

Finance and Public Administration Committee
Report on Fact-finding visit to Estonia, 23-26 September 2024

Introduction

1. The Scottish Parliament's Finance and Public Administration Committee visited Tallinn, Estonia, between 23-26 September 2024. The purpose of the visit was to learn from Estonia's experience of public service reform, including its digital transformation, in order to inform the Committee's [pre-budget 2025-26 scrutiny on Managing Scotland's Public Finances: A Strategic Approach](#).
2. During the visit, Members of the Committee met with representatives from the Estonian Parliament (Riigikogu) and the Estonian Government, including their counterparts on the Estonian Economic Affairs and Finance Committees and the Chair of the State Budget Control Select Committee, the Estonian National Audit Office, the Estonian Information System Authority, the Estonian Association of Information Technology and Telecommunications and representatives of local ICT companies.
3. The Committee thanks all those who gave up their time to meet with us and share their knowledge and experiences, for the insightful discussions as well as their hospitality. The Committee also thanks the British Ambassador to Estonia, HMA Ross Allen, for his welcome to the country and assistance with the Committee's visit.
4. A full list of the meetings attended by Committee Members in Tallinn is included at the end of this report.

Background

5. Public service reform (PSR) is a key element of the Committee's remit. The Scottish Government's view is that PSR is a crucial element of ensuring fiscal sustainability, particularly in the context of current significant pressures on Scotland's public finances. Indeed, in its [2022 Resource Spending Review](#), the Scottish Government identified the need for "an enhanced focus on delivering efficiency savings across the public sector" over the life of the Parliament, including through: digitalisation, maximising revenue through public sector innovation, reform of the public sector estate and public body landscape, and improving public procurement.
6. In 2023, the Committee held an [inquiry into the Scottish Government's PSR programme](#) to examine the Scottish Government's objectives for reform and progress made to date. The findings of this inquiry were included in its [report on pre-budget scrutiny 2024-25: The Sustainability of Scotland's Public Finances](#), published on 6 November 2023. In that Report, the Committee expressed its disappointment that commitments "have at times not been met" and set out a series of recommendations aimed at bringing "much-needed impetus, focus and direction to the Scottish Government's reform programme to ensure successful outcomes can be achieved at a much quicker pace".

7. In its January 2024 [report on the Scottish Budget 2024-25](#), the FPA Committee concluded that much greater progress is needed with digitalisation in Scotland, given its potential to achieve efficiencies in the current financial climate, as well as improving public services and productivity. The Committee agreed to continue its scrutiny of PSR as part of its annual pre-budget scrutiny, with a view to reviewing progress and delivery against the overall outcomes of the programme towards the end of this parliamentary session. This year's [pre-budget 2025-26 scrutiny on Managing Scotland's Public Finances: A Strategic Approach](#) therefore includes a strand of work on PSR. The Scottish Government has committed to providing six-monthly updates to support the Committee's ongoing scrutiny of its PSR programme. Its [first update](#) was provided in December 2023 and is contained within the Scottish Government's response to the Committee's Pre-Budget 2024-25 Report. The [second update](#) was provided to the Committee on 23 September 2024.
8. A key plank of the Scottish Government's PSR programme is the opportunity that digitalisation provides to achieve more effective and efficient services. In its [Digital Strategy for Scotland](#), published on 11 March 2021, the Scottish Government set out its commitment to deliver a "shared vision of a modern, digital and collaborative government, designed around people". This commitment aims "to change the way we work to ensure services are designed to meet the needs of the user, to deliver economic recovery, to meet climate change targets and to ensure that everyone in Scotland has the skills, connectivity and devices required to fully participate in our digital nation".
9. In August 2024, Audit Scotland and the Accounts Commission published a report on Tackling Digital Exclusion, which highlights that one in six Scottish adults lack the digital skills needed for everyday life. The report's key findings include—
 - public bodies must make better use of technology to deliver services. "Done well, it gives people greater flexibility whilst reducing costs to service providers".
 - some people are being left behind as more services move online and reliance on digital technology increases, "causing unintended harms and further widening inequalities".
 - all public bodies have a responsibility to do more to support people to use digital tools "in a way that benefits them and make[s] sure they can access the services they need". The report notes that, "failing to do, intensifies the impacts felt by already vulnerable people – due to poverty, age or because they have a disability".
 - progress to address digital exclusion was made by the Scottish Government, councils and third sector at the outbreak of the pandemic, but "since then, momentum has slowed, [and] national leadership weakened, with less funding available".
 - the report calls on the Scottish Government and COSLA to, by the end of 2024/25, develop "a clear action plan, with clarity on leadership, roles and responsibilities", including detail about the funding needed and available to deliver this plan.

