorities.

### **7.** Declaration to the police (e.g. in case of theft)

Responsibility:Central Government, Estonian PoliceWebsite:http://www.politsei.ee/en/Description:An online crime reporting service is available on the website of the Estonian Police.

#### **8.** Public libraries (availability of catalogues, search tools)

Responsibility:	Central Government, National Library of Estonia
Website:	http://www.libdex.com/country/estonia/tallinn/library 22677.html
Description:	Online catalogue and reservation facility.

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9.	Certificates	(birth.	marriage):	request	and delivery
	certificates		marnagej	request	und denvery

Responsibility: Local Government

Website: <u>http://www.eesti.ee/eng/teemad/perekond/</u>

Description: Information only. Requests for certificates are handled by the local authorities.

#### **10.** Enrolment in higher education/university

Responsibility: Central Government, Higher Education institutions

Website: <u>https://www.sais.ee/index\_en.html</u>

Description: Enrolment in higher education is managed by Higher Education institutions. An enrolment information system called SAIS (*SissAstumise InfoSüsteem*) has been developed to enable the entire enrolment, processing, decisionmaking and information in a single environment on the Internet for participating universities. The system uses the eID card as an authentication tool. It can however be entered through one of the Estonian Internet Banks. Since the results of high school examinations are already in the online database, students can see immediately if they have been accepted to a participating university.

#### **11.** Announcement of moving (change of address)

Responsibility: Central Government (Estonian Population Register)/Local Government

Website: <u>http://w3.andmevara.ee/?lang=en</u>

Description: On the Estonian Population Register's website, it is possible for citizens to make the announcement of moving by sending a digitally signed document. In that case, a person is automatically identified. Consequently, there is no need for any other identifying document.

**12.** Health related services (interactive advice on the availability of services in different hospitals; appointments for hospitals)

Responsibility: Ministry of Social Affairs

Website: http://www.digilugu.ee/portal/page/portal/Digilugu/ETerviseProjektid

Description: The East Tallinn Central Hospital became the first in Estonia to introduce an <u>ePatient portal</u> in April 2008. Patients can access the portal from the hospital's website. Through the portal, patients can view their medical records, book doctors' appointments and pay consultation fees. It is also possible to order an appointment reminder via SMS or email. The project consists of four sub-projects: Electronic Health Record (EHR); Digital Imaging; Digital Prescription; and Digital Registration.

# **eGovernment Services for Businesses**

## Availability and sophistication of eServices for Businesses

The information in this section presents an overview of the 20 basic public services, which were identified by the European Commission and Member States, in the <u>eEurope initiative</u> <u>of 2000</u>, to measure the take-up by businesses and citizens of electronically-available public services.

The 8 services for businesses are as follows:

- 1. Social contributions for employees
- 2. Corporate tax: declaration, notification
- 3. VAT: declaration, notification
- 4. Registration of a new company
- 5. Submission of data to statistical offices
- 6. Customs declarations
- 7. Environment-related permits (incl. reporting)
- 8. Public procurement

#### **1.** Social contributions for employees

Responsibility: Central Government, Tax and Customs Board

Website: <u>http://www.emta.ee/</u>

Description: Estonian employers are required by law to pay 'social tax' for all persons employed. The tax rate is 33 % of the taxable salary. 20 % is allocated to pension insurance and 13 % to health insurance. The social tax can be calculated, filed and paid online using the eTaxBoard (*eMaksuamet*).

#### 2. Corporate tax: declaration, notification

Responsibility: Central Government, Tax and Customs Board

Website: <u>http://www.emta.ee/</u>

Description: The eTaxBoard (*eMaksuamet*) enables corporate taxpayers to file, view and correct their corporate tax returns online, and view their tax account balances.

### **3.** VAT: declaration, notification

Responsibility: Central Government, Tax and Customs Board

Website: <u>http://www.emta.ee/</u>

Description: The eTaxBoard (*eMaksuamet*) enables corporate taxpayers to view their VAT returns, submit VAT refund applications and view their tax account balances.



### **4.** Registration of a new company

Responsibility: Central Government, Centre of Registers and Information Systems

Website: <u>https://ariregister.rik.ee/</u>

Description: The Centre of Registers and Information Systems is a State Agency working under the Ministry of Justice. Its main function is the administration of a number of central databases and registers, e.g. the Estonian enterprises register. Since February 2007, entrepreneurs have been enabled to submit data to the Commercial Register through the new Company registration portal. They can submit registry documents processed within the next working day, at the earliest. Persons are identified and procedures are performed using the Estonian eID card and digital signature. Information only. Company registration services are handled by local courts.

#### **5.** Submission of data to statistical offices

Responsibility: Central Government, Statistical Office of Estonia

Website: <u>https://estat.stat.ee/</u>

Description: Data can be submitted electronically to the Statistical Office. The <u>eSTAT</u> is a web-based channel which has been available since February 2006 for filing official statistical reports. It offers an operational overview of the reports filed through different channels in the Statistical Office, as well as contacts with the providers of these reports.

### 6. Customs declarations

Responsibility: Central Government, Tax and Customs Board

Website: <u>http://www.emta.ee/</u>

Description: The Estonian Tax and Customs Board developed an eCustoms application (eToll) that enables online filing of customs declarations. A web-based system called <u>COMPLEX</u> was launched in May 2006 for processing customs declarations. This system can be used from every computer with Internet access. The Tax and Customs Board updates and maintains the system on a day-to-day basis: users do not have to do it themselves; that allows greater savings for enterprises. Customs declarations can also be drawn up and submitted in XML-format. To use COMPLEX, a client can enter the eTaxBoard, via the Tax and Customs Board's web-page, or an Internet bank.

#### 7. Environment-related permits (incl. reporting)

Responsibility: Central Government, Ministry of the Environment, Estonian Environment Information Centre

Website: <u>http://klis.envir.ee/</u>

Description: Fully transactional service.



8. Public procurement			
Responsibility:	Central Government, Public Procurement Office		
Website:	https://riigihanked.riik.ee/		
Description:	Established in 2001, the Public Procurement State Register is an 'eTenders' portal where all public procurement notices are published electronically.		

#### **European Commission**

The factsheets present an overview of the state and progress of eGovernment in European countries.

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