

Usability of public e-services

Is the quality of public e-services high and do they create added value?

Summary of audit results

The use of information technology helps to make the functioning of the state more efficient and seamless. There are increasingly more solutions that can be used for governance and communication with citizens and provision of services to them can be organised via electronic channels. E-services make using public services easier and more convenient for people. For example, it is possible to submit income tax return or request a new driving licence or identify document without leaving your home. The e-services of Estonia are admired at the international level.

What did we audit?

During the audit, the National Audit Office studied four information systems – the Public Procurement Register, the public e-File, the information system for submission of data for national statistics and the information system for spatial planning procedures – to determine whether the eight e-services they provide¹ are high-quality and create added value, i.e. save time and money for the agencies that provide them and the people who use them. The National Audit Office also analysed whether the agencies measure the usability of services and use the obtained information for the improvement of usability.

Why is this important to taxpayers?

According to the Ministry of Economic Affairs and Communications, the number of e-services provided in the state is 1692. It is important for the users of e-services that the quality of the public services provided by the state is good and that they are reliable and allow the users to communicate with state agencies easily and conveniently without spending much time or money, and to use the services and benefits provided.

The state will spend *ca* 200 million euros from the state budget and the money allocated by structural funds on the development of information systems in the public sector, incl. purchasing hardware and software, and developing data communication from 2014-2020.

What did we find and conclude on the basis of the audit?

The National Audit Office is of the opinion that the state must give more attention to levelling the usability of public e-services, because the state agencies have a different understanding of the development of an e-service that is user-friendly, high-quality and state-of-the-art. Although the Ministry of Economic Affairs and Communications has developed many recommendations for levelling the quality of e-services, the agencies have not followed them enough. The development of public e-services is fragmented and needs stronger central guidance.

Key observations about the audited services and information systems:

- **Many of the e-services studied during the audit were not simple and convenient, and using them required separate instruction.** The audit revealed that the process of providing some services is complicated and information technology opportunities have not been used to the full to

¹ Services of the Public Procurement Register: processing of public procurement tenders/applications by the contracting authority; searching for the messages, proposals and invitations sent to tenderers; preparation of tenders for procurements. Services of the public e-File: filing actions in civil cases and expedited processing of orders for payment in alimony claims. Services of the information system for submission of statistics: submission of reports to Statistics Estonia. Services of the information system for spatial planning procedures: initiation of spatial planning and monitoring one's applications.

provide simple and convenient services. The audit also revealed that using the services often meant going through the same stages electronically that were necessary when the paper process was used to provide the services, and that automatic checks or cross-usage of the data in national registers had not always been implemented in the service provision process. The fact that using some services was impossible without instruction or instruction materials was another sign that the services were too complicated. E-services are only effective if electronic processing is easy and convenient for both the official who provides the service as well as the person who uses the service, and helps them save time and money.

- **E-services are developed according to the logic of paper-based administration and no attention is given to the added value and savings the e-service gives the user and the state agency itself.** The development of two of the reviewed information systems proceeded from the earlier paper-based service provision processes and the opportunities to provide services more conveniently than before were not used to the full. The audit revealed that none of the audited agencies had calculated whether providing an information system and e-services is economically beneficial and helps save money in comparison to the ordinary way or the use of 'paper procedure'. The users of e-services generally felt that saving e-services does save time, but the owners of the information systems had usually not assessed how much time was saved. It is important from the viewpoint of using the state's money that the created information systems and e-services help make the work of state agencies more efficient and also earn back the money spent on developing them.
- **No attention has been given to smart device users and visually impaired people upon the development of e-services.** All of the studied services would be inconvenient to use on smart devices, because no simplified websites for smart devices have been created. The need to allow visually impaired people to increase font size and contrast on websites has partly been considered in the provision of just two public e-File services.
- **The understanding of state agencies of the user-friendliness and quality of e-services is different.** The audit revealed that agencies assess and improve the quality of e-services differently, and do it primarily by monitoring operation, error management and on the basis of feedback from users. The National Audit Office is of the opinion that the present practice should be developed further in such a manner that the assessment of the usability of e-services and information systems is regular, comprehensive and well considered throughout the state. This would make it possible to constantly monitor the quality of e-services and offer user-friendly, convenient, simple, effective and seamless e-services with added value in all areas of the public sector.
- **The Ministry of Economic Affairs and Communications has developed recommendations for the development of public e-services, but they are given little attention in state agencies.** For example, the ministry has developed a system of indicators for measuring the usability of e-services, but not a single one of the audited agencies has used it so far.