10. It is on this basis that the Committee agreed to explore examples outside of Scotland, where digitalisation has been implemented successfully to deliver public services reform. The OECD has described Estonia as a “frontrunner in digital governance and innovation”, which is one of the factors that allowed it “to cushion better than others the sanitary and economic shock from the pandemic”¹.
11. This report provides an overview of the key issues discussed at meetings in Estonia, the Committee’s reflections following the visit, and our conclusions that will be reflected in our pre-budget 2025-26 report as recommendations for the Scottish Government.

Digitalisation

12. The Committee’s visit began with a presentation at the e-Estonia briefing centre, where Members received an overview of Estonia’s digitalisation journey and vision, alongside a demonstration of the Estonian State Portal and e-services for citizens.

Journey to e-Estonia

*“e-Estonia is an incredible success story that grew out of a partnership between a forward-thinking government, a proactive IT sector, and a switched-on, tech-savvy population”.*²

13. Following Estonia’s independence from the Soviet Union, in the absence of any legacy systems, digitalisation of processes was seen to be a quicker and more efficient way of building the state than if it were to use traditional solutions. The new Estonian Government was made up of “fairly young people” who “had a plan and stuck to it”, with a vision of the country becoming akin to a Scandinavian country. In the context of significant economic challenges, there was no pushback from citizens at the time, as they had other priorities.
14. The Tiger Leap programme initiated in 1996 saw significant investment in developing and expanding computer and network infrastructure through public-private partnerships, with a particular emphasis on education. E-banking services and an e-Cabinet followed in 1996, and an e-tax authority in 2000. The Estonian X-road project was initiated in pilot form in 2000 and since became “the backbone of e-Estonia” allowing public and private sector information systems to link and operate together. In 1998, the Estonian Parliament earmarked 1% of GDP as permanent state funding for IT, ensuring that the policy endures, including during political change.
15. Nowadays, 99% of Estonia’s public services are online and 99% of Estonian residents have an ID card, with 70% of them using it regularly. During the 2023 Parliamentary elections, 51% of Estonians voted online. 99% of patients have countrywide accessible digital healthcare records and all prescriptions are digital. Officials report that the country saves over 2000 years or working time annually

¹ [OECD Economic Surveys: Estonia 2022 | OECD](#)

² [e-estonia.com/wp-content/uploads/e-estonia_guide.pdf](#)

thanks to data exchange. The use of electronic signatures alone is estimated to save at least 2% of the Estonian GDP each year.

16. A detailed illustration of “the journey to e-Estonia”, including key statistics on Estonia’s digitalisation, is available in the [e-Estonia guide](#).
17. In 2019, Estonia published an [AI Taskforce Report](#) and [AI Strategy 2019-21](#), with further iterations following for 2022-23 and 2024-26. The main focus of this work is collaboration between Government, academia, and the private sector, fostering innovation and “ensuring a cohesive approach to AI development and deployment”. Enhancing AI and digital literacy among the population “is a key component of Estonia’s approach, ensuring that citizens are well-informed and can actively participate in the digital society”. It further places strong emphasis on developing and implementing trustworthy AI solutions, an approach which “helps ensure that the benefits of AI are realised in a manner that is secure, equitable, and respectful of privacy and human rights”. In the future, Estonia plans to continue to invest in AI research and development, “aiming to maintain its position as a leader in digital innovation”³.
18. 30+ AI projects have been carried out in the public sector since 2019. Some examples of those projects used to streamline processes and improve public service delivery include—
 - Bürokratt – a network of chatbots for citizen services
 - AI-driven tax fraud detection systems.
 - Autonomous vehicles – museum buses in Tallinn and Tartu, and
 - Automatic transcriptions of court hearings and Parliament sessions.
19. According to a [report published in April 2024 commissioned by Google](#) and prepared by the Implement Consulting Group in co-operation with the Estonian Government, generative AI could contribute up to €2.5 – 3 billion or 8% to Estonia’s GDP yearly if widespread adoption is achieved.

