Executive summary of the public audit report

MANAGEMENT OF INFORMATION RESOURCES OF THE MINISTRY OF AGRICULTURE

31 December 2013 No. VA-P-90-1-25

Full audit report in Lithuanian is available on the website of the National Audit Office: www.vkontrole.lt

ABBREVIATIONS

IS means the Information System.

IT means Information Technology.

ISDC means the Information Society Development Committee under the Ministry of Transport.

SFVS means the Lithuanian State Food and Veterinary Service.

AIRBC means the Agricultural Information and Rural Business Centre.

EXECUTIVE SUMMARY

The Ministry of Agriculture of the Republic of Lithuania is responsible for shaping the state policy in the areas of agriculture and foodstuffs, fisheries (except for the conservation of fishery resources and control thereof in inland waters), rural development, land reform, land management, surveying, mapping, real estate cadastre, state control over land use, engineering development and technical progress of the infrastructure in agricultural and rural residential areas, development of renewable energies, science, training, education, application of innovative technologies in agriculture, food industry and fisheries, land reclamation and land reclamation investment, crop production, livestock farming, plant protection, seed production, breeding, fish-farming, phytosanitary and veterinary, and national heritage, and for organising, coordinating and controlling the implementation of this state policy[1]

When automating its business functions, since 1996 the Ministry has been using information systems of varying complexity for collecting and processing data, including personal data. The Ministry manages 32 information systems and registers. Of these, 24 ones are managed, developed and upgraded by a state enterprise subordinate to the Ministry of Agriculture, the Agricultural Information and Rural Business Centre. The annual amount allocated by the Ministry for the maintenance of the Centre totals LTL 17.5 million on average.

The objective of the audit was to assess the general and development controls of the information resources of the Ministry of Agriculture.

The audit was conducted at the Ministry of Agriculture and the state enterprise Agricultural Information and Rural Business Centre, information was also collected at the State Plant Service. The audit conclusions were formulated upon analysis of the documentation on the information resources managed by the Ministry, working regulations and protocols of working groups and commissions, activity funding agreements, information resources development documentation, data of registers and the register of information systems, hardware management and security monitoring results, and taking into account interviews with representatives of the Ministry of Agriculture, Agricultural Information and Rural Business Centre, and the State Plant Service.

The audit covered the period 2010–2013.

The following public audit conclusions and recommendations were drawn upon the assessment of the audit findings.

CONCLUSIONS

1. The internal control maturity of the information systems of the Ministry of Agriculture is defined as the Primary (Ad Hoc) process, a number of weaknesses were identified in the management of the information resources that affect the use of funds and the security of digital information:
   1.1. In 2013, the Ministry introduced a quality management system, which defines the processes and monitoring (including IT) performed at the Ministry; however, there is no procedure in place designed to address strategic information technology management issues with the executive staff of the Ministry, so that the needs of the core activities

[1] Regulations of the Ministry of Agriculture of the Republic of Lithuania approved by Resolution No. 1120 of the Government of the Republic of Lithuania of 15 September 1998.

were linked to the opportunities offered by information technologies. This is one of the factors determining the management of information resources in breach of legislation and lack of information about IT.

1.2. There is no general information architecture model covering all information resources at the Ministry. Failure to clearly define the available digital data flows (data structure) makes it difficult to determine the exact amount of information resources and their interaction. Without this information, it is not possible to take appropriate measures to improve the efficiency and ensure the security.

1.3. Information resources are developed without observing the relevant legislation, 27 of the 32 information resources managed by the Ministry have not been established and lack the appropriate documentation (regulations, safety regulations and specification), thus it is not possible to determine whether these resources meet the operational requirements.

1.4. The Ministry does not have information about the costs of the development and/or maintenance of individual registers or information systems, so it cannot verify that the development and maintenance funds have been used efficiently.

2. The Ministry does not ensure the compliance to the security requirements for information resources laid down in legislation and in the procedures approved by the Ministry:

2.1. Data security regulations and documents implementing the security policy have not been approved for all information resources, so the assurance of digital information security depends only on the IT staff awareness, which can lead to security vulnerabilities.

2.2. Risk and security compliance assessments are not carried out in the period laid down in legislation and within the scope of all managed systems, thus it cannot be verified that appropriate and sufficient measures have been selected, and so assessment of the compliance thereto is not carried out.

2.3. No priorities for the recovery of information resources have been set, performance continuity plans have not been approved and tested for all information resources, the staff has not been trained to handle an emergency, so the recovery of the IT activities may be delayed.

2.4. The IS change management procedure of the Ministry has not been approved and observed.

3. The IS manager of the Ministry, the AIRBC, introduced the information security management standard ISO/IEC 27001: 2005 during the audit. It has also been implementing the necessary technical safety measures, however, certain personal data security deficiencies were identified (the personal data processing purposes of 13 information resources have not registered in the Register of Personal Data Controllers), which prevents the assurance of control over the use of personal data and people are not able to know to what extent their data is processed.

4. Information resources are developed without observing the legislation, it is not possible to verify the efficiency of the use of funds:

4.1. The process of the development of the Phytosanitary Register and the information system of the Phytosanitary Register does not meet the consistency laid down in the Methodology for the development of state information systems: the initiation, financing and specification of the system were carried out later than the development of the Register and system modules, so the final scope of the system functionality has not been approved.

4.2. The Ministry did not approve the regulations of the information system of the Phytosanitary Register before developing the IS, thus failing to assess the compatibility of the system with other state information resources, and the ISDC has no data about the compatibility with the information society development priorities and process of the development of the IS of the Ministry.

4.3. The Ministry did not conduct an analysis of the implementation of the information system of the Phytosanitary Register, which lead to failure to make sure that the most appropriate system development option had been chosen. The Ministry does not have

data on the cost of the development of the Phytosanitary Register and the information system of the Phytosanitary Register and on the amount of funds needed to complete this project, so it is impossible to verify the efficiency of the use of the funds allocated for the development of the system.

RECOMMENDATIONS

To the Ministry of Agriculture

1. To ensure efficient implementation of the functions of the committees on the information technology strategy and information technology management recommended in best practice, choosing appropriate structural solutions.
2. To establish the information architecture model recommended in best practice covering all systems managed by the Ministry that would facilitate the development, use and sharing of the information on the activities, while maintaining its integrity.
3. To establish and ensure regular assessment of legislative compliance covering all information resources managed by the Ministry.
4. To prepare and approve regulations and specifications of the information resources managed thereby.
5. In order to ensure the security of the information resources managed thereby, the Ministry should:
   5.1. approve security regulations of the information resources managed thereby as well as other documents implementing the security policy;
   5.2. update and test the activity continuity plan covering the information systems of internal administration and organise relevant staff training;
   5.3. carry out a risk assessment of the information resources, develop and approve risk reduction (management) plans for the information resources.
   5.4. inform the State Data Protection Inspectorate about the automatically processed personal data in the information resources managed by the Ministry in order to update the information contained in the Register of Personal Data Controllers.
   5.5. describe the process of emergency changes, classify and prioritise all changes.

To the Agricultural Information and Rural Business Centre

6. To develop and approve a methodology for establishing the cost of the development and maintenance of information resources and other services