# Overview of the use and preservation of state assets in 2013-2014

Summary of Problems in the Development and Economy of Estonia by the National Audit Office

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#### **Preface**

Each of us probably has a different perception of the development of Estonia in 2013 and 2014 which is largely based on personal experience – those who have done well see the development of the entire state in a better light than those who have not done so well.

Leaving aside the issues of security that are causing general anxiety, the current economic development may be regarded as calm progress by some and a standstill or even incessant movement backward by others. Everyone is probably right in their own way, as the development of the state and society cannot be different from people's lives in their diversity.

In addition to perception at the personal level, especially in the economic development that the National Audit Office focuses on, there are also a number of objective indicators in the state's development that characterise certain trends. Yes, statistical indicators can be interpreted differently based on experience, but they do make a contribution to the big picture.

Based on this big picture, we can call the past year a time when the trust of people in the Riigikogu and the government recovered from the low at the end of 2013 and the gross domestic product and state budget of Estonia are the biggest they have ever been in financial terms. However, we also saw that Estonia has failed to move significantly closer to the European average in terms of many development indicators – at least not as much and not as fast as we have been planning. Many countries to which we compare ourselves and who we clearly beat in overcoming the crisis have switched gear and caught up with us.

There is of course some inevitability in all of this, but only to a certain extent. Against the background of a small open economy and *laissez faire* economic policy, there is a growing danger that inevitability and dependence on external forces will be used as an excuse to justify a lack of ideas, an unwillingness to carry out reforms and a reluctance to change.

I tend to think that we sometimes mistake peaceful development for a standstill caused by indecisiveness and fear of failure. When we look to the future, we see that population aging will make it increasingly difficult for businesses to grow, develop and create value without which the tax revenue required to maintain the state will also decrease.

The expenses of the social security system will continue taking most of the increase in the state's revenue, but despite this, accessibility of medical care will continue to deteriorate and the real increase in pensions will not meet people's expectations.

We are witnessing how the state has acted as an indecisive bystander and allowed the gap between the duties and capacity of local authorities to deepen, thereby making it even more likely that the problems of several local authorities will soon become extremely serious problems for the state as a whole.

These facts do not come as a surprise to people who have taken the development of the state to heart. The National Audit Office has been pointing out these significant problems and possible solutions to the Riigikogu, the government and the general public for years. Unfortunately, the big picture tends to get lost in the stream of current problems and concerns: we lose track of what has happened to one problem or another; of whether a problem has been resolved in addition to being acknowledged. As the Auditor General, it is my duty to keep track of this, and time and again I am forced to admit that no significant breakthroughs have been made in the resolution of several principal issues over the year.

I am also happy that our public debt is small and that our budget is balanced. Well, structurally balanced. But that is not enough to become a wealthy society in the European sense. Order in public finance is an extremely important starting point for the activities of every government, but this in itself does not solve the problems Estonia is facing and which, if ignored, will certainly turn our peaceful development or standstill into regress.

We have kept ourselves busy with small decisions whilst many choices of sustainable development have yet to be made. Both onlookers and the people involved are under the impression that work is being done. It is being done, but there are still no solutions to core problems.

We must decide what will happen with our social security systems so that they actually help people cope, but without curbing the state's long-term progress at the same time.

We have to streamline our school network to offer education that is excellent, but also affordance for the state. We must understand our entrepreneurs better so that the state can contribute to earning income in the best possible manner and not get in the way. It has been clear for years that we cannot carry on without reforming the manner in which we maintain the state, and local government reform is only a part of this.

Keeping an eye on a balanced state budget, there is only one solution to this problem – the old way of financing that the state has become accustomed to must be given up, which is of course very difficult for officials, politicians and society.

In addition to the usual overview of the use of state assets, this year's annual report of the National Audit Office focuses on six of the areas we have audited and that still require special attention, bold decisions and strong action from the Riigikogu and the Government of the Republic.

We are also offering our own recommendations and solutions that could help make decisions.

These obstacles to development do not care about when the next elections will be held or who is currently in power – they just stand in Estonia's way and simply must be resolved in the end. And these decisions would be much better if public authorities – the users of taxpayers' money – learnt to understand the reasons for their successes and failures better.

People also have to be ready to change themselves, change their way of thinking, take a sharp look at the situation and support those who are prepared to make the necessary decisions and do not try to evade them, imagining or wanting to imagine that one or another issue can be resolved by forming yet another committee or burying even more money in a system that does not work. This would be pointless even if we had money to spare – which we do not.

Therefore, keeping a cool and calm head and making rational and brave decisions remains the only way to resolve our problems.

Alar Karis Auditor General

October 2014

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#### Use and preservation of state assets

- 1. The government uses taxpayers' money with the consent of the Riigikogu for the development of life in Estonia. The government is expected to achieve its goals, but in doing so it must also use the money in a manner that is lawful and transparent. The National Audit Office is obliged to help the public understand how the governors of the state have coped with their duties. This is why the National Audit Office carries out financial audits, performance audits and compliance audits.
- 2. There are several ways in which an overview of the use and preservation of state assets can be given. The Estonian Development Fund, the Estonian Cooperation Assembly, the National Audit Office, Statistics Estonia any many others also report on this every year in addition to the Government of the Republic and they do so in a broader sense in terms of financial, human, natural and other resources. In a narrower state, the state's annual accounts are one of the most important documents concerning the existence of state assets.
- 3. Every year the National Audit Office audits the state's annual accounts as well as the annual accounts of ministries, the Government Office and constitutional institutions. In the course of auditing the annual accounts, the National Audit Office evaluates whether state agencies have performed their economic transactions in compliance with the most important legislation: the State Budget Act, the state budget adopted as an annual act, the State Assets Act and the Public Procurement Act.

#### State accountancy is generally in order

- 4. By auditing the state's annual accounts the National Audit Office provides reassurance that the accounting indicators presented to the Riigikogu and the public give true information about the state's financial status and performance results for the year ended and that the state budget implementation report provides reliable information about the state's revenue and the expenditure incurred and investments made at the cost of this revenue.
- 5. The 2013 Annual Accounts of the State are correct in all material respects, which means that they give a true and fair view of the state's financial position as well as its financial performance and cash flow for the year ended. The observations of the National Audit Office about the annual accounts of the state are given in the audit 'Accuracy of the Consolidated 2013 Annual Accounts of the State and Regularity of Transactions'. One of the recommendations made by the National Audit Office in this report is to make the reports of ministries, the Government Office and constitutional institutions more economical.
- 6. The National Audit Office is of the opinion that basically nobody uses the annual reports prepared every year. The statistical indicators of public finance and the annual accounts of the state are important from the viewpoint of the Riigikogu, the government and the general public. This is why it would be practical to do away with the annual reports of ministries and thereby save the time of dozens of officials spent preparing and auditing these reports. The Minister of Finance agreed

The annual accounts of the state are accurate in all material respects.

#### Annual accounts are true and fair if

- they are accurate and comprehensive in registering transactions,
- they have been prepared on the basis of weighted and reasonable opinions,
- the notes to the accounts are detailed enough to allow competent readers to make reasonable conclusions.

with the recommendation made by the National Audit Office and promised to develop proposals for making financial reporting simpler.

7. The organisation of accounting in state agencies is predominantly at a good level. However, there are problems, mostly in the accounting and regularity of transactions of the agencies of the Ministry of Education and Research, the Ministry of Culture and the Ministry of Agriculture. The National Audit Office also ascertained that the internal control system of the calculation of social benefits in the Ministry of Social Affairs is not efficient enough and the information systems used for the calculation of social benefits need development. Detailed explanations of audit findings and recommendations are given in the audit reports of ministries and constitutional institutions, which are available on the website of the National Audit Office.

The state agencies have performed their economic transactions in compliance with law

- 8. The National Audit Office is of the opinion that state agencies performed their economic transactions in 2013 in compliance with the State Budget Act and the 2013 State Budget Act in all material respects. This means that the National Audit Office did not find any significant errors in the implementation of the State Budget Act. Due to the changes in the manner of presentation of the state budget, the annual state budget and its implementation report can be better compared to each other than before. In other words, the state budget implementation report now makes it possible to assess how the state agencies have used the budget approved in the Riigikogu with an act.
- 9. In recent years the National Audit Office has drawn attention to the fact that the amount of money transferred to the next year in the state budget is large. For example, 536 million euros or *ca* 7% of the budget of the year ended was transferred into 2014. Irrespective of this, the documents accessible to the general public contain very few explanations of why the money was transferred. Considering the large amount of money transferred, the National Audit Office feels it is important that the reasons for the transfer are analysed and made public to guarantee that the use of money is transparent and budgets are planned more efficiently.
- 10. In spring, the National Audit Office organised an audit to investigate how state foundations are financed from the state budget. The audit revealed that it is unclear how some of the foundations are financed from the state budget. The National Audit Office also disapproves of the practice of financing the principle activities of ministries via foundations. The main conclusion made in the audit was that the state's participation in foundations does not always have a clear objective and that over a period of almost twenty years the state has failed to develop best practice in terms of using the format of a foundation for the performance of public duties.
- 11. The same problem was also evident in the case of public undertakings. In 2013 the National Audit Office carried out the audit 'Organisation of the Management of Public Undertakings' in which it found that directing the operations of public undertakings and owner's supervision are not sufficient, and often the state does not know why it is maintaining certain undertakings and what it expects of them. One positive aspect that should be noted is that in June 2014 the Ministry of Finance started preparing the green paper on the state's participation

policy in an attempt to systematically resolve the problems highlighted by the National Audit Office regarding the state's participation in private legal entities.

## The state of public finance in 2013 and outlook for 2014-2018<sup>1</sup>

- 12. In order to understand the present situation of Estonia better and to view development in context, it is important to know the significant things that took place in public finance in 2013 how big the revenues of the state were, incl. local authorities; how much money was spent and what it was spent on; and how the state's reserves and debt increased or decreased. The public finance trends from 2014-2018 are discussed next, and we also provide an overview of the changes that can be expected to occur in the structure of the state's revenue and expenditure, whether reserves will be increasing or decreasing, and whether new loans will be taken out and/or existing ones paid back.
- 13. In preparing the overview, the National Audit Office relies on the State Budget Strategy 2015-2018, the explanatory memorandum to the draft state budget for 2015 and the Summer 2014 Forecast of the Ministry of Finance. In addition to the data of the Ministry of Finance, the National Audit Office used the data of Eurostat and Statistics Estonia.

#### In 2013 Estonia's general government expenditure exceeded revenue, but the deficit was among the smallest in Europe

- 14. In 2013 the general government in Estonia spent 34 million euros<sup>2</sup> or 0.2% more of t gross domestic product (GDP) than the revenue it received, which is a considerably smaller budget deficit than in most other European Union (EU) Member States. 28 EU countries<sup>3</sup> spent 3.3% more of GDP on average than they earned in revenue (see Table 1).
- 15. Germany and Luxembourg were the only EU Member States that kept their budgets in balance. The budget deficit of the remaining countries was larger than that of Estonia. The expenditure of Latvia exceeded revenue by 1% of GDP. The budget deficit of Lithuania was 2.2% of GDP.

How much did more did the public sector spend than it earned in 2013?

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<sup>&</sup>lt;sup>1</sup> The new time series of the European System of National and Regional Accounts (ESA 2010) published by Statistics Estonia have not been considered in the chapter, as the data of Statistics Estonia are not the only ones used in the overview, and other institutions (primarily Eurostat and the Ministry of Finance) had not updated their data by the time the overview went to print.

<sup>&</sup>lt;sup>2</sup> On 23 September 2014 Statistics Estonia disclosed new estimates based on ESA 2010 according to which the deficit comprised 0.5% of GDP, but as the data have not been adjusted by Eurostat, the National Audit Office uses earlier data in the interests of comparability.

<sup>&</sup>lt;sup>3</sup> Croatia joined the European Union on 1 July 2013. Since Eurostat has included the data of Croatia in its calculations, comparison with 28 EU countries is used.

# Budgetary position of general government — the difference between the total revenue and total expenditure of central government, local authorities and social security funds (the Estonian Health Insurance Fund and the Estonian Unemployment Fund). The budgetary position is recognised in accrual-based accounting, which in simpler terms means that an expense is recognised at the moment the liability arises, not at the moment the money is paid out (as done in

cash-based accounting).

future?

Table 1. The budgetary position of general government in Estonia and other European Union countries from 2010-2013 (% of GDP)

|           | 2010 | 2011 | 2012 | 2013 |
|-----------|------|------|------|------|
| Estonia   | 0.2  | 1.1  | -0.2 | -0.2 |
| EU 28     | -6.5 | -4.4 | -3.9 | -3.3 |
| Latvia    | -8.2 | -3.5 | -1.3 | -1.0 |
| Lithuania | -7.2 | -5.5 | -3.2 | -2.2 |
| Finland   | -2.5 | -0.7 | -1.8 | -2.1 |
| Sweden    | 0.3  | 0.2  | -0.6 | -1.1 |

Source: Eurostat as at 7 October 2014

16. The budget deficit of Estonian general government in 2013 was primarily caused by local authorities, as they spent 83 million euros more than their revenue. The budget deficit of central government was 13 million euros. Social security funds (mainly the Estonian Unemployment Fund, as the budget of the Estonian Health Insurance Fund was basically in balance) helped to balance the budget, as their budget surplus was 62 million euros.

## Will state budget revenue exceed expenditure in the

#### The state budget will post a small surplus in 2014

- 17. According to the latest forecast published by the Ministry of Finance, general government expenditure will also exceed revenue in 2014, but the state budget will post a small surplus (see Table 2).
- 18. The general government deficit is mainly caused by undertakings, foundations and public organisations at the level of central government, as their expenditure will exceed revenue by 45 million euros in 2014. Local authorities will end 2014 with a deficit of 29 million euros.

Table 2. Budgetary position of general government for 2014-2018\* (million euros)

|   | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|------|------|------|------|------|
| Nominal budgetary position of general government (million euros)          | -38  | -111 | 9    | 77   | 204  |
| State budget  | 1    | -59  | 33   | 152  | 219  |
| Other central government  | -45  | -42  | -39  | -52  | -40  |
| Estonian Health Insurance Fund and Estonian Unemployment Fund             | 35   | 29   | 51   | 60   | 69   |
| Local authorities   | -29  | -38  | -37  | -83  | -43  |
| Structurally adjusted budgetary position of general government (% of GDP) | 0.9  | 0.8  | 0.6  | 0.5  | 0.5  |

<sup>\*</sup> The budgetary position of general government is recognised in accrual-based accounting and the sums do not match the difference between cash-based revenue and expenditure.

Source: Summer 2014 Forecast of the Ministry of Finance, excl. 2015, regarding which the explanatory memorandum to the draft state budget 2015 has been used. The forecast has not been specified in the explanatory memorandum in the case of 2014 and 2016-2018.

19. Mostly due to expenditure of a temporary nature, such as investments from the income earned from sales of pollution quotas and compensation for the suspension of second pension pillar contributions, the state budget will once again post a deficit in 2015, but according to

the forecast state budget revenue will increasingly exceed expenditure from 2016-2018.

20. Local authorities and central government undertakings, foundations and public legal entities will be operating with a deficit throughout the forecast period, but the surplus of social security funds and the state budget should see the consolidated budget of the general government post a surplus from 2016 onwards. According to the estimates of the Ministry of Finance, the revenue of the Estonian Unemployment Fund will increase expenditure throughout the forecast period.

## The general government budget for 2014-2018 complies with the requirements of the State Budget Act.

- 21. Rules concerning the balance of the general government budget have been agreed on at the international level in order to curb the budget deficits of European Union Member States, but they are not based on the nominal budgetary position, which is what we have been talking about so far in the overview, but on the structural budgetary position.
- 22. Pursuant to the State Budget Act which entered into force at the beginning of 2014, the structural budget of the general government must be balanced or in surplus. In other words, when the factors that have a one-off or temporary influence on the general government budget and the impact of the economic cycle are removed, the total expenditure of the general government may not exceed its total revenue.
- 23. The one-off measures that are included in the calculation are separately decided in each case. Examples of these are the revenue earned from sales of international pollution quotas and the investment expenses incurred at the cost of such revenue, and (on certain conditions) dividends taken from public undertakings.
- expenses incurred at the cost of such revenue, and (on certain conditions) dividends taken from public undertakings.

  24. The structurally adjusted budget of the general government has been in surplus since 2009. According to the forecast of the Ministry of

24. The structurally adjusted budget of the general government has been in surplus since 2009. According to the forecast of the Ministry of Finance the structural position in 2014 is a surplus of 0.9% of GDP. The requirement established with the State Budget Act has therefore been met in 2014. The Ministry also expects a structural surplus of 0.5-0.8% from 2015-2018.

#### The revenue received in the state budget in 2013 exceeded expectations.

25. The revenue earned by the state in 2013 was ca 7.6 billion euros. The tax revenue received in the State Treasury amounts to ca 6.1 billion euros and non-tax revenue to ca 1.5 billion euros. The tax revenue received exceeded the forecast amount by ca 80 million euros. Non-tax revenue also exceeded expectations by 25 million euros (Table 3).

The structural budgetary position of general government is found when the one-off and temporary factors that may distort the budgetary position are removed from the nominal position in addition to the impact of the economic cycle.

Which of the taxes received in the State Treasury exceeded

Will the budget deficit fit

the State Budget Act?

expectations?

within the limits permitted by

 $<sup>^4</sup>$  This includes transferable revenue or revenue transferred by the central government (e.g. personal income tax and funded pension contributions) in the amount of ca 1 billion euros.