Public trust and transparency

20. According to e-Estonia, the country’s e-governance rests on three pillars—
 - legislation (which aims to regulate the process, rather than the technology),
 - the ICT sector’s capability to implement the government’s vision, and
 - the trust of citizens in e-solutions.
21. During the visit, we heard that Estonian people tend to “trust e-systems more than physical systems”, with transparency built into the approach throughout, which helped build public trust.
22. Estonia has developed a “very secure system that people can rely on”, where everyone owns their own data, and each area of the system can only access specific and relevant information to that area on the e-system. A communication

³ [factsheet-ai-strategy.pdf \(e-estonia.com\)](#)

protocol allowing the secure and automatic cross-use of data between information systems, called X-Road, provides the secure interconnection of national databases. The Information Systems Authority (known locally as RIA) registers the exchange of information between agencies, without seeing the actual data that is being exchanged. Importantly, all public sector systems must be compatible with X-Road and, more recently, the private sector has started optimising their systems to ensure better and easier flow of information. With data being held by individual agencies, the system is protected against single-point-of-failure risk. In other words, if one agency is compromised, it is cut-off from the system, with the other agencies unaffected. To date, X-Road has not experienced any significant failures.

23. RIA also manages and protects the state Internet network to enable secure e-elections and manages the State Portal eesti.ee, which aims to deliver to citizens important information regarding the state, including sections on e-services for citizens, eservices for entrepreneurs, proactive government services, and announcements. The effective and efficient operation of the network means information is nimbly exchanged between different agencies. For citizens, this means “you only have to give the government any piece of information once”. The State Portal also includes a data tracker, which allows people to see who has logged into their personal data, and criminal proceedings can be (and on occasion, have been) brought against anyone inappropriately accessing personal data.
24. The development of the State Portal has also allowed for the introduction of proactive services, including automatic maternity and paternity leave and benefits after a woman is registered on the e-system as being pregnant by their GP. We heard that “the idea is that the citizen does not need to know how the state works to navigate it”, the aim of digitalisation being to improve the citizens’ quality of life. Further, the efficient and transparent exchange of information, alongside the use of e-identification have made certain types of fraud, for example, identity and welfare fraud, “virtually impossible”.

Collaboration between public and private sector

25. Estonia’s digitalisation programme owes its success partly to effective collaboration between government and business, and, as described by the e-Estonia briefing centre, the public sector in Estonia has been built by the private sector. During discussion with the Estonian Association of Information Technology and Telecommunications (officially abbreviated as ITL) and representatives of local ICT companies, we heard that the public sector collaborates very closely with the private sector, and that there is a Government priority to provide private companies with stability and an opportunity to be bold and innovative. The business sector also contributes significant amounts of data to the Government, which, in turn, provides them with reliable statistical overviews of their respective sectors.
26. We heard that the private sector is involved in the design of services early on in the process, before procurement stage. While this approach can be time consuming, it enables consensus to be achieved on design and “can lead to

significant changes from the initial idea”. Representatives from ICT companies found that the public sector is generally open to receiving feedback on proposals and they find it “fairly easy” to speak to relevant Ministers. An IT procurement guidance document, developed through cooperation between the public and private sector with the aim of avoiding issues with IT projects, has been used consistently by the public sector and has led to significant improvements. The current system also contributes to fair competition between suppliers to the public sector.

27. Staff exchanges from Government to the private sector and vice versa are commonplace and continue to be encouraged, an approach which enables “good relationships and constructive criticism”. A DigiAcademy has also recently been created for civil servants.
28. The e-Estonia centre described the culture as one where it is “ok to fail, so we do it quicker and learn from that and move on”. Public-private partnerships continue, taking a “whole nation approach” with the vision of “building something together”. More generally, we have heard that people are “mission driven”, with some private companies volunteering their time for free.

