



SMART TAX ADMINISTRATION SYSTEM

17 September 2019

No. VA-6

SUMMARY

Relevance of the Audit

Rapidly evolving information technologies and the computerisation of business processes lead to changes that penetrate the tax administration process. In order to combat the shadow economy more effectively, many countries started to implement initiatives where business monitoring, advice and provision of other services in smart ways are taking place in real time¹.

In 2014, Lithuania took the initiative to develop a smart tax administration system (iMAS). The Smart Tax Administration feasibility study² sets out the following objectives:

- reducing the shadow economy and increasing tax revenues;
- improving the efficiency of tax administration;
- reducing the administrative burden for taxpayers.

The smart tax administration project is of great importance to Lithuania because it can serve as a tool in the fight against the shadow economy. The shadow economy has a negative impact on the tax revenues of the state and includes illegal activities where tax obligations may be avoided or other illegal tax benefits may be obtained³. The size of the shadow economy in Lithuania is high: based on the data of the 2019 survey carried out by the company “Spinter Surveys”, it amounted to 23.9 % of GDP in 2018⁴. Tackling the shadow economy is one of the priority areas for the government activity, whereas reduction of the

¹ Internet access:

[https://www.ey.com/Publication/vwLUAssets/ey-the-tax-authority-of-the-future/\\$File/ey-the-tax-authority-of-the-future.pdf](https://www.ey.com/Publication/vwLUAssets/ey-the-tax-authority-of-the-future/$File/ey-the-tax-authority-of-the-future.pdf).

² Smart Tax Administration Feasibility Study, 17-11-2014.

³ Office of the Government. The shadow economy. Changes over the decade, 2016.

⁴ Study commissioned by the State Tax Inspectorate entitled “Assessment of the level of taxpayers’ awareness and the shadow economy”, 2019.

shadow economy is one of the main objectives of this system, therefore the proper implementation of this objective could have a significant economic impact on the state.

According to the information reported in the European Commission 2019 VAT Gap Report⁵, the VAT gap in Lithuania was 25% in 2015-2017. (In 2017, EUR 1.119 million VAT was not collected to the budget). Out of the 28 EU countries, we are among those having the biggest VAT gap and occupy the 26th place. Information on the business operators' current business operations (VAT invoice registers, shipping bills, cash registers, etc.) obtained through the smart tax administration and other sources, collated and processed, can contribute to a more efficient assessment of the risks of the shadow economy, analysis taxpayers' behaviour, prompter identification of irregularities and response to them.

I.MAS makes the tax administration process more efficient and effective by making it even more digitised and standardised. The availability of the operational taxpayers' information and the use of technological tools provide the tax administration with the possibility to conduct regular controls on taxpayers and ensure the prevention of tax irregularities in a timely manner.

In the framework of the smart tax administration project it is also decided to develop voluntary e-services for taxpayers, which should reduce the administrative burden. Modern smart tax administration offers considerable opportunities for tax administrators as well – it enables tax authorities to control taxpayers more effectively, however these changes increase the administrative burden on business, the adaptation of existing systems and the continuous availability of data calls for additional costs. The OECD⁶ and the EC⁷ therefore point out the need for a responsible cost/benefit analysis in order to minimise the administrative burden on taxpayers resulting from the implementation of tax obligations.

Development of the smart tax administration system involves also information security risks: the collection of detailed information on business activities includes certain aspects of business secrets of companies. The Law on Tax Administration⁸ provides that information on the taxpayer submitted to the tax authorities is to be kept confidential, therefore it is important to ensure sufficient protection of taxpayers' data.

The smart tax administration has been created by implementing individual projects according to subsystems. It consists of seven subsystems, of which three are already in place. In 2021, it is planned to complete the entire smart tax administration system project. In order to ensure that the tax administration system will function effectively at the end of the project, it has been decided to perform an audit of the system to assess whether the solutions developed/under development by the smart tax administration system will ensure that the set objectives are achieved, and whether the safety of taxpayers' data is ensured.

⁵ Internet access: https://ec.europa.eu/taxation_customs/sites/taxation/files/vat-gap-full-report-2019_en.pdf.

⁶ Internet access: https://read.oecd-ilibrary.org/taxation/increasing-the-use-of-self-service-channels-by-taxpayers_9789264223288-en#page.

⁷ European Commission Report "VAT listings – implementation in EU Member States", 2017.

⁸ Law on Tax Administration, Article 38(1)

Audit Objective and Scope

The objective of the audit is to assess whether the solutions developed/under development will ensure that the objectives of iMAS are achieved.

The main questions of the audit are:

- whether voluntary e-services developed/under development in the framework of the iMAS create the preconditions for reducing the administrative burden for taxpayers;
- whether the models developed in the framework of the iMAS project will make it possible to contribute to reducing the shadow economy and increasing tax revenues as well as improving the efficiency of tax administration;
- whether the safety of information on taxpayers and their activities is ensured.