Table 3. Forecast and actual state budget revenue and expenditure in 2013 (million euros)

|                        | 2013 budget | 2013 actual | Difference |
|------------------------|-------------|-------------|------------|
| Personal income tax    | 293.3       | 306.9       | 13.6       |
| Corporate income tax   | 234.0       | 326.6       | 92.6       |
| Social tax             | 2,069.0     | 2,071.2     | 2.2        |
| Heavy good vehicle tax | 3.9         | 4.0         | 0.1        |
| Value added tax        | 1,549.4     | 1,550.6     | 1.2        |
| Gambling tax           | 21.5        | 21.6        | 0.1        |
| Customs duty           | 33.0        | 28.7        | -4.3       |
| Alcohol excise         | 209.0       | 209.0       | 0.0        |
| Tobacco excise         | 161.8       | 166.6       | 4.8        |
| Fuel excise            | 417.0       | 383.7       | -33.3      |
| Packaging excise       | 0.4         | 0.4         | 0.0        |
| Electricity excise     | 33.0        | 33.0        | 0.0        |
| Total tax revenue      | 6,054.8     | 6,140.4     | 85.6       |

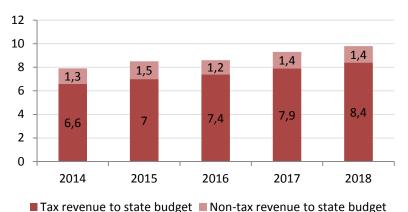
Source: Report of the Ministry of Finance on the implementation of cash-based state budget revenue and expenditure in 2014 and Summer
2014 Forecast of the Ministry of Finance

26. With the exclusion of fuel excise and customs duty, the amounts of all other taxes actually received exceeded the amounts forecast in the 2013 state budget. The higher than expected amount of personal income tax collected (92.6 million euros) was the main reason for budgetary over-performance.

#### Tax revenue is increasing but its share in total revenue is not

27. The state budget revenue forecast by the Ministry of Finance for 2014 is ca 7.9 billion euros, incl. tax revenue in the amount of ca 6.6 billion euros and non-tax revenue in the amount of ca 1.3 billion euros. State budget revenue increases every year, while the share of non-tax revenue during the forecast period is 15% of total revenue on average (see Figure 1).

Figure 1. State budget revenue forecast for 2014-2018 (billion euros)



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Source: Explanatory memorandum to the 2015 Draft State Budget Act regarding 2014 and 2015, Summer 2014 Forecast of the Ministry of Finance regarding 2016-2018

How much will state budget revenue increase in the coming years?

28. The Ministry of Finance forecasts that the annual increase in state budget revenue will be ca 5% on average from 2015-2018. The Ministry of Finance estimates that ca 9.8 billion euros, i.e. almost a quarter (ca 24%) more than in 2014, should be received in the state treasury in 2018.

**Cash-based expenditure** — expenditure recognised at the moment the money is paid out, not at the moment the liability is

incurred.

#### State budget expenditure is increasing but flexibility of use is not

- **29**. Cash-based state budget expenditure comprised 7.7 billion euros in 2013. The confirmed state budget expenditure in 2014 is *ca* 8 billion euros. According to the forecast of the Ministry of Finance, state budget expenditure will increase by 5-6% from 2014-2015 and by 3-4% per year from 2016-2018.
- **30.** Social protection and national defences have increased in the state budget over the years whilst growth in the funding allocated to other areas has been more fickle and often dependent on the use of European Union structural funds.
- How big is the share of predetermined state budget expenditure?
- 31. Approximately 75% of state budget expenditure is determined by law or in another manner. These are called fixed costs, and changing them is not easy. Fixed costs are costs that the state must finance in order to perform its existing obligations aimed at the provision of services to people or helping them to cope, but which generally do not support the state's economic competitiveness (excl. foreign support). The remaining quarter of state budget expenditure can be used flexibly and redirected.
- **32.** Approximately half of fixed costs consist of state pension insurance, health insurance, family benefits, parental benefits and other social expenses.

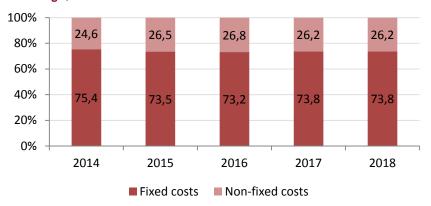
Will there be more disposable funds in the state budget for supporting development?

33. The Minister of Finance is of the opinion that no significant changes can be expected in cost structure in the near future. It is noted in the State Budget Strategy for 2015-2018 that considering the additional increase in social benefits, the share of fixed costs will start increasing again from 2017 after a slight decrease. This means that the share of disposable funds in the state budget that could be used to support the state's development will not increase.

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<sup>&</sup>lt;sup>5</sup> The National Audit Office points out that the cash-based difference in revenue and expenditure does not equal the deficit or surplus of the budgetary position, as cash-based accounting is used for one and accrual-based accounting for the other. Cash-based accounting reflects the actual cash flow in the budgetary year; accrual-based accounting considers the moment a liability is incurred.

Figure 2. Division of state budget expenditure between fixed and disposable funds (% of state budget)



Source: State Budget Strategy for 2015-2018

34. The forecast of the Ministry of Finance indicates that in the future the expenses of the areas pre-determined by law or in another manner are those that will increase in the future. The areas of activity that have so far been funded largely from foreign support must again hope that they will obtain extra money from the EU cohesion budget for 2014-2020.

# Which areas can expect to receive extra money in the coming years?

**35.** For example, the costs of environmental protection are decreasing year on year and the area's budget in 2018 will comprise *ca* 53% of the money that will be used in 2014. A standstill also awaits the expenses of the area of economics until the implementation of large amounts of foreign money starts again (see Table 4).

Table 4. State budget expenditure by area of activity in 2014 and 2018 (million euros)\*

| Area of activity               | 2014  | 2018  | Change 2018 vs. 2014 | Increase 2018 vs. 2014<br>(%) |
|--------------------------------|-------|-------|----------------------|-------------------------------|
| General public sector services | 1,366 | 1,663 | 297                  | 21.8                          |
| National defence               | 365   | 469   | 104                  | 28,5                          |
| Public order and security      | 403   | 386   | -17                  | -4.2                          |
| Economy                        | 993   | 991   | -2                   | -0.2                          |
| Environmental protection       | 319   | 171   | -148                 | -46.3                         |
| Housing economy and utilities  | 0     | 0     | 0                    | 0                             |
| Health                         | 997   | 1,252 | 255                  | 25.6                          |
| Leisure, culture and religion  | 189   | 187   | -2                   | -1.1                          |
| Education                      | 758   | 782   | 24                   | 3.2                           |
| Social protection              | 2,666 | 3,336 | 670                  | 25.1                          |
| TOTAL                          | 8,056 | 9,237 | 1,181                | 14.7                          |

<sup>\*</sup> Compared to the State Budget Strategy for 2015-2018, the Ministry of Finance has adjusted the data of 2014 in the explanatory memorandum to the 2015 Draft State Budget Act, but has not reviewed the data of 2018. The amounts of 2018 do not include the co-financing of European Union support from 2014-2018, the expenses of undistributed wage increase etc. in the total amount of 266 million euros, which the Ministry of Finance has not divided between areas.

Source: Explanatory memorandum to 2014 State Budget Act and the State Budget Strategy for 2015-2018

**36.** According to the Ministry of Finance, the total expenditure of all areas will increase by ca 1.2 billion euros by 2018 when compared to 2014 and half of the growth will go to the area of social protection.

Extra money will also be allocated to the areas of health, education, national defence and general public sector services.

#### The state will continue making investments primarily with foreign money.

How big is the share of state budget expenditure incurred from foreign support?

How big is the share of investments made with the help of foreign support?

- 37. Slightly more than one-tenth of state budget expenditure is financed from foreign support. The share of foreign support in state budget expenditure in 2013 was 11.4% of 870 million euros. The amount of foreign support in the 2014 state budget was 897 million euros, i.e. 11.1% of total state budget expenditure, and the amount will be approximately the same in the next year.
- **38.** General government investments comprised 906 million euros in 2013 and a little over a quarter of this amount was covered from the state's 'own' revenue. Local authorities spent 186 million euros on investments.
- **39.** According to the State Budget Strategy for 2015-2018, general government investments will amount to 949 million euros in 2014, the majority of which will come from the state's own revenue (26%) and the European Union (44%) (see Figure 3).

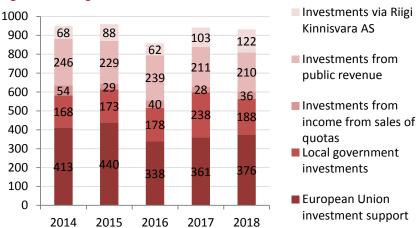


Figure 3. General government investments from 2014-2018 (million euros)

Source: State Budget Strategy for 2015-2018

- **40.** The State Budget Strategy for 2015-2018 indicates that similar to the past five years, the government is again planning to finance its investments primarily from sources other than its own revenue in the near future. According to the forecast of the Ministry of Finance, the amount of general government investments from 2014-2018 will range between 850 and 950 million euros per year, incl. 210-250 million from the state's own revenue and 350-440 million euros from EU support.
- 41. General government investments confirm that the state's own revenue is predominantly used to cover fixed costs, while investments that contribute to the long-term development of the state are mostly covered by foreign funds.

### How big is the revenue of local authorities?

### e of

## The increase in local government revenue is smaller than the increase in general government revenue

- **42.** In 2013 the revenue of local authorities comprised 1.49 billion euros, which is *ca* 69 million euros or 4.9% more than the year before.
- 43. Local authorities earn *ca* half of their revenue from personal income tax, which increased from 665 billion euros in 2012 to 724 million euros in 2013. The support granted by the state to local authorities via equalisation and support funds has increased a little and is designed to even out the budgetary possibilities of local authorities, the labour costs of teachers, school lunches and payment of subsistence benefits. The remaining revenue of local authorities own revenue and other support received increased by just under 10 million euros.

## What will the revenue of local authorities be like in the near future?

- 44. According to the forecast of the Ministry of Finance, the increase in the revenue of local authorities will remain smaller than the increase in state budget revenue in the coming years. The revenue of local authorities will increase by 4% per year on average according to the forecast for 2014-2018: from 1.5 billion euros to 1.73 million euros.
- **45**. The majority of the revenue of local authorities, i.e. just over half of all revenue, comprises income tax, which will increase from 779 million euros in 2014 to 982 million euros by the end of the forecast period. According to the forecast, the state does not intend to increase the amount of the equalisation fund for local authorities: it will remain at the level of 75-76 million euros for the entire period. Other support received and own revenue will increase modestly, by *ca* 10 million euros per year (see Figure 4).

1800 678 668 1300 659 652 647 76 76 76 75 800 75 982 927 875 826 779 300 -200 2014 2015 2016 2017 2018 ■ Income tax ■ Equalisation Fund Other support received and own revenue

Figure 4. Local government revenue from 2014-2018 by type of income (million euros)

Source: Database of local government indicators of the Ministry of Finance <a href="http://www.fin.ee/kov-eelarved-ulevaated#KOVF">http://www.fin.ee/kov-eelarved-ulevaated#KOVF</a> as at 10 October 2014

**46.** The fact that local government revenue will increase primarily due to income tax received means that the revenue allocated to them by law will increase, but the options of increasing own income are limited and the state does not plan to allocate more money to local authorities via other sources.

## What do local authorities spend their money on?

#### Local authorities are cautious in forecasting expenditure

- 47. The operating and investing expenses of local authorities increased by *ca* 1.56 billion euros in 2013, which was 9.7% more than the year before. In absolute amounts, the school and nursery school maintenance expenses of the area of education increased the most by 42 million euros. Expenses of the area of the economy increased by 40 million euros, which is primarily used to organise public transport and road maintenance in local authorities.
- **48.** As a percentage, the expenditure of local authorities increased the most in 2013 in the areas of environmental protection (22.7%) and leisure, culture and religion (21.7%), which covers the maintenance of hobby schools, cultural centres, libraries, museums and sports facilities as well as youth work. The only area were funding decreased in 2013 was housing economy and utilities by 4 million euros.
- 49. The Ministry of Finance has taken account of the budget strategies presented by local authorities in forecasting the expenditure of local authorities in the state budget strategy in the coming years. Local authorities were obliged to submit their budget strategy for 2014-2017 to the Ministry by November 2013. On the basis of these strategies, the Ministry notes that local authorities have remained conservative in forecasting expenditure for the next few years.
- **50.** For example, local authorities have borne in mind that the amount of income they will receive from the Ministry of Finance is smaller than forecast. The planned average increase in labour costs is 2.5% per year on average which remains below the expected increase in the average salary in the state. Local authorities are also cautious in planning their investments and apprehensive about the opening of the funds of the European Union budget period of 2014-2020.

#### The state's debt burden will not increase significantly in the future.

51. The expenditure that exceeds revenue and other transactions that take cash from the state or local authorities that are not recognised as expenditure (e.g. contribution to the share capital of a public undertaking) can be covered from reserves or borrowed funds.

#### How big are the state's debts?

bts?

- **52.** The general government debt as at the end of 2013 was *ca* 1.85 billion euros or 9.8% of GDP.<sup>6</sup> The debt increased by 133 million euros over the year, which was primarily caused by local authorities and Estonia's participation in the European Financial Stability Facility (EFSF).
- **53.** Estonia agreed to guarantee the loans issued by the EFSF to a certain extent, which is reflected in the debt burden of Estonia. In this manner, the debt burden of Estonia may increase even if the state itself does not borrow more. This is why the general government debt of Estonia increased in 2013 by an estimated 103 million euros.

15

<sup>&</sup>lt;sup>6</sup> Based on the ESA 95 methodology, as the chapter proceeds from this methodology. According to the specified data of Statistics Estonia of 23 September 2014 and the ESA 2010 methodology, the debt comprised *ca* 1.9 billion euros or 10.1% of GDP.

- 54. The impact of the EFSF excluded, the debt of the general government and the state treasury decreased by 41 million euros. The debt burden of local authorities increased by 70 million euros to 636 million euros. The general government debt of Estonia remains the smallest among all European Union Member States.
- 55. The Ministry of Finance sees that expenditure that exceeds the revenue of the state treasury is primarily covered from reserves, which is why the debt burden of the central government is decreasing, i.e. liabilities are paid back (in amounts that exceed new loans taken out). Public debt increases mainly due to the increase in the loan burden of local authorities and the loans issued by the EFSF.
- 56. By the end of 2018, general government debt will increase by 89 million euros compared to the end of 2014, whereby the central government will reduce its liabilities (excl. EFSF) by 138 million euros, the EFSF will increase central government debt by 26 million euros and local government debt will increase by 201 million euros (see Table 5).

Table 5. General government debt from 2014-2018 (million euros)

|                                       | 2014  | 2015  | 2016  | 2017  | 2018  |
|---------------------------------------|-------|-------|-------|-------|-------|
| Total debt                            | 1,882 | 1,908 | 1,934 | 1,984 | 1,971 |
| incl. central government              | 1 217 | 1,205 | 1,194 | 1,161 | 1,105 |
| incl. impact of EFSF                  | 486   | 492   | 498   | 505   | 512   |
| incl. central government without EFSF | 731   | 713   | 696   | 656   | 593   |
| incl. local authorities               | 665   | 703   | 740   | 823   | 866   |

Source: The explanatory memorandum to the 2015 Draft State Budget Act and Summer 2014 Forecast of the Ministry of Finance. The adjustments published by Statistics Estonia on 23 September 2014 have not been considered in the forecast.

57. The forecast of the Ministry of Finance indicates that the central government plans to pay back more debt from 2014-2018 than the estimated increase in debt caused by the EFSF, i.e. central government debt as a whole will decrease throughout the forecast period. However, the debt burden of local authorities is growing more rapidly, and on the whole this will lead to an increase in general government debt.

#### The state's reserves will start growing from 2016

- **58.** The reserves of the general government at the end of 2013 were almost equivalent to debt, i.e. 1.82 billion euros. Reserves decreased by 20 million euros over the year, comprising 9.9% of GDP.
- **59**. The reserves of the general government decreased by 89 million euros to 875 million euros in 2013. The reserves of local authorities increased by 10 million euros to 211 million euros. The reserves of social security funds also increased from 676 million to 735 million euros.
- **60.** According to the forecast of the Ministry of Finance, reserves will decrease to 1.7 billion euros by the end of 2014 and to 1.6 million euros in 2015, after which they will start increasing again (see Table 6).

Table 6. Liquid financial assets of general government from 2014-2018 (million euros)

|                       | 2014  | 2015  | 2016  | 2017  | 2018  |
|-----------------------|-------|-------|-------|-------|-------|
| Total reserves, incl. | 1,701 | 1,571 | 1,622 | 1,762 | 1,991 |
| central government    | 721   | 562   | 553   | 633   | 793   |
| local authorities     | 211   | 211   | 211   | 211   | 211   |
| social security funds | 770   | 799   | 858   | 919   | 987   |

Source: The explanatory memorandum to the 2015 Draft State Budget Act and Summer 2014 Forecast of the Ministry of Finance

## How big will the state's reserves be in 2018?

**61.** The reserves will start recovering when the central government budget posts a surplus. The Ministry of Finance forecasts no changes in the reserves of local authorities. The Ministry is of the opinion that the reserves of social security funds will increase throughout the forecast period. The general government reserves will amount to ca 2 billion euros in 2018.

## Catching up with the European Union average in development is an uphill struggle<sup>7</sup>

- **62.** Since Estonia regained its independence its governments have been pursuing the goal of catching up to developed Europe and increasing the wealth of people and the state to the level of the rich societies of Europe.
- 63. In order to compare the development of Estonia to the average of the European Union Member States, GDP per person is compared on the basis of the purchasing power standard (PPS)<sup>8</sup>, as well labour productivity and household final consumption expenditure. These three indicators are used to evaluate convergence in the economic forecasts of the Ministry of Finance and in the national competitiveness strategy "Estonia 2020".
- **64.** According to Eurostat, the GDP of Estonia per person on the basis of the purchasing power standard is 72.8% of the  $^9$  average of the 27 European Union Member States. The relevant indicator of Latvia is smaller than that of Estonia 67% but in Lithuania it is somewhat higher 74% (see Figure 5).
- 65. Although the GDP of Latvia based on purchasing power is weaker than that of Estonia, it has grown twice as rapidly as that of Estonia in the last five years. Compared to the end of 2008, the relevant indicator was 4.1% in Estonia and 8.8% in Latvia by the end of 2013. In Lithuania, GDP per person based on purchasing power increased even more rapidly during the same period by 9.8%.

Did Estonians become wealthier in comparison to the average European in 2013?

<sup>&</sup>lt;sup>7</sup> The transfer to the ESA 2010 methodology has not been taken into account, as Eurostat has no made changes in its data yet.