Challenges of digitalisation

29. Our visit enabled the Committee to delve deeper into Estonia’s experiences of digitalisation, including the specific challenges it faces, such as bridging the digital divide between rural and urban areas and between different age groups, ensuring proper maintenance of the infrastructure and preventing a skills shortage of data experts, so that the system can continue to run smoothly.
30. In the context of significant reliance on digital systems, we heard that cyber-attacks continue to be a significant threat, which has been exacerbated following Russia’s invasion of Ukraine. The Government is transparent about the nature of cyber-attacks, and we heard that there is more emphasis than ever on protecting critical infrastructure. The Committee was told that Government efforts to support Ukraine and reduce Russian cultural influence domestically have led to an increase in Russian cyber-attacks. All cyber-attacks are reported to RIA, and the Committee heard that “millions of attacks” on the state network are prevented every month. Following the introduction of the Cybersecurity Act 2018, Estonia has 6 IT powerhouses supporting several ministries and agencies. While these are part of the public sector, they employ private contractors, whose pay levels are confidential.
31. Any organisation fulfilling public duties must abide by the E-ITS (the Estonian information security standard), with RIA holding the power to supervise and screen entities. However, the large number of entities subject to E-ITS and the inability to automate screening, pose challenges to the agency’s ability to fulfil this duty.
32. As part of general efforts to mitigate the risks of potential attacks, Estonia has created a Data Embassy in Luxembourg, which is capable of providing data backups and operating the most critical services.

33. Such investment, however, comes at a cost. During conversation with the State Audit Office, we heard that while ICT investment has consistently been a priority, the share of maintenance costs is now growing, and there is a general lack of clarity around overall costs. A significant number of projects have used European Union funds; however, maintenance costs are not always factored into overall projects, which is posing long-term financial risks.
34. Further, challenges of digitalisation mean there can be time delays in legislation being introduced and enacted while supporting e-systems are developed. The State Audit Office has suggested that Estonia's international image is "still good", but indicators are lagging.
35. Committee Members were also interested to hear about how Estonia tackles digital exclusion, given the issue remains in Scotland. We heard that significant emphasis is placed on developing the digital skills of Estonia's inhabitants, and that programming, robotics and modern technologies are taught to children from a very young age. There is a general expectation that younger people will help support other family members to overcome digital exclusion, although it remains true that some people do not wish, or are unable, to use digital services. The State Audit Office suggested that there is a good network of access through local libraries for those seeking support to develop their digital skills.
36. Talent acquisition presents another challenge in Estonia's public and private sectors. During a discussion with representatives from the Ministry of Economic Affairs and Communications, we heard that the country has relatively low productivity in the industrial sector and is expected to face a significant shortage of engineers. Younger generations, it was suggested, now have less interest in having a career in industry. Retraining programmes, which have proved successful in attracting people to the IT sector, are now being used in the industry sector.
37. Talent acquisition challenges are also faced by the IT sector, as the country needs more specialists, with more specialised skills. According to ITL data, the ICT sector in Estonia comprises of over 9,000 companies and amounts to 8% share of the GDP, with an annual turnover of 7.88 billion euros. However, we heard that in order to maintain and increase the competitiveness of the Estonian economy, the number of ICT professionals should be increased by a factor of 1.5 compared to today (Estonia currently trains 1,200 people per year in ICT, when the number needed to ensure sustainability is closer to 2,000 people per year). Competition for ICT workers tends to occur amongst companies within Estonia rather than internationally.

Digitalisation in the Estonian Parliament

38. During our visit, we also met with the Administrative Director of the Chancellery of the Riigikogu, to discuss reforms in the Estonian Parliament. Issues raised will inform the Committee's scrutiny of the Scottish Parliamentary Corporate Body's Budget bid for 2025-26.

39. We heard that the Estonian Parliament is exploring how AI can enhance its services, including through AI generated verbatim official reports. While automated Committee meeting summaries has also been explored, challenges have arisen, and an acceptable approach is still to be found. For committees, staff use the AI generated verbatim text to prepare Committee minutes of proceedings, and, as of October 2023, the error rate was around 5%, mainly depending on the speaker and the nature of their speech, as well as background noise. One of the drivers for digitising this work was that it is “intensive and repetitive work that young people don’t want to do any more” and that the stenographers in post were close to retirement.

Wider public service reform

40. The Committee also took the opportunity to learn about wider public service reform in Estonia, particularly during discussions with representatives from Estonia’s Ministry of Finance.