What did we recommend as a result of the audit?

The National Audit Office advised the Minister of Economic Affairs and Infrastructure to complete the preparation of the draft of the Government of the Republic Regulation 'Fundamentals of the Organisation of Services and Information Management' in 2016. This regulation should require all state agencies that provide e-services to work in the assessment and improvement of the quality and usability of e-services and calculation of added value.

Response of the Minister of Economic Affairs and Infrastructure: The Ministry of Economic Affairs and Communications submitted the draft of the Government of the Republic Regulation 'Fundamentals of the Organisation of Services and Information Management' for approval on 25 November 2015. The draft is in the second circle of approval and the ministry is currently waiting for feedback from the Ministry of Justice and the Government Office about the adequacy of the responses

and explanations given to them. The Ministry of Economic Affairs and Communications will then submit the draft regulation to the Government of the Republic. The regulation requires all state agencies that provide e-services to work in the assessment and improvement of the quality and usability of e-services and calculation of added value.

The assessment of the quality and usability of the services will be discussed at the meeting of the cooperation network of service owners that started operating on 30 June 2015. The Government of the Republic Regulation 'Fundamentals of the Organisation of Services and Information Management' stipulates that a council will be working by the Ministry of Economic Affairs and Communications and it will continue the activities of the present cooperation network of the service owners.

The National Audit Office advised the audited information system owners to develop and implement a methodology for assessing the quality and usability of e-services within a year and to improve the usability and quality of the services on the basis of the assessment results. The National Audit Office also advised making the services more accessible to people with special needs and smart device users.

Response of the Minister of Justice: The Minister of Justice supports the recommendations of the National Audit Office, but would like to emphasise that the extremely broad meaning, different target groups and goals of public e-services make measuring and assessing all e-services on the basis of the same criteria impossible. This is why the usability of the services of the public e-File cannot always be measured on the basis of the system of indicators for measuring the usability of e-services developed by the Ministry of Economic Affairs and Communications. The measurement of the public e-File usability cannot be based on the assumption that the number of users increases constantly or that the cases filed through the system are processed faster than the ones not filed via the system. The added value given by documents with digital data to the users of the public e-File must also be considered when usability is measured. The Ministry of Justice will continue monitoring the usability of the public e-File on the basis of the criteria that are suitable for the system and give information about the needs of users.

Comment of the National Audit Office: The number of users and speed of processing court cases pointed out in the response of the Minister of Justice are just two of the possible indicators that can be used to assess usability and are given in the guideline 'System of Usability Indicators for Public Sector Software Systems' developed by the Ministry of Economic Affairs and Communications. The mentioned guideline contains 24 countable indicators and 17 indicators that the owner of the information system can use according to the specific features of their information system and services.

Response of the Minister of Finance and the Minister of Public Administration (also includes the response of Statistics Estonia): The Ministry of Finance has participated in the steering group of the coordinators of e-services, which deals with the development of the quality and usability of e-services, since October 2015. The Ministry of Finance therefore sees no need for the development of a separate methodology. The Ministry of Economic Affairs and Communications is the leader of the steering group. The ministry also finds that establishing a separate methodology for assessing the quality and usability of e-services would not be practical, but it should be established in the state as a whole.

The Ministry of Finance will consider the recommendation to make services accessible to visually impaired people when updating and developing the Public Procurement Register, the information system for submission of data for national statistics (e-STAT) and the information system for spatial planning procedures (RPIS).