<sup>&</sup>lt;sup>8</sup> The indicator 'GDP per person on the basis of purchasing power standard' is usually interpreted as the purchasing power of the state, but this is not entirely accurate. According to Statistics Estonia, the evaluation of GDP on the basis of purchasing power makes it possible to compare the size of the gross domestic product of countries by eliminating the price differences of these states. If we agree that GDP per person shows how much value is created by members of society, this indicator characterises the fortune/wealth of the state and people, with certain concessions.

<sup>&</sup>lt;sup>9</sup> The National Audit Office wanted to use newer data, but as Eurostat has not published the updated data of Greece yet, we compared the statistics of the EU 27.

130 Estonia 120 Eurozone - 18 110 countries 100 Latvia 90 80 Lithuania 70 60 Finland 50 Sweden 40 2008 2009 2010 2011 2012 2013

Figure 5. GDP per person based on purchasing power (PPS) (EU 27 = 100%)

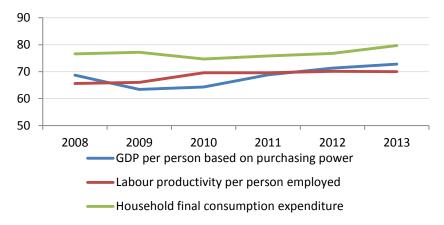
Source: Eurostat as at 7 October 2014

- **66.** As at the end of 2013, the household final consumption expenditure in Estonia comprised 79.7% of the average of the EU 27. It was 76.6% of the EU average at the end of 2008 (see Figure 6).
- 67. The price level in Latvia compared to the EU average decreased in the same period, from 75% to 71.1%. The household final consumption expenditure in Lithuania also decreased in comparison to the EU average in the last five years it was 65.9% in 2008 and 64.5% in 2013.
- **68.** The third indicator used to evaluate catching up with the average level of development in the European Union is labour productivity per person employed. Increasing productivity has been one of the main goals of Estonian economic policy for years, but it has practically not grown at all in recent years compared to the European Union average.

Has the productivity of labour increased?

**69.** In 2013 the productivity of labour in Estonia comprised 70% of the EU 27 average, which is 0.1% less than the year before. Labour productivity per person employed has remained at 69-70% of the EU average for the last three years (see Figure 6).

Figure 6. Price level in Estonia, GDP per person based on purchasing power and productivity compared to European Union states (EU 27=100%)



Source: Eurostat as at 25 September 2014

# Are Latvia and Lithuania catching up to Europe more rapidly than Estonia?

- **70.** Compared to the other Baltic States, productivity in Estonia is higher than in Latvia but lower than in Lithuania. Latvia's productivity comprises 66.9% of the EU average, while the same indicator in Lithuania is 74.6%.
- 71. In the last five years, productivity in Estonia has increased by 4.4% compared to the EU average (end of 2013 *vs* end of 2008). In the same period, productivity increased by 11.9% in Latvia and 12.7% in Lithuania.
- 72. Over the last three years, labour productivity in Estonia has practically not drawn closer to the EU average at all. In 2013, productivity was 0.4% higher than at the end of 2010. In the same period, productivity in Latvia increased by 6.2% and in Lithuania by 6.5% compared to the EU average.
- 73. The structure of the Estonian economy compared to other European countries is characterised by Figure 7. In Estonia, areas of activity have concentrated around the average in terms of productivity, which means that there are no engines with large added value in the economy that would pull other economic sectors or shifts within economic sectors towards greater productivity.
- 74. Figure 7 indicates that the productivity of the most productive companies in Estonia is basically at the same level as the least productive companies in Germany and Belgium (companies with more than 20 employees).

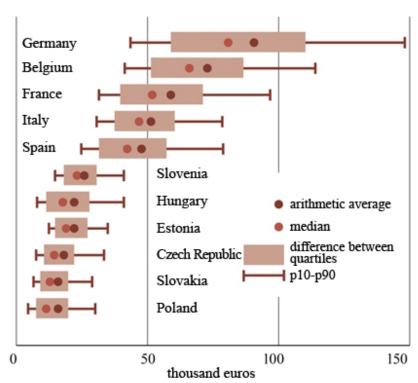


Figure 7. Division of companies on productivity scale\*

Source: Bank of Estonia

<sup>\*</sup> Comparison of productivity of companies of 111 countries based on constant prices of 2005. Covers companies with more than 20 employees. Countries are listed according to the value of the 75<sup>th</sup> percentile of productivity (the right side of the pink area). The range p10-p90 marks the division of labour productivity from the 10<sup>th</sup> to the 90<sup>th</sup> percentile.

- 75. Increase in labour productivity is a precondition for an increase in the income of people and the state. In simpler terms, productivity indicates how much value a worker manages to create with their activities. In order to pay higher wages to workers, their activities must be worth more, i.e. they must generate more revenue for the employer.
- 76. In recent years, the increase in wages has considerably exceeded the increase in productivity, which can only remain possible in the short term. If wages increase more rapidly than productivity over a longer period, it will lead to difficulties for companies, recession and increasing unemployment, which is what happened in Estonia during the global financial crisis in 2008 and 2009.
- 77. When we compare the development of Estonia and the European Union average according to GDP per person on the basis of purchasing power, productivity and the price level, we are forced to admit that at least as far as these indicators are concerned, Estonia did not draw much closer to the EU average in 2013 in terms of its development, and it seems that Latvia and Lithuania did better in this regard.

## Is the development of Estonia improving?

## Public finance in Estonia is in good shape compared to the rest of Europe, but sustainable development demands decisions

- 78. Compared to spring 2014, the outlook of the Estonian economy has become a little more modest. The deterioration in the growth outlook of the European Union and the main trade partners of Estonia also has an impact on the small and open economy of Estonia.
- 79. Compared to spring, the Ministry of Finance has reduced many important macroeconomic indicators of 2014 and 2015 in its forecast published in September. GDP growth, export growth, employment growth and many other outlooks are smaller in the new forecast.
- **80.** Whilst we have confidence in the opinions of the Ministry's experts, we still believe that there is also reason to be optimistic about the future. The economy of Estonia stands on rather strong pillars, and despite some negative tendencies our financial state is still generally good.
- **81.** On the basis of the three criteria used to evaluate the state of public finance in Europe (revenue and expenditure ratio, public debt and reserves), Estonian clearly stands out in debt-ridden Europe.
- **82.** On the other hand, the volatile environment of the global economy needs the ability to quickly react to changes, find new options and constantly think about how the state could help the economy in earning revenue, and alleviate the development obstacles of companies with accessible/affordable levers.
- 83. Creation of favourable conditions for economic activities is a duty of the state. Another duty is to use the revenue received by the state as smartly as possible. The National Audit Office sees several long-term problems related to earning as well as using revenue which the state has not been able to or wanted to resolve, or the resolution of which has been easier to postpone.
- **84.** The National Audit Office's review of 2013-2014 is dedicated to six areas we consider important and where decisions must immediately be

made, or else the problems will start piling up and finding solutions will become even more difficult.

## Economic development — we are often unaware of the reasons for our successes and failures

## The competitiveness of our economy has improved according to rankings, but growth is slowing down

- **85.** The competitiveness of the state and its ability to earn revenue depends on economic development. Economic development generally means higher income for people and the state's possibilities to offer public services also broaden as the economy grows.
- **86.** The position of Estonia has improved in recent times in the most important competitiveness rankings. In the IMD<sup>10</sup> rankings for 2014, Estonia ranks 30<sup>th</sup> among 60 countries (compared to 36<sup>th</sup> in 2013) and in the 2014-2015 World Economic Forum rankings<sup>11</sup> Estonia ranks 29<sup>th</sup> among 144 countries (compared to 32<sup>nd</sup> among 148 countries in 2013-2014).
- 87. The economy of the 28 European Union Member States grew by 0.1% on average in 2013. The gross domestic product of Estonia increased by 2.2%, but the economies of Latvia, Lithuania, Malta and Romania grew more rapidly. The economic growth of Estonia was one of the most rapid in the EU in 2013, but still the smallest since the recession of 2009 (see Table 7).

Table 7. Real GDP increase in Estonia and other European Union countries from 2007-2013 (%)

|           | 2007 | 2008 | 2009  | 2010 | 2011 | 2012 | 2013 |
|-----------|------|------|-------|------|------|------|------|
| Estonia   | 7.3  | -4.1 | -14.1 | 3.3  | 8.7  | 4.5  | 2.2  |
| EU 28     | 3.2  | 0.4  | -4.5  | 2.0  | 1.6  | -0.4 | 0.1  |
| Eurozone  | 3.0  | 0,4  | -4.5  | 1.9  | 1.6  | -0.7 | -0.4 |
| Latvia    | 10.0 | -2.8 | -17.7 | -1.3 | 5.3  | 5.2  | 4.1  |
| Lithuania | 9.8  | 2.9  | -14.8 | 1.6  | 6.0  | 3.7  | 3.3  |
| Finland   | 5.3  | 0.3  | -8.5  | 3.4  | 2.8  | -1.0 | -1.4 |
| Sweden    | 3.3  | -0.6 | -5.0  | 6.6  | 2.9  | 0.9  | 1.6  |

Source: Eurostat as at 17 September 2014

88. The economic growth outlook of Estonia is strongly influenced by the economic growth of our trade partners. Unfortunately, the economies of these trade partners, i.e. our neighbouring countries, have not been growing rapidly either. The GDP of Finland has been decreasing for the last two years. The economic growth of Sweden did accelerate compared to 2012, but has not achieved the level of earlier

The speed of Estonia's economic growth is decreasing

<sup>&</sup>lt;sup>10</sup> International competitiveness ranking prepared by Lausanne International Institute for Management Development (IMD), see <a href="http://www.imd.org/wcc/">http://www.imd.org/wcc/</a>.

<sup>&</sup>lt;sup>11</sup> World Economic Forum, see <a href="http://www.weforum.org/reports/global-competitiveness-report-2014-2015">http://www.weforum.org/reports/global-competitiveness-report-2014-2015</a>.

Latvia and Lithuania have caught up to us in terms of macroeconomic indicators

years. The only important export market to Estonia to grow significantly was Latvia – up by 4.1% in the last year.

- 89. Although Estonia ranks several places higher than our closest neighbours Latvia and Lithuania in terms of competitiveness, the recent growth figures of Estonia are more modest (see Table 7). In the longer time series. Estonia stands out positively among its close neighbours only for the indicators for 2010 and 2011, but labour productivity and GDP per person have caught up to the EU average more slowly than in Latvia and Lithuania (see points 64-72). However, it is still too early to say whether these changes are permanent, but the fact that we are lagging behind is an important signal from the viewpoint of the implementation of the Estonian competiveness plan "Estonia 2020". Achievement of the goals set in the competitiveness plan "Estonia 2020" requires the macro-economy of Estonia to develop more rapidly than in the rest of Europe. We also consider it self-evident that we are ahead of our closest competitors Latvia and Lithuania.
- 90. The government has listed the problems hindering the economic development of Estonia in many policy documents<sup>12</sup>, such as the low investment and innovation capability of companies, the modest local impact of research and development, the small number of exporting companies and the concentration of their activities on the performance of cheaper functions in the international value chain. Some of them have been present in these documents for a long time. Another problem for Estonia is that we do not know how to cope with the development obstacles behind the modest development indicators revealed by statistics. We do not know whether and how the selected solutions will alleviate the problems. This knowledge is primarily required for the development of economic policy, but also for state budget revenue forecasts in the longer term.

#### Achievement of the economic goals set out in the competitiveness plan "Estonia 2020" is not progressing well

- 91. Determined development calls for the existence of long-term plans as well as detailed knowledge of how the economy works. The most important economic development plan that also covers all of the activities of the government is part of the competitiveness plan "Estonia 2020". This ten-year plan, which was prepared in 2011, sets goals that all subsequent governments should strive to achieve and specifies the significant challenges of the Estonian economy that must be considered. It forms part of the European Union's plan "Europe 2020", aimed at increasing the competitiveness of the EU.
- 92. According to the primary review carried out by the National Audit Office, the implementation of "Estonia 2020" has been mediocre. 11 of the 17 goals have been achieved as planned or at a better level (see Table 8, rows with white background) while the achievement of six goals is considerably behind schedule (see Table 8, rows with red background). This means that the achievement of more than a third of

 $<sup>^{12}</sup>$  For example, the partnership agreement for the use of the European structural and investments funds 2014-2020 approved with the resolution of the Government of the Republic of 25 February 2014 and the competitiveness plan "Estonia 2020" updated by the Government of the Republic on 8 May 2014.

the goals is problematic. The status of the goals that directly concern economic development (see Table 8, rows 2, 11, 12 and 13) is more critical: The achievement of three of the four goals is behind schedule.

Table 8. Estonian Competitiveness Plan "Estonia 2020": goals vs results in September 2014 (based on ESA 95)\*

|     | Goal  | Initial                  | Most recent           | Goal                     | Goal                     |
|-----|---|--------------------------|-----------------------|--------------------------|--------------------------|
|     | Indicator   | level                    | level                 | 2015                     | 2020                     |
| 1.  | Increase employment in the 25-65 age group  Employment rate in the 25-65 age group  | 66.4%                    | 73.3%                 | 72%                      | 76%                      |
| 2.  | Increase productivity per employed person compared to EU average.  Rate of productivity per employed person compared to EU average  | 65.8%                    | 70%                   | 73%                      | 80%                      |
| 3.  | Reduce the share of young people (18-24) with basic or lower education who do not continue their studies.  Share of young people with basic or lower education in the 18-24 age group who do not continue their studies | 11.7%                    | 9.7%                  | 11%                      | 9.5%                     |
| 4.  | Increase the share of people aged 30-34 with tertiary education.  Share of people aged 30-34 with tertiary education  | 39.7%                    | 43.7%                 | 40%                      | 40%                      |
| 5.  | Reduce the rate of relative poverty after social transfers.  Rate of relative poverty after social transfers  | 17.5%                    | 18.6%                 | 16.5%                    | 15%                      |
| 6.  | Increase the rate of participation of adults in lifelong learning (25-64).  Rate of participation of adults aged 25-64 in lifelong learning   | 10.9%                    | 12.6%                 | 15%                      | 20%                      |
| 7.  | Reduce the share of adults (25-64) without professional or vocational education.  Share of adults without professional or vocational education in the 25-64 age group   | 32%                      | 30.3%                 | 32%                      | 30%                      |
| 8.  | Reduce the rate of long-term unemployment.  Rate of long-term unemployment  | 7.7%                     | 3.8%                  | 4%                       | 2.5%                     |
| 9.  | Reduce the rate of youth (15-24) unemployment.  Youth unemployment in the 15-24 age group   | 32.9%                    | 18.7%                 | 15%                      | 10%                      |
| 10. | Increase the rate of participation in the workforce (15-64).  Rate of participation in workforce in the 15-65 age group   | 73.4%                    | 75.1%                 | 74%                      | 75%                      |
| 11. | Increase the level of research and development investments.  Research and development investment expenditure (% of GDP)   | 1.42%                    | 2.18%                 | 2%                       | 3%                       |
| 12. | Increase the share of Estonian exports in world trade.  Share of Estonian exports in world trade  | 0.085%                   | 0.096%                | 0.1%                     | 0.11%                    |
| 13. | Labour costs do not increase more rapidly than productivity.  Change in real indicator of labour unit cost  | -3,.%                    | 1.7%                  | 0%                       | 0%                       |
| 14. | The rate of greenhouse gas emissions** compared to 2005 should not increase by more than 11% by 2020.  Greenhouse gas emissions   | 5.647<br>million<br>tons | 5.644 million<br>tons | 6.156<br>million<br>tons | 6.269<br>million<br>tons |
| 15. | Increase the share of renewable energy to 25% of end use of energy.  Share of renewable energy in end use of energy   | 19.5%                    | 25.8%                 | 23.6%                    | 25%                      |
| 16. | Maintain end use of energy at the level of 2010.  Level of end use of energy  | 2818<br>ktoe             | 2764 ktoe             | 2986<br>ktoe             | 2818<br>ktoe             |
| 17. | Maintain the structurally adjusted budget surplus of general government.  Structurally adjusted budgetary position (% of GDP)   | 0.1%                     | 0.3%                  | 0.2%                     | _                        |

<sup>\*</sup> The rows in italics comply with the indicators of the European Union competitiveness plan "Europe 2020".

\*\* The goal applies to sectors outside the EU emissions trading scheme.

Source: National Audit Office, Eurostat

- 93. The goals and plans established in the competitiveness plan "Estonia 2020" are intentionally ambitious. Compared to the other countries in the European Union, Estonia is among those meeting the EU average in terms of achievement of goals. For example, Estonia is a frontrunner in terms of research and development expenditure, but second-last in terms of relative poverty.<sup>13</sup>
- 94. The active measures for the development of the economy that help achieve the goals set in "Estonian 2020" still depend on EU support. This money is used to finance entrepreneurship support programmes. The new budget period of the EU has started, during which the amount of money distributed to individual businesses has decreased from *ca* 330 million euros to 90.1 million euros. Although business support is decreasing considerably, the amount of money paid to support entrepreneurship remains noteworthy. Using this money successfully requires very smart decisions.
- 95. It is important from the viewpoint of the state's activities that the government knows what we succeed at in the development of our economy and why, and what our failures are. When the results of the implementation of the competitiveness plan "Estonia 2020" are interpreted, it is also necessary to understand why we are lagging behind as well as what the reasons behind successful development have been. Only thorough knowledge of how and why certain measures work helps the government plan suitable activities and create efficient policies.

#### Smart and rapid reactions require better knowledge

- 96. The government has led the economic development of Estonia primarily via goals related to macroeconomic indicators. At the operative level, the progress of the measures used to support the economy has been reviewed on the basis of output alone, e.g. the amounts of the support paid, the number of training events and visits to trade fairs. However, macroeconomic development does not depend solely on the state's support, which is why it is necessary to know the scope of the impact of the state's activities in order to link output and macroeconomic indicators.
- 97. The Ministry of Economic Affairs and Communications (Ministry of Economic Affairs and Communications) has cooperated with policy implementers and external partners in recent years and made significant efforts to evaluate the effectiveness of support measures, and the National Audit Office is of the opinion that this should continue. Reporting on output indicators alone and describing the progress of the companies that have received support does not make it possible to understand the connection between the conduct of companies and macroeconomic changes.
- 98. Past monitoring of companies has highlighted the problems that must be dealt with, but when it comes to the success of measures, it only really allows us to set hypotheses and questions for further analysis, which the ministry on its own is incapable of doing. These

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<sup>&</sup>lt;sup>13</sup> Andres Oopkaup. European Union strategy "Europe 2020" and Estonia. Speech at the presentation of the "Statistical Yearbook of Estonia 2014" on 25 July 2014.

issues could be dealt with in depth in the course of the Research and Innovation Policy Monitoring Programme TIPS, for example. Studies have been carried out within the scope of TIPS for the smart specialisation led by the Estonian Development Fund in consideration of the new EU budget period. However, the organisation of monitoring companies and the economy still requires clearer principles in order to enable knowledge-based policy-making.