41. We heard that early state reform initiatives were funded by the EU and included reducing local municipalities from 213 to 79, with the criteria of at least 5000 inhabitants per municipality.

42. The Government has also rationalised some public sector agencies, including ICT services, and officials are currently working on a catalogue of support services to identify opportunities for standardisation. A policy driven reorganisation of Government agencies is now taking place, and each is subject to around 10% budget cuts.

43. Restructuring and consolidation of state agencies has to date led to the creation of joint agencies in five areas—

- the environment,
- agriculture and food,
- transport,
- education and youth,
- enterprise development and innovation.

44. We heard that the same process is currently underway with state laboratories and healthcare and medicines related state agencies.

45. At the same time, reform of ICT and central government support services has included—

- the consolidation of central basic ICT services for the entire state into a newly created institution of Estonian State Information and Communication Technology Center, which deals with maintaining, procuring and developing the necessary ICT services, solutions and systems, managing the corresponding budget and ICT assets,
- centralisation of state personnel data and accounting,
- centralisation of public procurement, and

- centralisation of document management systems now also underway.

46. Current public governance goals include—

- linking strategic and budget planning more clearly,
- harmonising and consolidating the principles of public services and support services,
- creating a comprehensive concept of data-based governance,
- ensuring the institutional flexibility of the state, i.e. reducing the rigidity of the borders between government institutions,
- reducing internal bureaucracy through harmonisation of services and solutions at the top of government services,
- building a partnership between the state and citizens and a co-creative policy-making culture, and
- developing a local government with sufficient capacity and ensuring clarity of tasks and responsibilities of the state and local governments.

47. Estonia has a far slimmer public sector compared to Scotland. While the Estonian public sector as a whole comprises of approximately 100,000 workers, Government employees amount to only 20,000. The Government's aim is to create an agile model of governance, where policy-driven reorganisation of government agencies is the new norm. However, we heard that, in 2023, more than 700 employees changed their position during the reorganisation of ministries, which revealed limited connection between support services, the absence of a clear change management model, and a resulting reduction in motivation. In July 2024 another reorganisation was initiated, with the goal of achieving a model of governance that allows implementation of necessary changes "in a way that does not require changing the structural units of government agencies at the legal level every time" and ensures the continuity of policy making.

48. The number of Government documents have been rationalised based on feedback. There are now 17 Government strategic documents linked to budgets with clear metrics, an approach which is intended to make it easier to evaluate impact. Metrics includes public satisfaction.

49. Similar to experiences in Scotland and elsewhere, following Covid, there is an expectation amongst the public that "things will happen faster", which can present challenges for consultation and 'co-creation', with civil servants expected to provide evidence more quickly to support decision-making. This echoes the findings of our own [inquiry into effective Scottish Government decision-making](#).

Economy

50. The OECD has recognised Estonia as the top country in the world for Tax Competitiveness. Its transparent and simple tax system includes a flat 20% tax on individual income, no corporate income tax on reinvested and retained profits, a property tax which applies only to the value of land, and a territorial tax system which exempts 100% of international profits earned by domestic corporations

from domestic taxation. Tax returns are completed online, with forms mostly pre-filled, taking as little as two minutes to complete. In fact, the Committee heard that submitting one's tax return as soon as the portal opens has become "a national sport".