The audited entities include the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania, iMAS manager and the main processor⁹; Ministry of Finance, shaping public policy in the field of public finances, controlling and coordinating the activities of central tax authorities, organizing the development of information systems for the management of the monetary resources of the State¹⁰.

The period covered by the audit - 2014-2018. In order to assess the developments and compare data, in some cases information was used which was obtained before 31 June 2019.

The i.MAS is composed of 7 subsystems, out of which i.SAF, i.VAZ, i.EKA, i.APS are meant for the collection of information of the current tax payers' transactions (VAT invoices, shipping bills, cash registers, etc.) and the provision of voluntary e-services, i.KON, i.MAMC are meant for analysing and monitoring data collected for the purpose of carrying out the analysis and control activities, and i.SAF-T is meant for the collection of information, e-services, data analysis and control activities. Since the i.MAS is under development, the audit did not assess the solutions that were not introduced during the audited period and solutions being introduced at the end of the audit ((i.EKA, i.APS, i.KON, i.SAF-T). The audit did not assess the i.MAMC, macro and behavioural objectives.

The assessment of ensuring the tax payer data protection did not include the assessment of the compliance with the requirements of the General Data Protection Regulation¹¹.

The audit was carried out in accordance with the Public Auditing Requirements of the National Audit Office and International Standards of Supreme Audit Institutions. The scope of the audit and the methods applied are described in greater detail in Annex 2 – "Audit Scope and Methods" (page 51).

⁹ Order No V-30 of 28 April 2015 of the Head of the State Tax Inspectorate approving the Regulations of the Smart Tax Administration System.

¹⁰ Government Resolution No. 1088 of 08 September 1998 approving the Regulations of the Ministry of Finance, paras. 7.1, 8.1.8, 8.1.15.

¹¹ 27-04-2016 European Parliament and Council Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

Annex 3 of the Report (page 55) provides a separate opinion of the auditee, explaining certain situations, but, in the auditors' opinion, has no impact on the audit results.

Main Audit Findings

The importance of the implemented iMAS project is evident: the project is based on the current topical and progressive national practices using advanced tax administration technologies and data analytics for the purposes of combating the shadow economy. Taxpayers already use the e-services developed, a data analytics centre is in place to handle part of the identified data modelling and analysis tasks. However, due to the weaknesses in the implementation of the iMAS project, some of the objectives of the iMAS may not be reached in full after completion of the project.

1. The solutions developed in the framework of the smart tax administration system provide preconditions for reduction of the administrative burden on business, however this impact has not been realised yet.

The benefits of reducing the administrative burden for taxpayers that were expected to arise from the provision of voluntary e-services within the i.SAF and i.VAZ have not been achieved and the actual annual cost to taxpayers is higher than it was planned. The introduction of these solutions did not reduce the administrative burden for business. The insufficient benefits and maturity of progress of voluntary e-services do not encourage taxpayers to use them.

The incomplete analysis of the needs of businesses carried out at the initiation (idea) of e-services did not give a detailed account of the real importance of e-services and taxpayers' needs. User activity can further decrease in the future as currently there is no assessment of the suitability of the e-services developed for taxpayers and e-services are not further improved on the basis of such an assessment (Section 1, page 14).

2. Smart tax administration offers opportunities to improve tax administration, but the potential of data analytics has not yet been fully exploited at national level in order to reduce the shadow economy.

I.MAMC project has made it possible to change over from traditional risk assessment and sampling methods and to move towards smart data analytics offering a greater potential in the fight against the shadow economy. However, when planning the project activities, there was no sufficient focus on the strategic preparation of the changes, which led to a lack of data and human resources management in the introduction of analytical models that caused the failure to implement the full scale of the planned work.

The development and application of analytical models already makes it possible to identify more precisely the status of the VAT gap in the country, to show more risky business segments. This allows the STI to perform administrative work more effectively. However, the objectives of the iMAMC does not include reducing the size of the shadow economy at country level, therefore we believe that the potential of data analytics is not fully exploited in the fight against the shadow economy, and the contribution of this tool to the reduction of the shadow economy is limited.

The possibilities to redesign the risk assessment and sampling procedures applied by the STI by transforming them into advanced data analytics activities have not been sufficiently exploited. A large share of risk analysis and sampling operations at the STI are still performed in the framework of the expert techniques (Section 2.1, page 26).

There is no monitoring system to assess how much i.MAS project and the analytical models developed contribute to reducing the shadow economy and increasing tax revenues (Sub-section 2.2, page 34 and Sub-section 2.3, page 37).

3. A system designed to ensure the safety of taxpayers' data, but some controls are not effective enough

The existing legal regulation in the STI does not explicitly regulate the procedure for the legal entities' consent to the submission of their data to recipients, the lack of regulation on the anonymisation (pseudonymisation) of data and the removal of those data at the end of the procedure, the model for the data confidentiality classification is not updated.