- 99. In the audit 'Impact of Innovation Support Measures on the Competitiveness of Companies' and the review "State's Activities in the Development of Exports", the National Audit Office looked at how the government has planned to influence macroeconomic indicators through its actions. We also looked at whether and how it is ascertained why some measures of the government work and others do not.
- The impact of promoting innovation is not reliably known
- 100. In its audit of the innovation policy, the National Audit Office found that the impact of innovation support measures is not known, and that at best the impact is small and incidental. The audit covered 1771 companies that had received support and to whom 166 million euros had been paid as at April 2013.
- 101. The National Audit Office found that there are different understandings of the impact of the support and how to measure it, and that nobody knows what kind of macroeconomic impact there actually was or why. Output indicators are predominantly used and changes in economic indicators are described in reports about the measures. Positive changes lead to the conclusion that the money was given to good companies, the measures work and that they make at least some contribution to the achievement of big goals. The first attempts to assess the impact suggest that, in some cases, support is indeed the thing that has helped the company achieve better economic performance.
- 102. However, macroeconomic goals have still not been achieved (see Table 9) and there is little systematic information about which measures actually work at the level of companies and why. For example, the government should know exactly how to make companies, the state and universities cooperate in the name of economic development.
- 103. In terms of policy-making, there are shortcomings in the general monitoring of companies that have not received enterprise support and economic activities. There are considerably more companies that have not received support than those that have received it.
- 104. The Ministry of Economic Affairs and Communications and Enterprise Estonia (EAS) agree that detailed information about the economic activities of companies is necessary and that its collection must be agreed on, but there has been no money or clear demand for this. Interviews with the agencies that implement enterprise and innovation policy EAS and KredEx revealed that it is very difficult or even impossible to relate the contribution of specific activities to any of the objectives of the competitiveness plan 'Estonia 2020', e.g. to increase the share of Estonian trade in the global economy or labour productivity to 80% of the EU average by 2020. It is also unknown whether such a causal relationship can be ascertained at all.

## The problems of export development have been the same for years

105. The fact that there is little knowledge about the impact of the state's activities also became evident when we looked at the development of exports. The National Audit Office and the Ministry of Economic Affairs and Communications are of the opinion that exports by companies that have and have not received enterprise support has increased almost equally. The government does not know why the money granted for the development of exports has had no impact.

106. The report of the National Audit Office "State's Activities in the Development of Exports" indicated that the government only started turning more attention to the internationalisation of companies and increasing export capability in 2007, when the previous financial period of the EU started. The amount of money initially planned for the achievement of the goals set in the area was 71.5 million euros, which was later increased to 82.5 million euros. The amounts comprised *ca* one-fifth of the total budget of the enterprise policy. However, direct and indirect contributions to the development of exports were also made with other measures of enterprise policy as well as from the budget of the Ministry of Foreign Affairs, but the government has not counted the total amount of money spent on the development of exports.

107. The main problems of Estonian exports have been the same for almost 15 years. The small added value of exports, the shortage of target markets (see Table 9) and exporting companies (see Table 10) and the concentration of large export volumes in the hands of only a few companies have constantly been highlighted as challenges in policy documents. The government attempted to alleviate these problems from 2007-2013, and although the situation has changed considerably in the case of some of these problems, export support measures alone have not always been sufficient to resolve the issues or the approach to solving them has not been decisive enough. Increasing export volumes has been the guiding principle of the government's export policy. Right now we need to take another look and try to understand whether these problems are still problems and why.

## Export support alone will not help to increase productivity

108. The added value of Estonian companies that export increased from 2007-2013, but the impact analysis carried out by the Ministry of Economic Affairs and Communications in 2014 revealed that the export volumes and added value of companies have increased in the same manner in companies that have and have not received enterprise support (incl. export support). This means that the support has not been the required and expected accelerator of the companies' development.

Neighbouring countries are still our main export markets and going further remains difficult 109. Table 9 indicates that the share of exports to neighbouring countries increased to *ca* 55% of total Estonian export turnover from 2007-2013. The top ten export markets have not changed much in terms of countries. The concentration of exports on the markets of closest neighbours is a common phenomenon in international trade, but a more diverse selection of target markets is important in terms of spreading economic and political risks. It is therefore also important to know how and where the products of Estonia are exported beyond the markets of our neighbouring countries, but no detailed studies of this have been made.

 $<sup>^{14}</sup>$  In an indirect manner, almost all enterprise support is a contribution to improving the export capability of Estonian companies.

110. The share of much-discussed Asian markets remains very small in Estonian exports, although we have sought to make more profit on the development of emerging markets for many years now. The government has tried to help companies reach distant markets through various support measures, but the money has mostly still been spent on supporting exports to nearby markets. Making plans for the integration of foreign policy and enterprise support started many years ago. However, important decisions have only been made recently and there is no certainty that the coordination mechanism will start working.

Table 9. Ten most important target countries of Estonian exports, share of exports to target country in total exports in 2007, 2009 and 2013

| 20                               | 07           | 200                              | 9            | 201                              | 3            |
|----------------------------------|--------------|----------------------------------|--------------|----------------------------------|--------------|
| Country                          | Share<br>(%) | Country                          | Share<br>(%) | Country                          | Share<br>(%) |
| Finland                          | 17.7         | Finland                          | 18.5         | Sweden                           | 16.8         |
| Sweden                           | 13.3         | Sweden                           | 12.6         | Finland                          | 16.1         |
| Latvia                           | 11.5         | Latvia                           | 9.5          | Russia                           | 11.4         |
| Russia                           | 8.8          | Russia                           | 9.3          | Latvia                           | 10.4         |
| Total<br>immediate<br>neighbours | 51.3         | Total<br>immediate<br>neighbours | 49.9         | Total<br>immediate<br>neighbours | 54.7         |
| Lithuania                        | 5.9          | Germany                          | 6.1          | Lithuania                        | 5.8          |
| Germany                          | 5.2          | Lithuania                        | 4.8          | Germany                          | 4.6          |
| United<br>States                 | 4.2          | United<br>States                 | 4.2          | Norway                           | 3.7          |
| Togo*                            | 3.4          | Denmark                          | 3.5          | United States                    | 2,9          |
| Norway                           | 3.4          | Norway                           | 3.2          | 3.2 United Kingdom               |              |
| United<br>Kingdom                | 2.8          | Nigeria*                         | 2.9          | 2.9 Denmark                      |              |
| Total                            | 76.2         | Total                            | 74.5         | Total                            | 76.4         |

<sup>\*</sup> These countries are included in the target country rankings on the basis of large, one-off transactions.

Source: Statistics Estonia

111. The current goal according to the competitiveness plan 'Estonia 2020' is to increase the share of Estonian exports in global trade (total global exports) to 0.11%. In a situation where the government is not making a great deal of effort to link exporters to Asia – which is influencing the development of global trade considerably due to its rapid economic growth and large market and will continue to do so – increasing Estonian exports in total global exports is even more difficult. The fact that Estonian embassies were opened in India and Brazil is a positive aspect worth mentioning.

The government is of the opinion that the number of exporting companies has not increased enough

112. The number of companies that export goods from Estonia has increased considerably over the years and the share of companies that export goods among all economically active companies has also increased (see Table 10). As there are also companies that do not sell goods to foreign countries but only export services, Statistics Estonia

calculates the share of exporting companies as 22, 23 and 28% in 2007, 2009 and 2012. The OECD has noted that the share of exporting companies in the economy is typically 10% or less.<sup>15</sup>

113. The Ministry of Economic Affairs and Communications has assessed the share of exporting companies on the basis of the data of the Tax and Customs Board and finds in policy documents that increasing the number of exporting companies remains very important. As such, the main fact that there is no common understanding of how to assess one of the fundamental indicators of export development – the share of exporting companies – is the main source of difficulty here. There is no joint agreement on which companies should be included among exporters and it also not known whether there really are too few exporting companies or whether it is something else that is standing in the way of export development.

Table 10. Number and share of companies that export goods from 2007-2013

|   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   |
|---|--------|--------|--------|--------|--------|--------|--------|
| Exporting companies                     | 8,597  | 9,048  | 9,841  | 10,629 | 11,987 | 13,177 | 14,364 |
| Nominal increase in exporting companies | -*     | 5%     | 9%     | 8%     | 13%    | 10%    | 9%     |
| All economically active companies       | 56,139 | 58,895 | 59,677 | 61,863 | 65,032 | 69,733 | _*     |
| Share of exporting companies            | 15%    | 15%    | 16%    | 17%    | 18%    | 19%    | _*     |

<sup>\*</sup> No data was available at the time this report was prepared.

Source: Statistics Estonia

# Estonian exports are in the hands of only a few companies

114. Estonian exports are in the hands of only a few companies: more than half of all exports come from the operations of 250 companies. However, this concentration hasdecreased a little over the years (see Table 11), but the reports prepared about the development of exports do not indicate whether or how the activities of the state have influenced this. On the one hand, it is good to have more successful exporters; on the other, it is also important that these successful exports have a positive impact on the activities of the other companies operating in Estonia and contribute to broader economic development. Little is known about such connections.

<sup>15</sup> Entrepreneurship at a Glance, 2013, see <a href="http://www.oecd-ilibrary.org/sites/entrepreneur\_aag-2013-en/02/05/index.html;jsessionid=tc5ydyxec26j.x-oecd-live-02?contentType=&itemId=%2Fcontent%2Fchapter%2Fentrepreneur\_aag-2013-11-en&mimeType=text%2Fhtml&containerItemId=%2Fcontent%2Fserial%2F22266941&accessItemIds=%2Fcontent%2Fbook%2Fentrepreneur\_aag-2013-en.

Table 11. Concentration of export volumes among 250 biggest exporting companies (share of exports by group of companies as a percentage of total exports) in 2007, 2009 and  $2012^{16}$ 

|                     | 2007 | 2009 | 2012 |
|---------------------|------|------|------|
| First 50 companies  | 37   | 34   | 33   |
| First 100 companies | 47   | 43   | 42   |
| First 150 companies | 53   | 49   | 48   |
| First 200 companies | 57   | 53   | 52   |
| First 250 companies | 60   | 56   | 56   |

Source: Statistics Estonia, calculations of the National Audit Office

115. In the course of preparing this overview, the National Audit Office and Statistics Estonia took a closer look at the performance indicators of the 250 biggest Estonian exporters. The results of the analysis revealed that although the export volumes of all of these companies are equally large, the contributions made by these companies to the creation of this significant added value are vastly different.

116. When we look at the exporters with the biggest export volumes in 2007, 2009 and 2012, we see that their total export volumes in 2012 were considerably bigger (37%) than in 2007 and that the added value of the companies also increased (24%). The higher export volume in 2012 was achieved with *ca* 6000 fewer employees than in 2007. The majority of top exporters are group companies belonging to foreign capital (slightly more than half of the top 250 exporters in 2012) whose export contribution has increased consistently over the years.

117. An analysis of the behaviour of exports according to the owners of capital, for example, shows that although exporters based on foreign capital create the majority of added value as a whole, the growth of the added value of companies with Estonian capital from 2007-2012 was bigger (see Table 12). When we look at the ratio of one of the most important components of added value from the viewpoint of contribution to the economy – labour costs – to exports, it has remained the same in companies where the majority capital is Estonian, but decreased in companies where the majority capital is foreign.

118. On the one hand, this characterises the increased productivity of companies with foreign capital (larger export volumes are achieved at lower labour costs), but on the other it also shows that the contribution of exports by these companies to the development of Estonia has decreased relatively. Such a development can partly be explained by the fact that in comparison to 2007 there are a few more companies among exporters in 2012 that intermediate goods produced in other countries. It is also important to note that the structure of the areas of activity of the top exporters as a whole has changed very little and that *ca* half of the companies are the same throughout the years.

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<sup>&</sup>lt;sup>16</sup> Unlike the data above, results for three years have been shown in which the 250 biggest exporting companies are characterised: 2007 (status before the economic crisis), 2009 (the worst year of the economic crisis) and lastly 2012, because not all data were available for 2013 at the time this overview was prepared.

Table 12. Added value of top 250 exporters (million euros) and share of labour costs in exports (%) by capital ownership

| Indicator  | 2007  | 2009 | 2012  | Change 2012/2007 |
|--|-------|------|-------|------------------|
| Added value of companies with majority Estonian capital (€)                  | 523   | 521  | 747   | +43%             |
| Added value of companies with majority foreign capital (€)                   | 1,001 | 821  | 1,146 | +15%             |
| Labour costs and export ratio of companies with majority<br>Estonian capital | 7%    | 9%   | 7%    | 0%               |
| Labour costs and export ratio of companies with majority foreign capital     | 12%   | 13%  | 9%    | -3%              |

Source: Statistics Estonia

119. Based on capital ownership, the performance indicators of larger companies in 2007, 2009 and 2012 also differ in a number of other respects (e.g. main target markets and changes in the number of jobs), and the differences in the contribution made to labour costs are also evident when we look at the 250 biggest exporters in the industrial sector in terms of their areas of activity. The changes in the other components of the added value created by exporters with majority foreign capital (e.g. profit) and their connection with other local companies and research and development institutions should be studied in much greater detail – analysing statistics based on annual reports alone is not sufficient for this. For the purposes of policy-making, it is necessary to know more about the participation of exporters in international value chains at the level of single companies, but such studies have been delayed in the Ministry of Economic Affairs and Communications due to a lack of money.

120. The general differences between exporting companies indicate that they need different support from the state. For example, selling their products to parent companies located outside of Estonia is obviously no problem for companies belonging to groups with foreign capital. The necessary workforce and salary level tend to be problems for them. Companies with Estonian capital, on the other hand, need help in opening doors to new markets. The need for export support measures may also differ depending on the areas of activity of the companies. This is why the state offers diverse measures for supporting exports. Enterprise support aimed at exports, whereby an increase in both export volumes and added value was expected, was given to everyone in the same way from 2007-2013 and this may have diluted the impact of the measures.

121. The different contribution of exporting companies to economic development and the small impact identified during the interim evaluation of enterprise support in 2014 suggest that exporters must be supported far more individually than before. This is also the plan in the new EU financial period: enterprise support will from then on be granted from the comprehensive business plan support measure and will be preceded by thorough diagnostics, while the state will offer more information and contact services and financial instruments than before when it supports exports. Understanding the unique features and different needs of exporting companies calls for detailed analyses of the companies, which was lacking when the different support measures were developed from 2007-2013. The organisation of their performance

The results of the Estonian export development plan 'Made in Estonia' have not been comprehensively evaluated

as well as the monitoring of companies in general still awaits clearer agreements in consideration of the new EU financial period.

122. Three extensive plans have already been made for the development of exports and attracting foreign investments, the last of which – 'Made in Estonia 3.0' – was approved by the Minister of Economic Affairs and Communications in March 2014. The government has not prepared any thorough reports on the success of the implementation of the previous versions of this plan. General information about the implementation of activities related to internationalisation has been added to reports on enterprise policy, but they do not cover all of the activities of 'Made in Estonia' as a whole. This means that there is no in-depth knowledge of the reasons for the success or failure of the support measures as well as of the effectiveness of the export promotion coordination system.

123. The government has prepared the macroeconomic future vision 'Estonia 2020' to measure economic development. Its implementation is monitored by both Statistics Estonia and the Government Office. The changes and trends in these general indicators are often interpreted as direct results of the government's actions.

## Economic studies fail to answer important questions

124. The contradictory nature of knowledge-based enterprise policy lies in the fact that several studies have been carried out and dozens of reports have been written in order to shape the development trends of enterprise and the role of the state. The Ministry of Economic Affairs and Communications has confirmed that it has contacts with companies or their representative organisations and that it knows everything about the companies that is needed for a successful enterprise policy. Also, all policy documents have been prepared in compliance with EU and national requirements, and goals and indicators have been formally established. However, there have been admissions that inadequate analysis of macroeconomic data is the reason why the connections between the behaviour of companies, support and macroeconomic development have not been fully understood. There seems to be enough information, but perhaps not quite as much as is needed, and the reasons for successes and failures remain unclear.

125. The National Audit Office has seen the efforts made by the officials of the Ministry of Economic Affairs and Communications and EAS to fill the gaps in knowledge but the demand for detailed information that identifies the significant connections in the functionality of enterprise policy from the level of political decision-making has been lacking. Since the quantity of the state's revenue depends directly on the success of the activities of companies, the National Audit Office is of the opinion that the lack of such knowledge is a systematic risk to the government's enterprise policy. It threatens the use of support money as well as the smart direction of economic development. The latter, however, is essential considering the ambitious macroeconomic goals of the government and the economic conditions of the near future that are volatile and difficult to forecast.

**126.** The National Audit Office is of the opinion that the following should be done in order to ensure that the government's activities in the development of the Estonian economy are as efficient as possible:

- expand the discussion about economic development and involve the Riigikogu in the reviewing and updating of the competitiveness plan 'Estonia 2020';
- the government should regularly report to the Riigikogu about the achievement of the goals of 'Estonia 2020', while the reports should explain the impact of the state's actions at the level of companies as well as the efficiency of coordination systems;
- the government should strengthen analytical capability to study the processes of economic development at the level of companies. This would make it possible to understand the reasons why measures have succeeded or failed in consideration of the government's macroeconomic goals and to design better measures in the future.

## Social security systems — decisions must be made to guarantee sustainability

127. Estonia's social and health expenditure comprised 17.7% of GDP in 2013 and was below the average of the members of the Organisation of Economic Cooperation and Development (OECD), which was 21.9%. Only Israel and Iceland spent less than Estonia.