51. Government debt as a share of GDP is low compared to most countries – at around 10% of GDP in 2023. However, Estonia's export market share has fallen in recent quarters, with Estonia's merchandise exports falling by 23% between Q3 2021 and Q4 2023. This has been caused by an adverse combination of external shocks. Russia's war on Ukraine resulted in disruptions to supply chains and increased input costs. Commodities like timber and metals previously supplied from Russia and Belarus, are now sourced from more expensive markets. The Euro's appreciation against currencies of trading partners like Sweden and Norway has also reduced the competitiveness of Estonian exporters.
52. In light of current economic challenges, VAT is due to rise to 24% and income tax rates to increase from 20% to 22% from January 2025. A new 2% tax on companies' accounting profits will also be introduced in 2025 to "bolster the country's security and defence" and is due to come to an end in 2028, unless renewed.
53. Similar to Scotland, Estonia faces the challenges of an increasingly ageing population, with gradual increases to the pension age being introduced in response to this. The ageing population also impacts on the availability of a skilled workforce.
54. We heard that young people tend to prefer to follow ICT career paths rather than in industry, and that, although university education is currently free of charge, the Government is now trying to target this more towards the skills base needed in the country.
55. In addition to the permanent commitment of 1% of GDP for IT, the Estonian Government also has a target of 1% of GDP for research and development. The Committee heard about a significant research project undertaken by the University of Tartu, which has gathered the genetic and health information of over 200,000 volunteers, in order to analyse and provide personalised prescriptions and medical screening advice, an approach that can lead to significant savings in healthcare over the long-term.
56. The simplicity and competitiveness of the tax system means companies that come to Estonia "tend to stay", along with the highly skilled workforce. A transnational digital identity allows any user outside of Estonia to run a trusted location-independent EU business online with all the tools needed to conduct business globally. The system, called e-residency, was introduced in 2014 and the country now has over 113,000 e-residents. In addition to e-residency, the country benefits from a substantial number of micro-businesses, which is partly attributed to the ease of setting up a business, but also to a general entrepreneurial spirit – "every 10th Estonian has a company".

57. We also heard that the Estonian Government aims to standardise all data and make full use of e-billing and e-invoicing, so that, by 2027, businesses do not need to submit any reports to the Government.
58. The budget in Estonia is now ‘activity-based’ to enhance understanding of where funds are being spent, an issue of concern previously highlighted by the State Audit Office.
59. The Government has also started zero-based budgeting within three Ministries, justifying and approving budget lines each year rather than basing it on past spending. It hopes to extend this approach to all other Ministries within four years.
60. The country’s deficit increased from 0.9% of GDP in 2022 to 3.4% in 2023 and the Government produces 4-year medium-term fiscal plans as well as an annual budget, with a general goal to link strategic and budget planning more clearly. The vision of Estonia’s Fiscal Policy Framework is “we help to maximise wellbeing of Estonians, by making smart decisions quickly” and one of its goals is for a “financially literate state”, which is—
- antifragile (knowing and dealing with fiscal risks),
 - impactful (activity and performance-based budgeting), and
 - efficient (budget revision, including zero-based budgeting and personalised services).
61. Thanks to its digital system, Estonia has an abundance of data, however, this is not always easily accessible as it is not centralised, with different databases providing information on spending.
62. Statistics Estonia, the government agency responsible for producing official statistics regarding Estonia, which is part of the Ministry of Finance, has produced an interactive, easy to use dashboard called the ‘[Tree of Truth](#)’, which shows the country’s progress towards national strategic goals on the basis of national statistics. The tree displays data from 15 activity areas and the results are visible as leaves coloured green (goal achieved), yellow (some progress made) or red (significant catch-up needed), and aims to provide “a simple, honest and objective picture of how the country is doing”.

Conclusions

63. Our visit to Tallinn enabled the Committee to delve deeper into Estonia’s approach to digitalisation, including how it works in practice as well as the challenges associated with digital reform of the public sector.
64. During our visit, we heard that the background to Estonia’s digitalisation journey was a lack of legacy systems following the dissolution of the Soviet Union, coupled with a generally tech-savvy population and the concurrent development of relevant technology, all of which contributed to the creation of a digital government and society “from scratch”. The synchronous development of

institutions, and the consistent focus of successive governments, ensured that systems were created with interoperability in mind from the start, paving the way for efficient public services.

