NATIONAL AUDIT OFFICE
OF THE REPUBLIC OF LITHUANIA

PUBLIC AUDIT REPORT

GENERAL AND CREATION CONTROL OF THE INFORMATION SYSTEMS OF THE MINISTRY OF FINANCE

16 July 2012, No. VA-P-90-1-9
Vilnius

SUMMARY

Audit started 11 July 2011
Audit completed 16 July 2012

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

The National Audit Office has conducted an audit of general and creation control of the information systems of the Ministry of Finance. The audit covered the period 2008-2011, in some cases data of previous years was also used for the sake of comparison.

When automating its business functions, since 1995 the Ministry of Finance has been using information systems of varying degrees of complexity. During the audited period, the Ministry had ten functioning information systems the users of which were more than 4 000 public sector institutions and establishments. Four information systems which process information important for the entire State and which are intended for the management of the financial resources of the Ministry and of the State were chosen for the audit of general control.

Planning, creation and management of information systems (IS) important for the State require knowledge of information technology (IT) strategic planning and management, the ability to link business needs with IT possibilities and to use IT in an optimal manner aiming for efficient performance. Many IT management aspects (except for security, IS creation, operation, and investment planning) were described only in good practice guidelines, however, they were not binding until 1 January 2012. Since the entry into force of the Law of the Republic of Lithuania on Management of State Information Resources[1], the bodies which manage state information resources of critical importance have to draft IT development plans, to carry out audits of information technologies[2] and to apply other good practice guidelines transposed into the Law and subordinate legislation.

Aiming for a better impact of IT, during the audit period the Ministry of Finance was following recommendations of international IT management methodologies (COBIT[3] and ITIL[4]) in its activities; however, the application of certain processes specified in these methodologies was not effective. Following the said recommendations, the Ministry of Finance formed an IT Management Committee in 2004. The main functions of the Committee cover approval and monitoring of the implementation of the IT Strategy; however, during the audited period the IT Strategy was approved only for 2008-2010 and the Committee held only two meetings. The Strategy 2008-2010 outlined Strategy implementation risk management, information security and other principles but it did not cover all information systems created at that time at the Ministry.

The auditors found that the management of electronic information at the Ministry had a number of shortcomings: there is no detailed description of the classification of electronic information and no information classification criteria, therefore the information collected at the Ministry of Finance can be disclosed, destroyed or modified when access to the electronic data is given to the staff of the Ministry who do not need this data for the performance of their direct duties. No appropriate measures designed to ensure security and continuity of the Treasury Financial Management and Accounting Information System (FMIS) and Financial Management and Accounting Information System (FMAIS) have been provided for, because, in the auditors' opinion, these systems should be included in higher categories.

[1] Law of the Republic of Lithuania on Management of State Information Resources, 15 December 2011, No. XI-1807.
[2] Ibid., Art. 9 and 14.
[3] COBIT 4.1., 2011, Vilnius.
[4] ITIL (Information Technology Infrastructure Library).

It was also found that the Ministry failed to carry out regular risk assessments of the information systems and IS security compliance assessments; to update documents on security policy and its implementation; to test IS control measures ensuring preparedness to consistently and effectively restore IS operation in case of unforeseen situations; to establish a number of personal data security measures; and to ensure consistent incident management and implementation of Lithuanian legislation. The information technology security deficiencies identified during the audit pose a risk to the activities of the Ministry of Finance which ensure management of the financial resources of the Ministry and of the State, and to the performance of other computerised functions.

Taking into account the audit findings, the auditors established that the maturity of IS internal control according to the Capability Maturity Model (CMM) is defined as the Initial/ad-hoc (1) process. To be able to achieve a higher level of maturity at the Ministry, the activity of the IT Management Committee should be more productive, the IT Strategy should become a continuous activity improvement process related to activity changes and subject to evaluation of its implementation. IT operating procedures (such as management of changes and incidents, etc.) should be documented and the existing documentation should be continuously updated and should reflect the actual situation. It is necessary to carry out regular assessments of risks and IS security compliance and to ensure process monitoring.

The Ministry of Finance has failed to ensure effective creation of VSAKIS [Public sector accounting and reports consolidation information system] because the system was created without having approved its specification – without having set technical requirements for the system being created and without economic justification, as required by law, and the project was behind the schedule by 13 per cent of the total project implementation time. Although the Ministry did pay much attention to the project quality assurance, the non-detailed and immeasurable criteria for the achievement of the project objectives were insufficient to be able to assess the value created by the project outputs.

Audit conclusions

1. IT planning is insufficient and fails to reflect the activity needs, the activity of the IT Management Committee is inefficient, IT strategies are adopted randomly, their implementation is not reviewed and assessed, therefore the maturity level of the IT management at the Ministry of Finance is Initial.

2. IT security deficiencies have been identified at the Ministry because:

2.1. not all organisational and technical personal data security measures designed to protect personal data have been implemented as required in relevant legislation, which results in failure to ensure the intended level of security and creates a risk that personal data may be accidentally destroyed, modified or disclosed;

2.2. the Data Security Supervisor did not organise annual risk assessments of all IS, therefore the IS Risk Management System has deficiencies and fails to conform to legislative requirements – the factors which may affect information security were not assessed at regular intervals as intended, a number of the measures provided for in the Risk Management Plan have not been implemented;

2.3. the Ministry has identified FMAIS and FMIS categories without following the criteria laid down in legislation, therefore it has been applying insufficient measures for the ensuring of security of these IS;

2.4. the control procedures of the Ministry designed to ensure adequate preparedness to consistently and effectively restore IS operation in case of unforeseen situations have not been actually tested, so in case of emergency there is no guarantee that IS operation at the Ministry is consistently and effectively restored and that IT services are be continuously provided;

2.5. the Ministry has no criteria for the description of the classification of electronic information and for information classification, therefore the information collected at the Ministry of Finance can be disclosed, destroyed or modified when access to the electronic data is given to the staff of the Ministry who do not need this data for the performance of their direct duties.

3. The Ministry of Finance has failed to ensure effective creation of VSAKIS information system because it was created without having set technical requirements for the system and its economic justification, as required by law, and the project was behind the schedule. Not all VSAKIS project objectives were fully met, a number of the project attainment criteria established by the Ministry were not detailed and not measurable.

Audit recommendations

To the Ministry of Finance of the Republic of Lithuania:

1. With a view to ensuring that IT development conforms to the demands of the Ministry:

1.1. to provide for control measures to ensure IT planning at regular intervals, to approve an IT Development Plan of the Ministry;

1.2. to resume the IT Management Committee activities involving the owners of the most important business processes and a representative of the management, to ensure that the Committee functions at regular intervals.

2. With a view to ensuring security of the information managed by the Ministry and to prevent potential disruptions:

2.1. to conduct IS security compliance assessment;

2.2. to adopt a procedure for the management of IS changes;

2.3. to test the efficiency of the Business Continuity Management Plan of the Ministry;

2.4. following legislation, to assign the FMIS and FMAIS systems to appropriate categories and perform their risk assessment;

2.5. to specify lists of electronic information assigned to a specific category and persons responsible for the management of this information in the Safety Rules for Electronic Processing;

2.6. to draw up personal data processing rules and to initiate updating of the information contained in the Personal Data Management Register of the Ministry.

3. With a view to ensuring the management quality of the ongoing IT projects, to approve general management principles for the IT projects implemented at the Ministry.