128. At the same time, social and health expenditure in Estonia has been predominantly increasing (see Figure 8) and in 2014 will comprise as much as 46% of the budget. Both the expenditure and its share in the state budget will grow even more in the coming years and stopping this growth will become increasingly difficult if the present development continues. This was accomplished to some extent during the economic crisis (e.g. benefits for temporary incapacity for work and unemployment insurance were reduced and other expenses were cut from 2009-2011 to balance the impact of the significant decrease in social and other taxes collected), but these were mostly temporary solutions. This is why the state has to be ready for reforms which would make the financing of the social system more sustainable.





Source: State Budget Strategy for 2015-2018

#### **Read more**

The National Audit Office's audit report "Sustainability of the State's Pension System" of 2014

#### **Automatic adjustment mechanisms**

make it possible to adjust the pension system according to agreed statistical indicators, thereby reducing dependence on political factors. For example, it is possible to tie the retirement age to life expectancy, whereby the retirement age is regularly adjusted according to life expectancy statistics.

## The increase in pension insurance expenses increases pressure on financing other areas

129. The pension insurance deficit in 2014 is 380 million euros.<sup>17</sup> The deficit has increased by 20% compared to 2013. The deficit does not mean that pensions are not paid out, but in addition to the social tax collected by the state, additional state budget funds must be found for pensions at the cost of other areas.

130. In last year's overview of the use and preservation of state assets the National Audit Office pointed out that the social tax collected is not enough to finance pension expenditure and that the pension insurance deficit will not decrease for the next 50 years unless changes are made. In addition to changes in the demographic situation, the deficit is also caused by the current organisation of the pension system, where special pension schemes allow people to retire early and receive pensions for a long time. Special national schemes of this kind can no longer be considered justified in a situation where the retirement age is constantly increasing and people are saving for their retirement themselves in the funded pension system.

131. The state has decided that the retirement age must be increased and that the overall retirement age will be 65 from 2026. However, increasing the retirement age will not guarantee the future sustainability of pension insurance, which is why the state needs a long-term plan on how to guarantee that the pension system remains sustainable in conditions where the number of working-age people is decreasing and the number of pensioners and life expectancy are increasing. A few steps with marginal financial impact have been taken in the abolition of special pension schemes (e.g. judges, the Chancellor of Justice and the Auditor General are no longer eligible for occupational pensions), but thorough reforms have yet to be carried out.

**132.** The state should decide on the measures necessary to guarantee the sustainability of the pension system as soon as possible. The National Audit Office is of the opinion that

- the automatic adjustment mechanism that is best suited to the system considering the demographic and economic situation in Estonia and the characteristics of the pension system must be found as soon as possible and established from 2026, when the determined increase in the retirement age ends;
- and the special pension schemes that allow people to retire before the overall retirement age should be abolished. If necessary, early pensions should be replaced with effective personal protective equipment, people should be offered rehabilitation services, the loss of special pensions should be compensated with higher salaries, and people should be offered the chance to take part in national in-service training and retraining in parallel with working in the later stages of their careers:
- the capacity for work reform must be completed. The initial goals – to curb the increase in the number of disability

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<sup>&</sup>lt;sup>17</sup> State Budget Strategy for 2015-2018

pensioners and to reduce the unjustified expenditure of the state – must not be forgotten.

## There is not enough health insurance money to improve access to treatment

133. The budgetary position of social security funds (the Estonian Health Insurance Fund and the Unemployment Insurance Fund) is good this year and will also be good next year. This is mainly the result of the reserves of the Unemployment Insurance Fund. However, the budgetary position of health insurance is deteriorating. In Estonia, health insurance premiums are mainly collected from the social tax paid on wages (13%). At the end of 2013, working persons comprised 48% of people covered by health insurance; the remaining 52% were pensioners, children or people for whom health insurance premiums are paid by the state. This is why the state of health insurance depends primarily on the situation on the labour market.

134. In addition to health insurance, the health sector is also financed from the state budget (health promotion and ambulance services and emergency aid provided to uninsured people) and the private sector (mostly cost-sharing by patients when buying medication or receiving services). Total health expenditure decreased by 12.3% during the economic crisis and has only made a significant jump in recent years (see Table 13).

135. The proportion of expenditure incurred by various parties over five years has not changed significantly either. However, the share of expenditure incurred by households has decreased in recent years. The share of health expenditure borne by households in 2009 was 21%, but had dropped to 18.4% in 2012. This is primarily associated with changes in compensation for medication, which has made it possible for patients to obtain medication more cheaply.

Table 13. Health expenditure by source of financing, 2008-2012 (million euros)

| Year                      | 2008  | 2009  | 2010  | 2011  | 2012    |
|---------------------------|-------|-------|-------|-------|---------|
| Total health expenditure  | 942.5 | 929.4 | 900.7 | 932.8 | 1,011.5 |
| General government, incl. | 738.9 | 726.3 | 714.6 | 747.8 | 805.3   |
| central government        | 88.5  | 81.8  | 85.6  | 87.8  | 93.7    |
| local government          | 12.9  | 12.8  | 10.2  | 12.3  | 12.9    |
| Health Insurance Fund     | 637.5 | 631.7 | 618.8 | 647.7 | 698.7   |
| Private sector, incl.     | 203.1 | 202.1 | 183.9 | 181.7 | 203.0   |
| households                | 193.3 | 196.8 | 168.6 | 165.9 | 186.1   |
| Rest of the world         | 0.5   | 1.0   | 2.2   | 3.3   | 3.2     |

Source: National Institute for Health Development

**136.** In the Estonian health sector, money has mostly been channelled into dealing with the consequences and preservation of health; early prevention of diseases has not been a priority in terms of financing.

**Budgetary position** – the difference between total revenue and total expenditure

137. According to the Health Insurance Fund's strategy, one of its goals is to raise people's awareness and direct health behaviour. However, the total amount spent or planned in the budget of the Health Insurance Fund on disease prevention and health promotion in recent years is less than 1% (incl. 0.1% on health prevention) of health insurance expenditure. According to the explanations of the Health Insurance Fund, some of the money allocated to specialists and family doctors is also spent on prevention. However, considering the total amount of money spent on prevention (the expenditure of the government sector and private sector in addition to the Health Insurance Fund), we see that 3.3% of total health expenditure goes towards promoting health.

## The pressure to increase the financing of health is growing

138. The study of the financial sustainability of the Estonian health system prepared by the World Health Organisation, the Ministry of Social Affairs and the Estonian Insurance Fund of 2010<sup>18</sup> and its follow-up study (2011) already highlighted that Estonia will not be able to maintain its health system given the way it is being financed at present.

139. Several recommendations about how to guarantee the sustainability of financing were made in the study. For example, the state should pay the health insurance part of social tax for pensioners; in the interest of fairness, social tax should also be established on the dividends received on capital investments; AND the mechanisms with which revenue is allocated from the state budget to the health Insurance Fund must be stable and transparent to avoid fluctuations over the years. The Ministry of Social Affairs was also advised to continue reducing the excessive capacity of the hospital network, to review the investments made in expensive equipment, to increase the share of primary care in the health system and to take steps to limit cost-sharing by patients.

140. Only cosmetic changes concerning cost-sharing by patients have been made so far: promoting the use of generic medication and abolishing the cap on medication subject to a 50% discount. However, the conceptual decisions required to guarantee the sustainability of health insurance financing have largely been postponed. At present there is not even any public debate about them. The lack of discussion about the future options of financing health has led to a deterioration in the situation in health.

141. Money is always limited, which is why smart decisions must be made. If more money is allocated to health, it should be used to solve three problems <sup>19</sup> according to the WHO report:

- increase the share of insured people;
- reduce cost-sharing by patients when paying for services/medication;
- improve access to health services a broader selection of services and/or shorter waiting times.

<sup>&</sup>lt;sup>18</sup> Sarah Thomson, Andres Võrk, Triin Habicht, Liis Rooväli, Tamas Evetovits and Jarno Habicht. Responding to the challenge of financial sustainability in Estonia's health system. 2010.

<sup>&</sup>lt;sup>19</sup> The world health report. Health system financing. The path to universal coverage. WHO, 2010.

142. Pressure to solve all of these problems has existed in Estonia for a long time. The share of insured people among the working-age population has increased. The share of insured people aged 20-59 in 2011 was only 84%, but by 2013 this figure had already risen to 89%. However, this growth is the result of the improved situation on the labour market, not health policy decisions. Over 10% of the working-age population remains uninsured and they therefore only receive medical assistance as emergency care. <sup>20</sup>

143. Cost-sharing by patients has decreased in recent years as a result of changes in the compensation of medication and an increase in the awareness of patients.

Health insurance expenditure is increasing but access to services is deteriorating

144. The health insurance budget has grown strongly in recent years, but this has not improved access to services. The increase in budgetary funds mainly compensates for the price increase of services, the main reason for which is the rise in staff costs in addition to the general increase in expenditure. The collective agreement signed after the strike in 2012 stipulated a pay rise for health professionals in 2013 and 2014, and they have demanded the same for the future. Staff costs comprise more than half of the cost of health services.

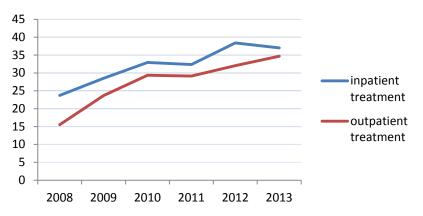
#### Did you know that...

- the maximum permitted waiting time in the event of outpatient specialist care is six weeks;
- the maximum permitted waiting time for scheduled inpatient specialist care, day care and infertility care is eight months.

#### Waiting times for treatment are getting longer

145. The National Audit Office has monitored changes in waiting times over the years. As seen in Figure 9, the average length of waiting times has increased year-on-year. The accessibility of health services to patients therefore keeps deteriorating. The reasons behind the long waiting times are a lack of money and a lack of options in providing health services. Timely provision of necessary services is a particular problem in the case of outpatient care – only 50% of appointments fit within the limits of the permitted waiting time as at 1 January 2014. The same indicators were 90% in inpatient care and 98% in day care. <sup>21</sup>

Figure 9. Average waiting times for inpatient and outpatient medical care from 2008-2013 (days)



Source: Data of the Estonian Health Insurance Fund, calculations of the National Audit Office

 $<sup>^{20}</sup>$  According to the Ministry of Social Affairs, the share of uninsured working-age people has dropped to 6.7% in 2014. The National Audit Office uses official statistics.

<sup>&</sup>lt;sup>21</sup> Annual Report of the Estonian Health Insurance Fund.

## Adding new services is a problem

## Health insurance will soon need extra money

- 146. The development plan of the Health Insurance Fund for 2015-2018 includes activities that should shorten waiting times and increase the service package. In a situation where a significant increase in financing is improbable and any planned increase is used to cover the pay rise of health professionals, it is more or less impossible for the National Health Insurance Fund to change the organisation of healthcare.
- 147. The expenditure of the Health Insurance Fund has exceeded its revenue for a long time and forecasts indicate that this will continue to be the case in the coming years. Expenditure must be increased even further if the circle of insured persons is to be increased and/or the accessibility of health services is to be improved.
- 148. Every summer the Supervisory Board of the Health Insurance Fund approves the four-year expenditure of the Fund and the sources from which it will be covered. This document is the basis on which the money used to pay for treatment is planned for the next four years. The document prepared in summer 2013 for 2014-2017 states that extra money must be found in 2017 to cover expenditure because the Estonian Health Insurance Act stipulates that only 30% of retained earnings may be used to cover expenditure. <sup>22</sup> Until now, the everincreasing expenditure could be covered from retained earnings, but extra money will have to be found from 2017 to finance health insurance to the same extent.
- 149. Pursuant to the Spring 2014 Forecast of the Ministry of Finance, <sup>23</sup> the Supervisory Board of the Health Insurance Fund has reworked its forecasts published in the document approved in August 2014 in such a manner that no extra money will need to be found from 2014-2018. The initial forecast indicated that the expenditure of the Health Insurance Fund would exceed revenue by 91.3 million euros from 2014-2017, but the new forecast says the difference will only be 4.3 million euros. According to the forecast of 2014, retained earnings will increase to 131.8 million euros by 2017 instead of the previously planned 41.6 million euros.
- 150. In order to achieve a balance, revenue has increased by 64.8 million euros and expenditure has decreased by 22 million euros. This means that the reason behind the unexpected balance is not just the increase in revenue, but also the decrease in forecast expenditure. However, considering the salary expectations of health professionals, such a decrease can only be achieved at the cost of the accessibility of health services, as no changes are planned in the structure of health services.
- **151.** The National Audit Office is of the opinion that such a practice is extremely regrettable forecasts are tweaked to conceal problems in financing and the conceptual decisions required for the reorganisation of financing are constantly postponed.

<sup>&</sup>lt;sup>22</sup> The legal reserve may also be used in certain situations, which has not been done so far.

<sup>&</sup>lt;sup>23</sup> The amount of social tax that will be collected from 2015-2018 according to the summer forecast of the Ministry of Finance is 20-25 million euros less than indicated for each year in the spring forecast.

- 152. The amount of money planned for health insurance in 2015 according to the 2014 draft state budget act, which the government has approved and sent to the Riigikogu, is already smaller than the forecast approved by the Supervisory Board of the Health Insurance Fund.
- 153. The survey prepared by the World Health Organisation, the Ministry of Social Affairs and the Estonian Health Insurance Fund in order to guarantee the financial sustainability of the Estonian health system already offered solutions in 2010 and warned that we will not be able to finance health from health insurance if we persist with the current system. The fact that the problems and solutions highlighted then were ignored was one of the reasons for the strike by health professionals.

## Performance of goodwill cooperation agreements has failed

- 154. Following the strike that took place in autumn 2012, the various parties operating in the health sector signed a goodwill cooperation agreement on 20 January 2013 in order to agree on the directions and actions needed to guarantee the sustainability of the health system.
- 155. A number of actions (and deadlines) are highlighted in the agreement which should make the health system more efficient and improve the situation of the parties. Unfortunately, only a couple of clauses regarding independent appointments with nurses and midwives, primary health care and the organisation of ambulance services have been implemented. Although the Ministry of Social Affairs has prepared discussion documents or drafts in several areas by the established deadlines, no important decisions for the optimisation of the specialist medical care network, the provision of e-health solutions or guaranteeing the financial sustainability of health care have been made.

# There are solutions for increasing health insurance funds

**156.** The financing of health can be improved in many ways. The first is to use money more efficiently in the health system. The National Audit Office has made many recommendations about this over the last ten years:

# As we have too many active care hospitals (i.e. there is not enough money, patients or employees for all of them at the same time), the hospital network must be immediately streamlined and redesigned on the principle of a network in such a way that treatment is primarily provided in large hospitals or 'centres of excellence'. The Ministry of Social Affairs has taken the first steps in this direction.

- More money is being directed to family medicine so that specialists do not have to deal with problems that fall mainly within the competence of family physicians.
- An e-health system that allows for the better use of money in health care must be developed.

# **157.** If money were used more efficiently – the hospital network being reorganised, primary care being developed and the e-health system being made more efficient – these changes, even if combined, would not guarantee the balance of health expenditure and revenue in the future.

#### Read more

recommendations of the National Audit Office in the audit reports 'Sustainability of the Hospital Network' (2010), 'Organisation of Family Medicine' (2011) and 'Activities of the State in the Implementation of e-Health' (2014).

- 158. Similar to pension insurance, the most significant aspects of financing health insurance are related to the aging of the population, but the general price increase in services plays an even more significant role in the growing need for financing. This is why it is necessary to find ways of raising additional money for the health system in the coming years. There are several options for this. For example:
  - some of the services currently paid for by health insurance could be financed from the state budget (e.g. family medicine or inpatient nursing care);
  - sickness benefits could be paid by the employer or financed from unemployment insurance instead of the health insurance budget;
  - the part of social tax that is put towards health insurance could be increased or the objects of social tax could be changed (e.g. dividends earned on capital investments).

#### Education – the state should take a stronger role in shaping the education system

#### **Education expenditure will** not increase in the coming vears

159. The total amount that will be spent on education from the state budget of Estonia in 2014 is 759.8 million euros, which comprises 9.4% of all state budget expenditure.<sup>24</sup> Social protection, health and support for the economy are the only areas in Estonia that receive more taxpayers' money than education.

**160.** Staff costs comprise the majority of the current education expenditure of the government sector. The share of staff costs in 2011 was 65% and management costs amounted to 35%. The share of management costs in Estonia is slightly higher than the average in OECD countries.

**161.** Our education expenditure is average in international comparison. In 2011<sup>25</sup> the average OECD country contributed 6.1% of its gross domestic product to education. Finland contributed 6.5% and Estonia 5.5%. <sup>26</sup> Spain and Portugal as well as rich central European countries Austria and Switzerland invested a similar share of their national wealth in education.

162. According to the State Budget Strategy 2015-2018, the share of education expenditure in the state budget should decrease somewhat in the coming years and reach 8.2% by 2018. For a developing education system, this means a need to carefully think through how limited resources can be used in the best possible manner. As revenue cannot be expected to increase in the near future, options for saving money should be found in the education system itself.

<sup>&</sup>lt;sup>24</sup> State Budget Strategy 2015-2018. Ministry of Finance, 29 April 2014.

 $<sup>^{25}</sup>$  The last year for which the data of all OECD countries are available.

<sup>&</sup>lt;sup>26</sup> Education at a Glance 2014. OECD Indicators, OECD, 2014. This is an institutionbased calculation (Expenditure on educational institutions as a percentage of GDP).

#### The numbers of students, teachers and schools do not go hand in hand

## The school network has still not been streamlined due to the state's indecisiveness

163. In the last ten years alone, the number of students in Estonian general education schools has decreased by more than 50,000 (see Table 4) and the number of upper secondary school-age students will continue to decrease in the coming years. In addition to this, the state's population has been concentrating in larger cities and their surroundings. Only Tallinn, Tartu and Pärnu have gained working-age people in the last 10 years. The number of children up to 14 years of age has only increased in Harju County in the last ten years.

164. Irrespective of the decrease in the total number of students, no significant changes have taken place in the school network. In the last ten years, the number of students has decreased by a quarter, but the number of schools has only gone down by a tenth (see Table 14). Compared to OECD countries, our classes have fewer students: in 2012, the average number of students in a class in the last stage of Estonian basic schools was 16, while the average in OECD countries was 24.