65. The Estonian story is therefore strongly linked to its context, which is not directly replicable to Scotland. In contrast with the situation in Estonia during the early 1990s, Scotland benefits from an array of existing legacy systems, which will take considerable time to adapt and modernise in a way that ensures interoperability and seamless digital information exchange across agencies. Nevertheless, the Estonian example provides useful insights into the steps Scotland can take now as part of its digital public service reform.
66. We quickly learned that one of the main contributors to Estonia's successful digitalisation is public trust, which has been built through the effectiveness of systems and transparency around how data is being used. Transparency is a key theme of this Committee's work and we have made a number of recommendations to the Scottish Government which have led to improvements in the level and presentation of data in relation to budgetary information. The Scottish Government can learn much from the approach of the Estonian Government in relation to transparency, clarity of goals and measurement of progress in relation to public sector reform. This will be essential to the success of any future digitalisation programme. The Committee also sees merit in the Estonian Government's zero-based budgeting approach and will explore opportunities to develop a similar approach with the Scottish Government.
67. Estonia owes much of its digital success to strong partnerships between the public and private sector. Similarly in Scotland, the public sector alone cannot provide all the solutions, skills and knowledge needed to build and maintain efficient and effective digital services. Meaningful collaboration with the private sector at the early stages of planning and development of projects is essential. Current procurement processes in Scotland may therefore require to be updated, to ensure the private sector is able and empowered to contribute to projects at an early stage. Similarly, a more structured approach to enable exchanges between staff in the public and private sector, including flexible career pathways, should be adopted.
68. The Committee further learned that Estonia's digital system is one where every agency only holds data relevant to its remit, with X-Road providing the secure interconnection of national databases. For the system to work effectively, all public sector systems must be compatible with X-Road. The Committee has previously heard that public sector systems are rarely compatible with each other. Setting a standard for the creation of any new systems, with a long-term goal of enabling these systems to communicate in the future, is the first step Scotland should make towards digitalisation of the public sector. Consideration should also be given to whether Scotland should create a permanent spending commitment on ICT, which lasts beyond political cycles, and to rationalising the number of Government strategy documents to enable clearer objectives and easier measurement of outcomes. The Government should further consider how it can

maximise AI opportunities to improve productivity in the public sector as well as the delivery of public services.

69. The Committee's report on Managing Scotland's Public Finances: A Strategic Approach sets out specific recommendations to the Scottish Government arising from this important fact-finding visit. We look forward to exploring further with the Scottish Government how these recommendations can be taken forward.

Agenda and meetings

Monday, 23 September

Committee travelled to Tallinn, Estonia.

Tuesday, 24 September

Meeting with HMA Ross Allen

Presentation in the e-Estonia Briefing Centre

Meeting with Ms Carolina Leis, Head of the International Relations of the Information System Authority

Meeting with Ms Sandra Särav-Tammus, Deputy Secretary General for Economics and Innovation, Ministry of Economic Affairs and Communications

Meeting with Ms Doris Põld, Chief Executive Officer of the Estonian Association of Information Technology and Telecommunications and ICT Company representatives Ms Marki Tihhonova-Kreek (Nortal AS), Ms Kedi Välba (Aktors OÜ) and Mr Rannar Park (e-Estonia Showroom)

Wednesday, 25 September

Meeting with representatives from the State Audit Office Mr Märt Loite (Director of Audit), Ms Tiit Lauri-Kivimäe (Auditor), Ms Ave Matsalu (Auditor), Ms Triin Saarma, (Auditor), Ms Aire Velling (Auditor), Ms Jane Sõmmer (Auditor) and Ms Katrin Gottlob (Information Officer)

Meeting with Mr Sven Kirsipuu, Deputy Secretary-General of Fiscal Policies and Mr Ott Karulin, Head of Public Governance, Ministry of Finance

Working lunch with members of the Economic Affairs and Finance Committee:

- Ms Annely Akkermann, Chair of the Finance Committee
- Ms Maris Lauri, Member of the Finance Committee
- Mr Tanel Kiik, Member of the Finance Committee
- Mr Aivar Sõerd, Member of the Finance Committee
- Mr Jaak Aab, Chair of the Economic Affairs Committee
- Mr Andres Sutt, Member of the Economic Affairs Committee
- Mr Tarmo Tamm, Member of the Economic Affairs Committee
- Mr Mart Maastik, Member of the Economic Affairs Committee
- Mr Andres Ando, Adviser to the Finance Committee
- Ms Kristina Funk-Lvovski, Adviser of the Foreign Relations Department

Tour of the parliament

Meeting with Mr Kristo-Enn Vaga, Chair of the Estonia-Great Britain Parliamentary Group

Meeting with Mr Ahto Saks, Administrative Director of the Chancellery of the Riigikogu

Meeting with Mr Urmas Reinsalu, Chair of the State Budget Control Select Committee

Thursday, 26 September

Committee travelled to Edinburgh.

Photos of those the Committee met





Members of the Finance and Public Administration Committee at the Estonian Parliament, the Estonian National Audit Office and the British Embassy in Estonia