A major cause for safety incidents (79 %) in STI is a human error and/or incompetence. However, informing staff about safety requirements and educational measures should be improved, as people are not resistant to social engineering threats, staff are not attentive to social engineering attacks and are easily exposed to email manipulation. The control measures on the legality of data leakage and processing are not sufficiently effective in addressing systemic safety deficiencies. 2% of STI staff who had access to i.SAF and i.VAZ data did not require this access to perform their functions, they did not make use of this access for more than 3 months. There was no response to recurring cases where the STI information was sent to the employees' personal mailboxes. Vulnerability management tools need to be improved in order to protect large amounts of data sensitive to taxpayers (Section 3, page 38).

Changes during the audit

In order to improve the organisation of the data protection measures:

- Since 11 January 2019, the STI Safety Representative function has been transferred to the Internal Security Division and a new person has been appointed to be responsible for these functions. In February 2019, a review of the access to safety documents took place: reports were generated and letters regarding the STI staff members unfamiliar with the security documents had been sent to the STI administration units.
- An amendment to the adaptation programme¹² entered into force on 28 February 2019, introducing the provision that newly recruited, transferred or returning from parental leave civil servants have an obligation to undergo a training on the information safety within a maximum of 6 months after recruitment, transfer, or returning from parental leave. The training of new staff is also centralised, i.e. since 2019 it will be developed by the Internal Security Division.
- A STI recommendation on the sending of information to a staff member's private e-mail, was drawn up in February 2019, to remind basic safety requirements and inform that once a repeated violation has been detected, the responsibility laid down in the

¹² Order No V-22 of 10 October 2017 of the Head of the State Tax Inspectorate.

legislation will apply. A decision has been taken to familiarise the staff concerned with this recommendation.

- In order to ensure the completeness and quality of the County STI checks on the lawfulness of data processing, in February 2019 a person responsible for data protection in Šiauliai was trained in March 2019, the Kaunas STI Working Group and the Vilnius STI Working Group were trained in May 2019.
- The information system user management rules¹³ were amended on 3 June 2019 by adding the provisions on the periodic review of rights granted.

Recommendations

To the Ministry of Finance, Office of the Government of the Republic of Lithuania

1. In order to further contribute to the reduction of the shadow economy and to maximise the impact at national level on all its manifestations, by also improving the tax administration process and reducing the tax administrative burden, by making use of the available institutional and interinstitutional data analytics capacities, to assess the alternatives to the follow-up of the STI data analysis and competence centre at national level and decide on the operational model of this centre and its implementation at country level (2nd main audit finding).

To the State Tax Inspectorate

2. In order to reduce the administrative burden, increase the maturity of e-services and focus more on taxpayers' needs:
 - 2.1. carry out a more detailed analysis of the needs and expectations of taxpayers, by assessing the problems encountered in administering taxes and, based on the results obtained, plan measures that would increase the maturity of e-services, reduce administrative burden and promote the use of i.MAS e-services (1st main audit finding);
 - 2.2. lay down criteria and adopt a procedure for the assessment of e-services suitability for consumers, to be followed when carrying out periodical assessments of the suitability of e-services for users and, on the basis of their results, improving e-services (1st main audit finding).
3. In order to increase the efficiency of tax administration, the expert methods need to undergo risk assessment and sampling procedures so that most of them are automated, using data analytics techniques (2nd main audit finding).
4. In order to ensure the achievement of the i.MAS project's objective to reduce the shadow economy and increase the collection of tax revenues, it is necessary to create a system for measuring the socio-economic benefits of the i.MAS project and to carry out interim and final evaluations of the impact of the i.MAS project on the shadow economy and the collection of tax revenues (2nd main audit finding).

¹³ Order No V-455 of 29 December 2007 of the Head of the State Tax Inspectorate.

5. In order to ensure a sufficient level of safety for taxpayers' data:
 - 5.1. improve the safety policy, providing in greater detail the arrangements for the consent of legal persons as regards the submission of their data, detailing the purpose of the data use, the time limit for depersonalisation and deletion of the data at the end of the period and updating the confidentiality classification model of the updated data (3rd main audit finding);
 - 5.2. improve the current mechanism to monitor safety policy documents (3rd main audit finding);
 - 5.3. improve the organisation of safety training to ensure more effective safety and development activities (3rd main audit finding);
 - 5.4. improve the control system for data processing and data leakage prevention to ensure reliable screening of cases, the removal of systemic irregularities (3rd main audit finding);
 - 5.5. improve the procedures for granting access rights through enhanced control of the granting of these rights (3rd main audit finding);
 - 5.6. review the vulnerability management practices of the information systems and increase the scope for testing resilience based on OWASP or other globally accepted safety testing practices (3rd main audit finding).

The measures and deadlines for implementing the recommendations are set out in the Section "Recommendations implementation plan" of the report (page 47).