165. The number of teachers has not changed in accordance with the decrease in the number of students (see Table 14). The number of students per teacher in Estonia is smaller than the OECD average: In 2012 there were 10 students per teacher in forms 7-9 in Estonia, while the OECD average was 14. <sup>27</sup> The school network, which was established under different conditions and needs to be updated, is too expensive in the present conditions and cannot guarantee education of equally high quality nationwide.

Table 14. Number of general education schools and number of general education school students, teachers, teaching positions and number of students per teaching position from 2004/2005-2013/2014

| Academic year      | Number of schools | Number of students | Number of<br>teachers | Number of<br>teaching<br>positions | Number of<br>students per<br>teaching<br>position |
|--------------------|-------------------|--------------------|-----------------------|------------------------------------|---|
| 2004/2005          | 603               | 190,928            | 15,974                | 13,864                             | 13.8  |
| 2007/2008          | 573               | 161,961            | 15,039                | 12,845                             | 12.6  |
| 2010/2011          | 545               | 145,939            | 14,394                | 11,970                             | 12.2  |
| 2013/2014          | 540               | 140,467            | 14,226                | 11,739                             | 12.0  |
| Change in 10 years | -63 (-10%)        | -50,461 (-26%)     | -1,748 (-11%)         | -2,125 (-15%)                      | -1.8  |

Source: Ministry of Education and Research

166. The need to adapt the school network to contemporary conditions has been obvious for at least ten years. Some small steps have been taken in reorganising the school network, but despite broad acknowledgement of the problems and repeated promises to solve them, governments over the years have failed to make the important decisions that are needed.

<sup>&</sup>lt;sup>27</sup> Education at a Glance 2014. OECD Indicators. OECD, 2014.

# 167. Analyses carried out by the Praxis Centre for Policy Studies and the Ministry of Education and Research<sup>28</sup> have both indicated that the school network could be significantly reduced in size. According to the most recent analysis of the school network by Praxis, the number of schools that would be adequate for Estonia in 2020 is 352 basic schools (in lieu of the present 484) and 58 upper secondary schools (in lieu of the present 194).

168. The majority of general education schools (463 schools in the 2013/2014 academic year) belong to local authorities. The Ministry of Education and Research is of the opinion that the school network can primarily be streamlined by the school manager and the ministry cannot take responsibility for streamlining the school network from local authorities.

169. The National Audit Office is of the opinion that the responsibility for the quality and management of education in the state is, in the end, the responsibility of the Ministry of Education and Research and that if local governments cannot or do not want to provide quality education, the state must step in and take over the role from the local authority. The Ministry of Education and Research has all of the levers it needs to initiate the amendment of the relevant acts.

170. Although the entire school network needs to be reviewed, the Ministry of Education has only paid heightened attention to streamlining the upper secondary school network and left the streamlining of the basic school network to local authorities. In order to provide quality upper secondary education and guarantee a more efficient school network, the Ministry of Education and Research has planned to establish state upper secondary schools in county centres. However, local government schools that also provide upper secondary education continue operating in parallel with state upper secondary schools in many places.

171. With regard to upper secondary schools, the Ministry of Education and Research has been of the opinion that the provision of general secondary education will transfer from local authorities to the state in the long run. <sup>29</sup> This should be accomplished as a result of cooperation between local authorities and the state and via the implementation of motivation measures, not as an obligation that must be met by a particular deadline. Similar to local government reform, wherein the state hoped that local authorities would voluntarily merge, streamlining the school network on a voluntary basis awaiting agreement has not led to any considerable changes.

172. Dividing responsibility for streamlining the upper secondary school network between two levels of government has not yielded the necessary results quickly enough. It has mainly depended on the readiness and willingness of local authorities. The Ministry of

# There is no clarity in the network of upper secondary schools and schools for special needs children Did you know that...

new **state upper secondary schools** are operating in Viljandi, Haapsalu and Jõgeva. Cooperation agreements for the establishment of new upper secondary schools have been entered into with the local authorities of Võru, Jõhvi, Pärnu, Tartu, Põlva, Valga, Kohtla-Järve, Kärdla, Rapla and Viimsi.

### Did you know that, as motivation measures.

the amounts granted as support for the labour costs of the teachers of <u>all</u> municipalities, towns and cities from the Equalisation Fund in 2014 as motivation to streamline the school network were increased by 1.5%.

An additional 3.6% of the teachers' labour cost support was granted for the labour costs of teachers to municipalities, towns and cities where the decision to streamline the upper secondary school network had been made.

The local authorities that have streamlined their upper secondary school network may use up to 5% of the basic school teachers' labour cost support to pay the salaries of upper secondary schools teachers.

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<sup>&</sup>lt;sup>28</sup> "Organisation of the General Education School Network" (Praxis Centre for Policy Studies, 2005); "Analysis of Estonian Basic School and Upper Secondary School Network for 2020" (Praxis Centre for Policy Studies, 2014); school network calculations by the Ministry of Education and Research (2009-2010).

<sup>&</sup>lt;sup>29</sup> Explanatory memorandum to the Basic School and Upper Secondary School Act adopted on 20 June 2013.

Education and Research has not established a clear division of tasks in the future organisation of education and there are no clear financing principles. It is difficult to reach agreement with local authorities in such conditions.

173. The only feasible option for streamlining the school network is for the state to take the lead. However, this requires a clear plan of how many upper secondary schools are needed and where they should be located. Although the Ministry of Education and Research has promised to prepare plans that cover the number of educational institutions and places of study for the implementation of the Lifelong Learning Strategy, no nationwide plan for the upper secondary school network has been published.

174. The state could set local authorities a good example with a well-considered and efficient network of state schools. There were 30 state schools in Estonia in the 2013/2014 academic year, 21 of which are for special needs children and two for children with behavioural problems. Inclusive education is the direction taken with the new concept of teaching special needs children, and there are plans to review the existing network of schools for such children. The Ministry of Education and Research is working on a plan of the school network for special needs children which, according to promises, should be completed by the end of 2014.

175. The National Audit Office is of the opinion that the state should quickly agree on the principles of streamlining not only the upper secondary school network, but the entire school network. If a clear division of tasks between the state and local authorities and the financing scheme do not motivate local authorities to streamline the school network and the quality of education suffers, the state will have to take a more forceful position in streamlining the school network.

176. The different levels of the education system should be planned together, as they increasingly depend on one another and develop hand in hand. Although the Estonian Lifelong Learning Strategy, completed as a result of years of work, and the fact that the Ministry of Education and Research has promised to streamline the number of educational institutions and places of study for the purposes of its implementation both deserve recognition, there is no clarity about the school network. To date, not one of the governments has clearly stated what streamlining the school network should accomplish, to what extent education will be provided by the state and where the money required for the provision of education will come from.

#### Quality education is possible if the work of teachers is properly valued

177. Teaching staff in Estonia are aging. The average age of general education school teachers increased consistently from 2007-2013. The share of teachers under 40 was 33% in the 2007/2008 academic year, but had dropped to 27% by 2013/2014. 30

178. The teaching profession is not popular among those youngsters who are the best students. The number of people who started acquiring a

#### Teaching staff are aging

<sup>&</sup>lt;sup>30</sup> http://www.haridussilm.ee, 16 September 2014.

degree in education from 2008-2010 was 1500 per year, but in 2013/2014 only 1013 people made this choice.<sup>31</sup> Also, those who do decide to train as teachers after acquiring secondary education may not remain in the profession.

179. Young people whose exam results are better than average do not usually continue their studies in the area of education – the teaching profession is generally not their preference.<sup>32</sup> Expectations of future teachers are high, which is why we need successful students to take an interest in the profession.

## Teachers' job satisfaction is low

- 180. The OECD Teaching and Learning International Study TALIS continues to show that the job satisfaction of teachers in Estonia is lower than in other countries. Teachers are particularly dissatisfied with the social status of the profession only 14% of the teachers and 12% of the heads of schools who took part in the study believe that the profession is valued in society. 33
- 181. The same study revealed that factors arising from society are at the forefront of the reasons for the dissatisfaction of teachers: low salaries, limited recognition in society, unstable education policy, low position of teachers in society, overburdened study programmes and excessive workload.
- 182. Governments have been promising teachers pay rises and motivation measures since at least 2005. In the last two years, the government has set the salaries of teachers as one of its priorities and also found extra money for this. Although the issue of the salaries of teachers whose objective is to bring the salary of teachers up to the average wage in the country has been on the government's agenda over the years, the pay rises offered to teachers have not managed to keep up with average salary trends. The average salary in the country according to Statistics Estonia in 2013 was 949 euros, which is 18% more than the average in the area of education (803 euros).
- 183. The low salaries of teachers are not evident in the local context alone, but also in international comparison. Estonia stands out among OECD countries with the lowest salary level of teachers. Teachers' salaries adjusted for purchasing power parity are also higher in countries that are poorer than Estonia, such as Chile. The salary level of teachers in Finland exceeds that of Estonian teachers almost three times (see Figure 10).<sup>34</sup>

#### Did you know that...

when adjusted for purchasing power parity, the comparison of countries only shows the differences in the volume of goods and services purchased, i.e. that teachers in Estonia obtain fewer goods and services for their salaries than teachers in other countries.

<sup>&</sup>lt;sup>31</sup> http://www.haridussilm.ee, 16 September 2014.

<sup>&</sup>lt;sup>32</sup> Eve Mägi, Mihkel Nestor. School graduates and their career choices. Praxis Centre for Policy Studies, 2012.

<sup>&</sup>lt;sup>33</sup> See http://hm.ee/et/tegevused/uuringud-ja-statistika/talis.

<sup>&</sup>lt;sup>34</sup> Education at a Glance 2014. OECD Indicators. OECD, 2014.

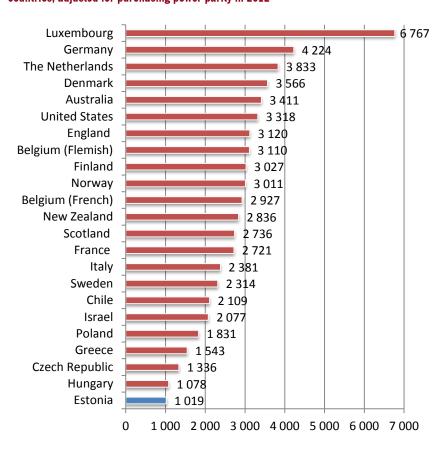


Figure 10. Average monthly income of teachers in euros at basic school level in OECD countries, adjusted for purchasing power parity in 2012

Did you know that...

the state supports local authorities in covering education expenditure. Money is allocated from the **support fund** on the basis of the number of students to help cover the following expenses:

- labour costs of teachers, school heads and head teachers:
- in-service training costs of teachers, school heads and head teachers;
- investments:
- textbooks;
- school lunches.

The exact division of the amounts is decided by the local authority on the basis of the regulation of the Government of the Republic.

Source: OECD Education at a Glance 2014, calculations of the National Audit Office

184. Similar to the topic of the school network, the issue of teachers' salaries is also accompanied by a dispute between state and local authorities about duties and financing. The Ministry of Education and Research is of the opinion that some local authorities are not using the money allocated for teacher's salaries purposefully. This is why the ministry has started to carefully monitor the use of the salary fund allocated to local authorities and to publish regular overviews of this in the online environment HaridusSilm.

185. According to the ministry's calculations, it should be possible for local authorities to pay teachers an average gross salary of 978 euros in 2014. Harju, Tartu and Jõgeva counties were managing this as at June 2014. The salary level was highest in Harju County, where the average monthly salary of teachers was 1014 euros, and lowest in Valga County, where teachers had to settle for an average gross monthly salary of 900 euros. 35

186. Ways of increasing the salaries of teachers have been linked to the further progress of the school reform in the Ministry of Education and Research. The optimisation of the school network should reduce administrative expenses and the excessive staff costs caused by small classes, which should then release funds which can be passed on to teachers as a pay rise. However, as we know the ministry has not

<sup>35</sup> http://www.haridussilm.ee, 16 September 2014.

calculated how much money could be saved by reforming the school network, we do not actually know whether or how much the salaries of teachers could actually increase at the cost of these savings.

187. In addition to salaries, there are other factors that help to find good teachers and keep them in schools. Several national and voluntary initiatives have been launched to popularise teaching and being a teacher. Examples of these are the Young Teachers to Schools programme that gives teaching experience to talented university graduates; the Back to School initiative that gives everyone the chance to teach lessons; the recent Train as a Teacher campaign; the good teacher month; and the start-up support for teachers. It is difficult to assess how much these initiatives, which are positive in themselves, have managed to improve the image of teachers in society. However, it is clear that an image-boosting campaign alone cannot make up for poor salaries.

188. The teaching profession does not have to be strictly regulated. The management of the salaries of teachers has become more flexible. Payroll based on professional categories and lessons is a thing of the past and heads of schools have been given more rights to motivate good teachers with money. The teaching profession could also become more liberal. While good teachers can find jobs outside schools, it is currently considerably more difficult for specialists from outside the education system to become teachers. <sup>36</sup> Teaching could form a part of people's career ladders.

189. It is clear that the salaries of teachers must become more competitive on the market if we want more younger teachers and better teachers. Teaching is not an easy job and the poor salaries scare off those who would cope well with the job. Hopes of a pay rise are largely pinned on streamlining the school network, but the pace at which the reform is moving forward is unclear and it is not known how much money this would actually release for salaries. In a situation where no additional money is coming into the area of education, it is clear that the salaries of teachers will not increase without the consistent intent of decision-makers at the political level.

190. Finding additional money for the education system at the cost of other areas is not possible according to forecasts, which is why reasonable decisions must be made in financing education. The divided management of the education system between the state and local authorities has long since been unsuccessful in terms of the reasonable use of money. The National Audit Office therefore finds that softly spoken intentions alone are not enough to make change happen – we need concrete solutions from the state that are implemented by specific deadlines.

teacher. A person becomes a professionally qualified teacher upon completing teacher training at a university or after proving that they have the necessary teaching competency to the qualification committee.

<sup>36</sup> According to Regulation No 30 'Qualification Requirements for Heads of Schools,

Head Teachers, Teachers and Support Specialists' of the Minister of Education and Research of 29 August 2013, an upper secondary school teacher must have a Master's degree or equivalent qualification and must also have the professional qualification of a teacher. A person becomes a professionally qualified teacher upon completing teacher

#### 191. The National Audit Office is of the opinion that

- it is necessary to decide where and at what level education is provided by the state and by the local authority as well how much money it requires and what source it comes from;
- clear management and financing principles must be agreed for the streamlining of the school network. For this purpose, it is necessary to
  - determine the duties and financing of the state and local authorities in guaranteeing primary, basic and upper secondary education;
  - calculate the amount of money that will be saved as a result of streamlining the school network and the costs to be incurred at the cost of these savings in order to improve the quality and accessibility of education and to increase the salaries of teachers, and to publish these results.

#### Oil shale sector – expecting considered decisions

- 192. The oil shale industry comprises up to 4% of GDP of Estonia. In terms of production volumes, it is equal to the contribution of the food industry and timber industry and half the share of the construction sector. Approximately 7,700 people worked in companies associated with the oil shale industry, which is somewhat fewer than in the food industry and about half as many as in the timber industry.
- 193. No other industrial activity in Estonia has a greater environmental impact than oil shale mining and use. The air pollution caused by the oil shale sector comprises more than 70% of all emissions into the air in Estonia and the waste generated by the extraction and processing of oil shale comprises *ca* 80% of non-hazardous waste and over 90% of hazardous waste. The water pumped from mines and quarries and the cooling water used by electric power plant Eesti Energia Narva Elektrijaamade AS comprises more than 90% of surface water and groundwater used in Estonia.
- 194. The oil shale industry has traditionally played a significant role in the Estonian economy it has made it possible to produce our own electricity from oil shale and thereby guaranteed our energy independence as well as a low price for electricity.

The oil shale sector is changing.

195. The oil shale sector as a whole is undergoing massive changes. The outlook of oil shale electricity generation is diminishing as a result of the confluence of the opening of the electricity market, the establishment of an electricity connection between Estonia and Finland and increasingly stricter environmental requirements. The use of oil shale for electricity will be replaced by large-scale shale oil production over the coming decades. According to plans, massive investments will be made in shale oil production in Estonia. The majority of shale oil is exported, but the environmental impact of its production will be borne by Estonia.

196. The state is planning to make significant decisions concerning the future of the Estonian energy sector in 2015 – the National Development Plan for Oil Shale Use 2016-2030, the Energy Sector Development Plan until 2030 and the new Framework Plan for Environmental Charges until 2016+ will be presented to the Riigikogu for discussion. It is inevitable that the changes taking place in the oil shale sector must be considered in the plans that concern the oil shale sector in order to reduce environmental impact, reassure companies on making future investments and earn fair revenue for the state for the use of oil shale resources.

## The state has failed to control the environmental impact of the oil shale industry

197. The goals set by the state in the National Development Plan for Oil Shale Use that will end in 2015 are to reduce the environmental impact of oil shale mining and use and to increase the efficiency of the oil shale sector. The Ministry of the Environment has not managed to guarantee the achievement of these goals.

198. According to the development plan, the efficiency of mining had to increase as a result of the reduction of mining losses. Mining losses in oil shale quarries increased from 2007-2012. Oil shale losses in underground mines remained at the same level as in 2007 (i.e. 28%). Oil shale mining losses total *ca* four million tons per year on average. Reduction of losses has not been required in the extraction permits issued to companies and no specific activities have been prescribed for this in the development plan. Also, no actions to increase the efficiency of oil shale use (i.e. electricity generation and oil production) have been established in the development plan.

## Environmental impact has not decreased

#### Did you know that...

the hazardous waste generated by the oil shale sector per person is the reason Estonia ranks first among EU countries (with 6.7 tons) while the EU average is slightly below 200 kg.

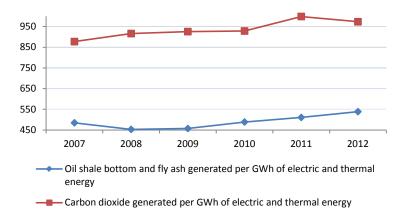
In terms of  ${\rm CO_2}$  emissions per person, Estonia ranks  $2^{\rm nd}$  in the EU with 13.6 tons while the EU average is 7.8 tons.

199. The environmental impact of oil shale extraction and use had increased in terms of several indicators instead of decreasing as expected in the development plan. For example, in 2012 the oil shale sector generated 12% more oil shale bottom ash, 8% more fly ash and 2% more semi-coke as well as 41% more mine waste in absolute quantities when compared to 2007<sup>37</sup>. No successful options for recovering the large quantities of waste generated have so far been found.

200. Emissions of the carbon dioxide  $-\text{CO}_2$  – generated in the production of oil shale electricity and heat increased by 11% per GWh of energy generated from 2007-2012. The quantity of oil shale bottom ash and fly ash per GWh also increased by 11% in the same period (see Figure 11).

<sup>&</sup>lt;sup>37</sup> The Ministry of the Environment explains that the quantity of mine waste has increased because the quantity of low-quality oil shale extracted is increasing. According to Eesti Energia Kaevanduste AS, the mine waste created in Narva quarries was not recognised in waste reporting before 2011. This means that the mine waste of Narva quarries was added to waste statistics in 2011.

### Figure 11. Quantity of oil shale bottom and fly ash created in electricity and heat generation and the quantity of carbon dioxide $(CO_2)$ from 2007-2012 (tons/GWh)



Source: National Audit Office on the basis of the data from Statistics Estonia and the Ministry of the Environment

#### Did you know that...

the installation of cleaning equipment on the chimneys of Eesti Energia Narva Elektrijaamad was not enough to adhere to the limit of  $SO_2$  emissions, and mine waste was added to oil shale boilers, which helped to bind the sulphur compounds, but on the other hand increased the quantities of  $CO_2$  emissions and oil shale ash per GWh of energy unit produced.

201. Only the attempts made to reduce the quantity of sulphur dioxide ( $SO_2$ ) were successful from 2007-2012 – it is down by 50%.  $SO_2$  emissions had to be reduced to adhere to the air pollution norms of the

EU, but this was not set as a goal in the development plan.

202. Oil shale extraction and use also has a significant impact on the resources and quality of ground water and surface water. However, not a single goal or action for their protection has been established in the development plan. Experts have admitted that the area in which the status of ground water is deteriorating will continue to grow if oil shale mining continues. <sup>38</sup> The impact of the closure of mines on ground water resources and quality in unmined areas has not been studied.

203. Although oil shale has been mined and used in Estonia for decades, the state has no overview of the comprehensive impact of the oil shale sector (impact on nature, health and the socioeconomic environment). This is why its impact has not been described in the oil shale development plan. For example, mining has caused a reduction in the value of properties and land, damage to buildings, emigration of people, noise, vibration and dust. The health impact of oil shale must also be mentioned.

204. The aforementioned forms of impact have been studied very little or not at all. Some studies have not yet been completed and will not be completed before the planned adoption of the new development plans in 2015. For example, the study of the health impact of the oil shale industry is expected to be completed in 2016. As the comprehensive impact has not been studied, it is impossible to prepare better development plans, and taking new oil shale resources into use is unreasonable.

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<sup>&</sup>lt;sup>38</sup> Analysis of the data required for the preparation of the National Development Plan for Oil Shale Use 2016-2030. Steiger Engineering LLC, the Stockholm Environment Institute, AS Mayes and OÜ Baltic Energy Partners, 2012.

#### Read more

The National Audit Office's audit 'Actions of the State in Directing the Use of Oil Shale', 2014.

#### Did you know that...

the purpose of the environmental charges is to motivate companies to prevent or reduce potential damage related to the use of natural resources, emission of pollutants into the environment and disposal of waste.

Subsection 4 (1) of Environmental Charges Act

External costs – the damage caused to people, the artificial environment and ecosystems, and the risks that are partly or fully not borne by those who cause them, but by the people living in the area of their impact or by society as a whole, including the next generations.

#### Did you know that...

the status of three groundwater bodies in Ida-Viru County is already bad a result of the oil shale industry's activities:

- the groundwater body of the Ordovician Ida-Viru oil shale basin,
- the Ordovician Ida-Viru groundwater body; and
- the Quaternary Vasavere groundwater body.

Source: Assessment of the Status of Groundwater Bodies. Stage I. OÜ Hartal Projekt, August 2014.

#### Taxation of the use of oil shale has become outdated

205. In the oil shale audit completed in 2014, the National Audit Office pointed out that the environmental charges on oil shale do not serve their purpose and that the state is currently not receiving fair revenue from the mining and use of oil shale.

206. The rates of the environmental charges established in the 1990s depended on the unstable transition economy, when companies were in a difficult situation. This is why very small rates were introduced at first – they were agreed on by way of negotiations and have been gradually increased over time. Environmental charges should motivate companies to reduce environmental impact and are also the tool via which possible damage associated with extraction and production, i.e. external costs, can be included in the production price.

207. Neither the quantity of pollutants generated by production nor the environmental impact related to the use of mineral resources have decreased as a result of the implementation of the current environmental charge system (see also points 199-202). Since the present rates of environmental charges have failed to motivate companies to reduce environmental impact sufficiently, both the National Audit Office and Praxis have recommended a thorough review of the environmental charge system. 39

208. The Ministry of the Environment must submit the Draft Environmental Charges Act with proposed rates for 2016-2020 to the government by the end of 2014. The Ministry claims that they have considered the results of various analyses commissioned for this purpose in the calculation of the environmental charges. <sup>40</sup> The annual increase in the environmental charges of the oil sector suggested for the new period is 3-10%. For example, the suggested annual increase in the charge is 3% for disposal of fly ash and semi-coke and for pumping out mining water, 2% for depositing mine waste and 5% for oil shale extraction rights. <sup>41</sup>

209. The ministry made its suggestions on charge rates largely based on the present situation, where oil shale is predominantly used for electricity generation. The fact that oil shale is increasingly used for oil production is not taken into account. For example, the ministry has decided not to differentiate between extraction charges according to the purpose for which the mineral resource is used. This means that the suggestion does not consider the possible revenue the state would receive when oil shale is used for oil production.

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<sup>&</sup>lt;sup>39</sup>Actions of the state in directing the use of oil shale. Audit Report of the National Audit Office, 2014; Analysis of Environmental Expenditure. Praxis Centre for Policy Studies, 2012.

<sup>&</sup>lt;sup>40</sup> Analysis of the Impact of the Act for Amendment of the Environmental Charges Act. Praxis Centre for Policy Studies, 2014; Impact Analysis of Environmental Charges. Stockholm Environment Institute and Centre for Applied Social Sciences of the University of Tartu, 2013; Analysis of Environmental Expenditure. Praxis Centre for Policy Studies, 2012.

<sup>&</sup>lt;sup>41</sup> Principles and purpose of changing environmental charges, main changes. Ministry of the Environment, 2014. See

 $http://www.envir.ee/sites/default/files/esitlus\_keskonnaministeerim\_polevkivi\_2309201~4.pdf.$ 

210. The National Audit Office is of the opinion that when establishing the extraction charge for the next five years, the Ministry of the Environment has failed to consider the fact that oil production is considerably more profitable and the impact of increases in environmental charges do not have a great deal of impact therein.

211. It was admitted in both the National Audit Office's audit and in the analysis prepared by the Competition Board that the profitability of oil production is considerably higher compared to electricity generation and extraction, so oil producers could pay more for oil shale or their products. For example, the ratio of environmental taxes and other taxes is in favour of oil producers and against companies that extract the resources, i.e. the biggest tax burden lies with the mining company Eesti Energia Kaevanduste AS. When the Ministry of Finance analysed the possible establishment of a royalty in 2013, the government postponed the topic until 2016.

Royalty — a certain percentage of tax established by the state on the company's output that may be related to the quantity of the output sold or sales revenue.

- 212. The National Audit Office is of the opinion that the changes occurring within the sector must be considered when the oil shale sector is taxed, and attention must also be paid to the other national taxes that influence investment decisions in the oil shale industry (labour tax, income tax and excise duty). At present, the state does not receive fair revenue for the use of a mineral resource of national importance; nor has this been analysed in the preparation of new development plans.
- 213. Observation of present developments suggests it is improbable that the state will be able to create a better oil shale development plan by 2015. The National Audit Office is of the opinion that the Ministry has not carried out important fundamental research or analyses before the adoption of the new development plans that direct the use of oil shale despite the fact that they would guarantee the reasonable use of oil shale resources and the receipt of fair revenue for such use.
- **214.** Therefore, there is no reason to presume that at present the state knows better
  - what the comprehensive environmental impact of the oil shale sector is like:
  - what the reasonable quantities of extracting oil shale would be, considering total impact;
  - what the impact of oil shale use is on the economic indicators of companies in the oil shale sector and on society as a whole.
- 215. In order to improve the situation, the National Audit Office advises
  - ascertaining the comprehensive impact of oil shale mining and use (incl. health, environmental and socioeconomic impact) and the circumstances that influence energy independence. Without knowing this impact, it is impossible to assess how great the reasonable annual extraction quantity would be and how great the negative impact is that society is prepared to tolerate;
  - ascertaining the damage and expenses society must sustain in relation to oil shale extraction and use. The results would make it possible to assess whether the environmental charge rates

Impact on the living environment is regarded as **socioeconomic impact**in the oil shale sector: the impact on local development, economic subsistence (employment and income), infrastructure and property, and demographic development.

- established on oil shale extraction and use are justified and the extent to which they should be changed;
- developing new principles for taxing the oil shale sector and the bases of taxes for the receipt of royalties on the use of oil shale before the new energy sector development plan and the new oil shale development plan are adopted. The fact that the quantity of shale oil produced will be considerably larger by 2016 should be taken into account.

216. All in all, the changes made in the energy and oil shale sector must be conceptual and substantive so that Estonia actually moves towards the development of an economic sector that generates less environmental pollution and values resources, and is more energy-efficient. The state should already be thinking about reforming the economic structure of Ida-Viru County in full in order to find new economic sectors that offer employment in the region. The National Audit Office therefore advises not rushing the adoption of the aforementioned development plans and environmental charge rates, but carrying out detailed analyses before any decisions concerning the use of a mineral resource of national importance are made.

## State's ICT — the accessibility of the state's data and the security of information systems must be improved

217. The contribution of the information and communication technology (ICT) sector to the GDP of Estonia is remarkable compared to other European countries. Comparing the data of the previous decade indicates that the share of the Estonian ICT sector in GDP is comparable to that of the largest in Europe – only Finland's indicator is considerably better than those of others (see Figure 12). The average share of ICT in GDP is 4.8% in Estonia, which is considerably better than the similar indicator of our closest neighbours Latvia (3.5%) and Lithuania (2.7%).

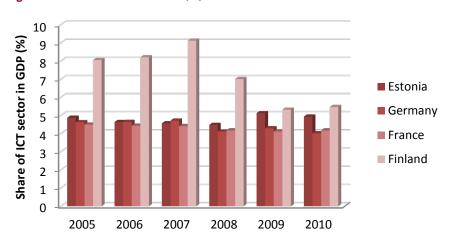


Figure 12. Share of ICT sector in GDP (%)<sup>42</sup>

Source: Eurostat

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 $<sup>^{\</sup>rm 42}$  Eurostat has not published any data about the share of the IT sector in GDP since 2010.

# 219 million euros will be invested in the state's ICT from 2014-2020

218. In Estonia, ICT has been developed and made more efficient using both taxpayers' money and the support received from the European Union. The amount of European Union support used for the development of the Estonian information society from 2007-2013 totalled *ca* 62.6 million euros. The amount allocated for the development of the information society from 2014-2020 in the new information society development plan is *ca* 219 million euros.

#### Use of collected data is difficult in Estonia

219. In order to direct the development of the information society, the Ministry of Economic Affairs and Communications has developed an information society development plan. Its main purpose is to guarantee an environment in Estonia that makes it possible to use ICT and create smart solutions, and allowing for better accessibility and safe use of such data is one of the tools with which to achieve the goal highlighted in the plan.

**220.** Allowing for better accessibility of the state's data or the distribution of open data makes it possible to enliven the economy, make governance more transparent and increase the involvement of the third sector, e.g. via the creation of innovative products and services. The European Commission has advertised increasing the accessibility of data as the new gold. <sup>43</sup>

**221.** According to a study commissioned by the European Union the data re-use market in 27 EU states is increasing by at least 7% per year and the direct and indirect impact of data re-use is an estimated 140 billion euros per year.<sup>44</sup>

**222.** Estonia is modest in making data collected by the state accessible. Open data is mostly not shared or re-used. In terms of the accessibility, use and socioeconomic impact of open data, Estonia ranks 14<sup>th</sup> among the 77 countries studied (see Figure 13, showing the top 19). 45

223. However, there is no detailed overview of open data or their content in Estonia. Open data themselves have been spread across different information systems and they are often not in a format that favours reuse. 46 For example, the data currently accessible to the public are the data from the public transport register of the Estonian Road Administration, the government cloud that contains data of local authorities and public finance data.

**Open data** means the data collected by the government sector that are freely and publicly accessible to everyone.

For example, the state collects statistical, spatial, economic and environmental data, archive materials, books and art collections.

**Re-use of data** means that data initially collected by the state for one purpose is made accessible and usable to the public.

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<sup>&</sup>lt;sup>43</sup> Neelie Kroes: "Data is the new gold", 12 December 2011. See <a href="http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/11/872&format=HTML&aged=0&language=EN&guiLanguage=en">http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/11/872&format=HTML&aged=0&language=EN&guiLanguage=en</a>.

<sup>&</sup>lt;sup>44</sup> Graham Vickery. Review of recent studies on PSI re-use and related market developments. Information Economics, Paris, 2011. See <a href="http://ec.europa.eu/information\_society/newsroom/cf/document.cfm?doc\_id=1093">http://ec.europa.eu/information\_society/newsroom/cf/document.cfm?doc\_id=1093</a>.

<sup>&</sup>lt;sup>45</sup> Open Data Barometer. 2013 Global Report. Open Data Institute and World Wide Web Foundation, 2013. See <a href="http://www.opendataresearch.org/dl/odb2013/Open-Data-Barometer-2013-Global-Report.pdf">http://www.opendataresearch.org/dl/odb2013/Open-Data-Barometer-2013-Global-Report.pdf</a>.

<sup>&</sup>lt;sup>46</sup> Estonian Green Paper on Machine-Readable Publication of Open Data. Information Systems Department of the Ministry of Economic Affairs and Communications, 2014. See <a href="http://www.riso.ee/et/avaandmete-roheline-raamat">http://www.riso.ee/et/avaandmete-roheline-raamat</a>.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Canada France Japan Iceland Estonia inland **Jnited States** Sweden Australia Sermany The Netherlands South Korea **New Zealand** Norway Jenmark

Figure 13. Accessibility of data by state in 2013

Source: Open Data Barometer. 2013 Global Report.

**224.** The European open data concept was adopted prior to Estonia's accession to the EU. When Estonia joined the EU it assumed the obligation to harmonise national law with the directive on the re-use of public sector information<sup>47</sup>. The requirements of this directive were included in the Public Information Act only in 2012, when the European Commission launched breach proceedings.

225. Pursuant to the Public Information Act, access to data must be guaranteed by 1 January 2015. One of the premises of making data accessible to the public is that data must be converted to a machine-readable format. Also, the Public Information Act obligates the holders of information to guarantee free access to data.

226. Due to the fact that the state needs to perform the obligations set forth in the Public Information Act, the Ministry of Economic Affairs and Communications prepared the Estonian Green Paper on Machine-Readable Publication of Open Data, which the Government of the Republic is expected to approve in 2014.

227. The purpose of the green paper is to provide guidelines for making public sector data accessible. The biggest drawbacks of the green paper are that its implementation is voluntary and there are no clear guidelines on how agencies should make data accessible to the public. A portal for publication of data or the open data portal <a href="http://opendata.riik.ee/has">http://opendata.riik.ee/has</a> also been created, but agencies have not started using it.

228. An action plan for making data accessible comes with the Estonian Green Paper on Machine-Readable Publication of Open Data, but the deadlines set in the plan have been partly postponed even though the green paper has not yet even been approved. All of the actions listed in the action plan should be completed by the end of 2014 in order to

perform the requirements set in the Public Information Act properly.

Machine-readability means that digital information is sufficiently structured so that software can reliably identify single factual statements and their inner structure.

Agencies have an obligation, but it is not clear how it must be performed

<sup>&</sup>lt;sup>47</sup> Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2013 on the re-use of public sector information. See <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0098:ET:HTML">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0098:ET:HTML</a>.

## The area of open data requires specific actions

Actually, the plan is to complete the actions gradually and only by the end of 2018.

- 229. The steps taken so far have been necessary for the formal performance of the requirements in the Public Information Act, but the system for giving data into public use must be developed in full to achieve the benefits that should arise from making data accessible to the public. At present there is the threat that agencies will publish electronic extracts from their registers for the purpose of formal performance of the requirements when the deadline set by law (1 January 2015) arrives. At the same time, it is unclear how data will be regularly updated and kept up to date, and how new services will be created on the basis of the data. Data security also needs to be resolved.
- 230. The Public Information Act makes the holders of information responsible for publishing and updating data. However, it is unlikely that the holders of information are interested in publishing open data and keeping it up to date, as this is merely an obligation for them. Those who benefit from access to data are primarily those who manage to create added value using such data.
- 231. It is possible to apply for money from the EU for the development of the open data concept. The volume of the relevant call for proposals in 2014 was 100,000 euros. There were only eight applicants, which shows that agencies who hold information have no interest in dealing with this topic. At the same time, the circle of agencies to which the obligation to publish data extends is large: ministries and their agencies, constitutional institutions, courts, municipal and city governments, public legal entities and others.
- 232. Money has also been allocated from the next period of EU support to make public sector data accessible. The Information Society Development Plan 2020 contains the measure Use of ICT for Promotion of Involvement and Participation to which 1.6 million euros has been allocated for the period from 2014-2017 (400,000 euros per year). The plan is to use this money to support pilot projects in the creation of services on the basis of data made accessible to the public, training and making data available in machine-readable format. Basically, support is also granted to actions that should have been completed by 1 January 2015.
- 233. If the government wants to continue presenting Estonia as an estate, promoting innovation, increasing the transparency of governance and thereby activating the third sector, it must take a stronger position in order to improve the accessibility of data and accelerate their introduction.
- 234. A good example of this is the United Kingdom<sup>48</sup>, where several steps have been taken by the government and the prime minister. For example, an overview of the state's data has been published in the United Kingdom in order to popularise the topic of open data; an open data fund has been created to support the data publication initiatives of

<sup>&</sup>lt;sup>48</sup> Cross-government review – Implementing transparency. National Audit Office, 2012. See http://www.nao.org.uk/wp-content/uploads/2012/04/10121833.pdf.

government and local agencies; and data of various areas are constantly published.

#### It is not known whether information systems are secure

235. As data is made accessible to the public, the state must guarantee that the data in information systems is protected. If we want information systems to constantly be able to satisfy the needs of its users, we must guarantee that the systems are secure and functional, and that up-to-date and correct data is accessible only to authorised persons.

236. Estonia stands out positively among other European countries for the information security rules it has established to guarantee said requirements in the state's information systems, i.e. the three-level baseline security system ISKE. Implementation of the ISKE rules guarantees that the data held in the state's information systems are correct, accessible and protected.

237. Many state agencies and information systems have failed to adhere to the required security rules to date. According to the administration system for the state information system RIHA, only 59% of obligated information systems comply with the information security rules established by the state, and the implementation of rules has only been audited to the extent of one-fifth (see Figure 14).

238. However, failure to implement the information system does not necessarily mean that there is no information security at all in the information system. This does, however, demonstrate clearly that the state has no assurance of whether the daily functioning of information systems is secure or whether the data held in the information systems are correct and relevant.

Considering the state's information security requirements has not yet become a rule

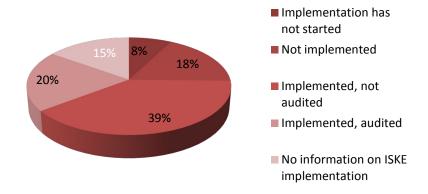
ISKE - the IT Baseline Security System created to guarantee the security of the

information in the state's information

systems.

RIHA (administration system for the state information system) – the database that provides an overview of the information systems and databases that exist in the state and of the services they offer.

Figure 14. Implementation of information security rules in the state's information systems as of 17 September 2014



Source: Administration system for the state information system (RIHA).

The plan was to implement the security rules by March 2011 **239.** The introduction of information security rules in the state's information systems was made compulsory with a regulation of the government<sup>49</sup>. Ordering regular independent audits of the

 $<sup>^{\</sup>rm 49}$  Regulation no. 252 of the government of the Republic of 20 December 2007 System of Security Measures of Information Systems.

implementation of security measures also became compulsory. According to the regulation of the government, the rules of information security were to be implemented by the end of 2008, and depending on the security level of the information system (high, medium or low) they had to be audited for the first time by 1 March 2011.

**240.** Although state agencies must generally cover the costs of the implementation of information security rules and the relevant audits from their own budgets, EU support was also distributed for this purpose from 2008-2012. For example, 1.9 million euros was allocated for the implementation of ISKE in the state's information systems in 2008, and local authorities received *ca* 300,000 euros for this purpose in 2012.

241. Despite this, information security rules have still not been fully implemented and audited in all information systems of the state. For example, the implementation of ISKE has not been finalised in key information systems like the e-State Treasury, the database of the Financial Intelligence Unit, the database of identity documents and the Riigikogu voting system.

242. The National Audit Office analysed the<sup>50</sup> implementation of information security rules in several earlier audits. There are many reasons why state agencies have failed to complete the implementation of ISKE in all of their information systems. The main reason given in responses to the audits of the National Audit Office is a lack of money, especially in a situation where the level of security is higher and the cost of implementation is therefore large. Respondents have also said that the implementation of ISKE is not practical at a time when the agency or information systems are being reorganised.

243. Another reason why the implementation of information security rules has slowed down is the fact that the Information System Authority (RIA) has no enforcement mechanism which it could use to speed up the process, e.g. a right of sanction arising from law.

244. Obtaining an overview of the implementation of information security requirements in the state's information systems is difficult because the administration system for the state's information systems, i.e. RIHA, does not provide accurate and up-to-date information about all of the information systems, incl. about the implementation of information security rules in them. Firstly, not all of the state's information systems have been described in the administration system. Also, the information concerning the implementation of ISKE is missing for several information systems contained in the administration system (15% of information systems according to RIHA, see also Figure 14).

245. Secondly, the administration system for the state's information systems does not make it possible to determine when the last information security audit of a certain information system was carried out or whether it was even done. ISKE audits must be carried out at

#### Did you know that...

the 2013 audit 'Maintenance and development of information systems in area of government of Ministry of the Environment' revealed that ISKE had not been fully implemented or audited in several information systems that contain important data and services (e.g. the environmental register, the Estonian nature information system and the information system of environmental permits).

The administration system for the state information systems does not give a good overview of the implementation of information security rules

<sup>&</sup>lt;sup>50</sup> For example, the 2010 audit "Results of the development of the state's information systems";

<sup>2012</sup> audit "Use of European Union funds in promoting information society".

specific intervals: the security of information systems at the high security level must be audited every two years, medium-level ones every three years and low-level ones once every four years. Incidentally, the implementation of security information rules in the administration system for the state's information systems itself has not been audited yet either.

246. In a situation where the implementation of the new information society development plan has not gained any momentum, it is possible to deal with the aforementioned two major challenges faced by the state's ICT: improvement of the accessibility of open data; and implementation and auditing of information security rules.

247. In order to give the economy a boost, increase the transparency of governance, adopt smart resolutions, improve the inclusion of the third sector and promote innovation by making public sector data accessible, the state should

- appoint an agency to coordinate the disclosure of the state's data:
- develop an action plan for data holders regarding the publication of data and make the publication of data and the updating of open data compulsory;
- increase public awareness of the options there will be when the data collected by the state is made accessible.

248. The implementation of information security rules is one of the most important steps in improving the reliability, quality and sustainability of the state's ICT. As the national information security system has not been fully implemented, the state should

- set a new deadline by which information security requirements must be implemented and audited in all of the information systems of the state. If the information systems do not meet the requirement by this deadline, their use should be suspended by the state:
- determine, with the information society development plan, how much the full implementation of the information security rules will cost and which sources this money will be obtained from (state budget or EU support).

#### **Local government and regional development – there are** no alternatives to local government reform

249. There were 215 municipalities, towns and cities in Estonia at the beginning of 2014. Five years ago there were 12 more: 227. Calculation of the administrative capacity index of local government<sup>51</sup> has clearly revealed that the capacity of local authorities depends largely on the number of residents. Based on this, at least 5000 people should live in a

<sup>&</sup>lt;sup>51</sup> Local government capacity index. Geomedia Consulting and Training Centre. See https://www.siseministeerium.ee/haldussuutlikkus/.

municipality, town or city in Estonian conditions to ensure that it can function reasonably. 52

**250.** At the beginning of 2014, 173 of Estonia's 215 municipalities, towns and cities had a population of less than 5000. In other words, 80% of Estonian municipalities, towns and cities were smaller than necessary for their reasonable functioning. Irrespective of the decrease in the number of local authorities as a result of the few mergers that have occurred in the last five years, the share of local authorities with fewer than 5000 residents has not decreased – it has remained the same.

251. Irrespective of its size, each local authority must cope with the provision of social welfare and services, child protection, youth work, water supply and sewerage, territorial planning, land readjustment, maintenance of roads and streets, organisation of public transport, provision of public services and amenities, waste management, maintenance of the local government's schools, kindergartens, hobby schools, community cultural centres, libraries, social centres and so on. The money for this comes primarily from the income tax paid by residents.

**252.** A comparison of the money at the disposal of the state and local authorities indicates that the ratio of the local government budget to the state budget has been characterised by a decrease in the last five years. In 2009, the expenditure of local authorities comprised 24% compared to state budget expenditure, but the same indicator had dropped to just 20% in 2013.

## Development of the Local Commuting Centres of Estonia reform plan also vielded positive results

**253.** Yet another plan of the Regional Minister to achieve a decision on the implementation of a local government reform failed. The objective of the reform plan was to have local government units whose borders coincide with the areas where people conduct their daily lives, which would lead to the more equal treatment of people irrespective of where they live. The number of local authorities would have then bordered on 50-60.

#### The reform plan Local Commuting Centres of Estonia was discarded

254. By the beginning of 2014 it was clear that the Government of the Republic would not give its support to the reform plan that had been developed since 2012, but work on the plan continued until spring when the government changed. The new government decided not to proceed with the reform plan. The Pro Patria and Res Publica Union fraction of the Riigikogu then submitted the same draft to the Riigikogu itself (647SE).

**255.** Although the process of the local government reform was interrupted, primarily due to the lack of political agreements, the process also had some positive impact that can be highlighted:

 $<sup>^{52}</sup>$  Explanatory memorandum to the Draft Local Government Organisation Reform Act, p 19. See

https://www.siseministeerium.ee/public/Omavalitsuskorralduse\_reformi\_seadus\_seletus\_kiri\_20.01.2014.pdf.

#### Did you know that...

surveys have indicated that if we discard the *ca* one quarter of Estonians who had no opinion on local government reform, 71% of people supported the reform as at the end of March 2014.

Source: Ministry of the Interior, blog on the reform of local government organisation

#### Did you know that...

ruling 3-4-8-09, made by the Supreme Court en banc on 16 March 2010, declared that it contravenes the Constitution that the state has failed to issue legislative acts which would

stipulate which functions assigned to local authorities by law are self-governing and which are public;

acts which distinguish the money granted to local government units for the resolution and organisation of local issues from money meant for the performance of public functions and which stipulate that the public functions assigned to local government units are financed from the state budget.

- The development of the reform plan led to a broader discussion on topics related to local authorities in society and increased society's readiness and desire for change. Public opinion polls indicated that support for the local government reform had increased. The survey commissioned by the Ministry of the Interior in spring 2014 indicated that a little over half of Estonian people supported the local government reform, and the share of supporters increased to 70% among those who had a certain opinion of the reform.
- As the Government of the Republic rejected the reform plan, one of the reasons it gave (in its opinion on 647SE) was that the draft would not make it possible to resolve the serious problems highlighted by the Supreme Court: the public functions performed by local authorities cannot be distinguished from self-governing ones and it is not known how much money local authorities need for their performance.

The Government of the Republic thereby admitted that the ruling made by the Supreme Court on 16 March 2010, which declared that such a situation contravenes the Constitution, has still not been acted upon. Since 2010, the National Audit Office has repeatedly pointed out to the Riigikogu in its annual reports that the ruling of the Supreme Court must be acted upon, but to date the government has claimed that the ruling has already been acted upon.

Although the draft submitted to the Riigikogu for processing did not find support, both government partners confirmed during its processing that local government reform is unavoidable. It was also confirmed that considering the need to harmonise the level of services, the guaranteeing of people's fundamental rights and the cooperation between local authorities, the local government reform should contain levers with which the state could enforce its intent.

## The functions and financing of local authorities are also discussed during the preparation of the local government reform

256. The action programme of the Government of the Republic states that the plan of the local government reform must be developed by 2015. Its goal is to determine the functions performed by the state and local authorities, and how these functions are financed. The Minister of Finance and the Minister of the Interior have been assigned the task of submitting a local government reform plan that contains the relevant proposals by the end of 2014. The new procedure of the local government reform act can then be launched.

257. The new reform plan is unlikely to offer any solutions that have not already been discussed for a number years. Finding a balance between the functions assigned to local authorities and their capacity to perform them remains the main issue.

**258.** Whether local authorities would cope better and would be able to improve the quality of the provision of necessary public services if they were bigger (e.g. had at least 5000 residents) or if they had to offer these

services in close cooperation remains open for discussion. However, it is clear that local authorities cannot be strengthened without reorganising them, and without this it is also impossible to find a solution that would guarantee that the functions currently assigned to local authorities were performed to a reasonable level.

**259.** The National Audit Office is of the opinion that the following must be kept in mind when solutions are offered during the preparation of the reform plan:

- Local authorities must be strong partners to the state after the reform. Cutting the number of functions currently assigned to local authorities may solve the coping problems of most existing local authorities, but weak local authorities are not in people's interests. Also, such a division of functions would limit the opportunities of communities to decide on issues of local life and the state itself would have to find the money and the people required for the performance of these functions.
- Decision-making within communities must be given all possible support. However, community identity is often not connected with the borders of municipalities, but with smaller areas or villages. Villages should be given better opportunities to have a say in decision-making or to make decisions themselves in order to promote discussion and decisions at the community level.
- Developing cooperation between local authorities and considering the interests of people is also essential beyond municipal borders: even if there were at least 5000 people living in all local government units, quality performance of a number of functions would still be impossible or unreasonable for local authorities without mutual cooperation. There are positive examples of such cooperation in the areas of waste management and public transport, i.e. areas that require cooperation at least on the county level.

In many other areas, cooperation between local authorities has been insufficient so far. One of the reasons here is the fact that the organisation of cooperation also requires the existence of a specialist in the local government who knows the area well, but many small local authorities do not have such specialists, and if nothing changes they will not have them in the future either. Current practice has shown that attempts to convince competing local authorities to cooperate have been unsuccessful if they are not prepared to cooperate with one another for political, personal or other reasons.

Local authorities must be interested in influencing the development of enterprise in its territory and the opportunity to do so. Real life shows that instead, even the smallest local governments try to maintain their own schools and kindergartens and build their own stadiums and swimming pools. They do this despite having the possibilities or the skills required for the creation of a favourable business environment

#### Did you know that...

in recent years the Ministry of the Interior has commissioned the following studies and training and consultation services concerning cooperation between local authorities:

- cooperation between the state and local authorities (2011);
- supporting the mergers of local authorities and the preparation of the joint provision of services (2013);
- summaries and interim reports on the project "Implementation of cooperation between local authorities for better performance of local government functions and better and more efficient provision of public services" (2013):
  - organisational framework and possible models of cooperation between local government units,
  - description of services and functions and modelling cooperation areas,
  - joint agency and transfer of a function to another local government unit.

Source: Ministry of the Interior, <u>www.siseministeerium.ee</u>

- that would leave or bring people and jobs to the region, i.e. those who need the education and leisure services.
- The National Audit Office is of the opinion that local government reform is unavoidable and that the longer it is postponed the more difficult it will be to implement. Systematic reorganisation of local authorities must be regarded alongside the level of the state, including the location of public sector jobs, in view of potential reorganisation and optimisation.
- 260. Considering the number of studies of the regional area carried out in earlier and recent years, decisions about local government reform should be made on the basis of them instead of postponing them on the grounds that more studies and analyses need to be conducted. For example, if the new reform plan states that the implementation of better cooperation is important in the performance of local government functions, the numerous works about the cooperation between local authorities that have been commissioned by the Ministry of the Interior (analyses, studies and training, see column on the left) can be used for this.
- 261. A lot of money has already been spent on studies, which is why a lot of thought should be given to whether new ones are needed. For example, at least 126,000 euros has been spent on studies, training and consultation services concerning cooperation between local authorities alone in recent years, and the Ministry of the Interior has at least once been one of the agencies commissioning them. Approximately 172,000 euros has been spent on studies, discussions and process management in relation to the Local Commuting Centres of Estonia.
- **262.** The National Audit Office is not saying that no more studies of the area of local government and regional development are needed, but points out that they must be done in a reasonable manner and that duplicating them or commissioning more and more new studies must be avoided if no agreements are ever reached about decisions.
- **263.** An example of such a danger is the lack of coordination between the work of the Ministry of the Interior and the Ministry of Finance within the scope of a project that has been prepared for a long time and whose results should also be used for the development of the new reform plan.
- 264. Namely, the Ministry of the Interior received support in 2014 for the development of a methodology for assessing the functions and revenue base of local authorities and for determining the capacity of local authorities to perform these functions using this methodology. The work was divided between the Ministry of the Interior and the Ministry of Finance: the task of the Ministry of the Interior is to analyse the functions of local authorities and to support the preparation of voluntary mergers, and the task of the Ministry of Finance is to analyse the connections between functions and finances. The amount of support for all activities related to the project is 320,000 euros.
- 265. As using the support was initially permitted until the end of 2014 and permission has now been extended until March 2015, there is little time for carrying out the activities. The Ministry of Finance could

therefore not wait until the Ministry of the Interior completed the overview of the functions of local authorities, but started preparing its own overview of functions in order to analyse the connections with finances.

**266.** The National Audit Office recognises the danger that in addition to the duplication of work in the preparation of an overview of the functions of local authorities, the results obtained may be inaccurate despite the cooperation between the two ministries This means that there is no certainty when it comes to the functions clarified by the Ministry of the Interior that the cost of the functions calculated by the Ministry of Finance covers the content that coincides with the function defined by the Ministry of the Interior.

267. All in all, what matters is the result – the work of the Ministry of the Interior and the Ministry of Finance should make it possible for the Government of the Republic to develop the plan of local government reform by the end of 2014, and on the basis of this to launch the draft for the implementation of the reform. The completion of the promised reform plan is doubtful if the work of the two ministries does not connect.

#### 268. The National Audit Office is of the opinion that

- local government reform must be carried out as quickly as possible and that the reform can be considered successful if it makes local authorities stronger. In other words, it is necessary to find a solution in addition to the provision of quality services that would actually turn local authorities into partners of the central government that can balance it;
- the local government reform must be substantive. All functions must be reviewed in the course of the reform and it must be clearly determined which of them are public and which self-governing. Functions whose performance at the local level would be practical and reasonable must be left to the local authorities to perform. A solution that could be considered is that more capable local authorities could perform more public functions:
- sufficient funds should be guaranteed to local authorities for the performance of their functions. The system for financing self-governing functions must be clear and understandable. Local authorities should actually be able to influence their revenue with local taxes. A preferred solution would be one where the money received by local authorities via the state would not come from different fragmented sources (e.g. support loosely connected to the objectives) but would provide the local authority with more even income and the option to spend it according to its needs. The money necessary for the performance of public functions must be clearly distinguishable by function and cover all of the expenses of the local authorities incurred in the performance of the function (incl. management and capital costs);

- objective, reliable and functioning internal controls must be established in local authorities. The extent to which local authorities can make their own decisions must be in balance with the obligation to give people all of the information about the background to such decisions so that their reasonability can be assessed;
- it must be clear how a local authority is held responsible if it performs its functions selectively or does not perform some functions at all.