

# CHALLENGED BY THE TRANSITION

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The development of IT is an integral part of the strategic development of the Lithuanian National Audit Office, and is closely linked with the its goals set in the Law on the State Control, the main development trends of information society in Lithuania as well as the increasing role of IT and opportunities for its application in worldwide audit practice.

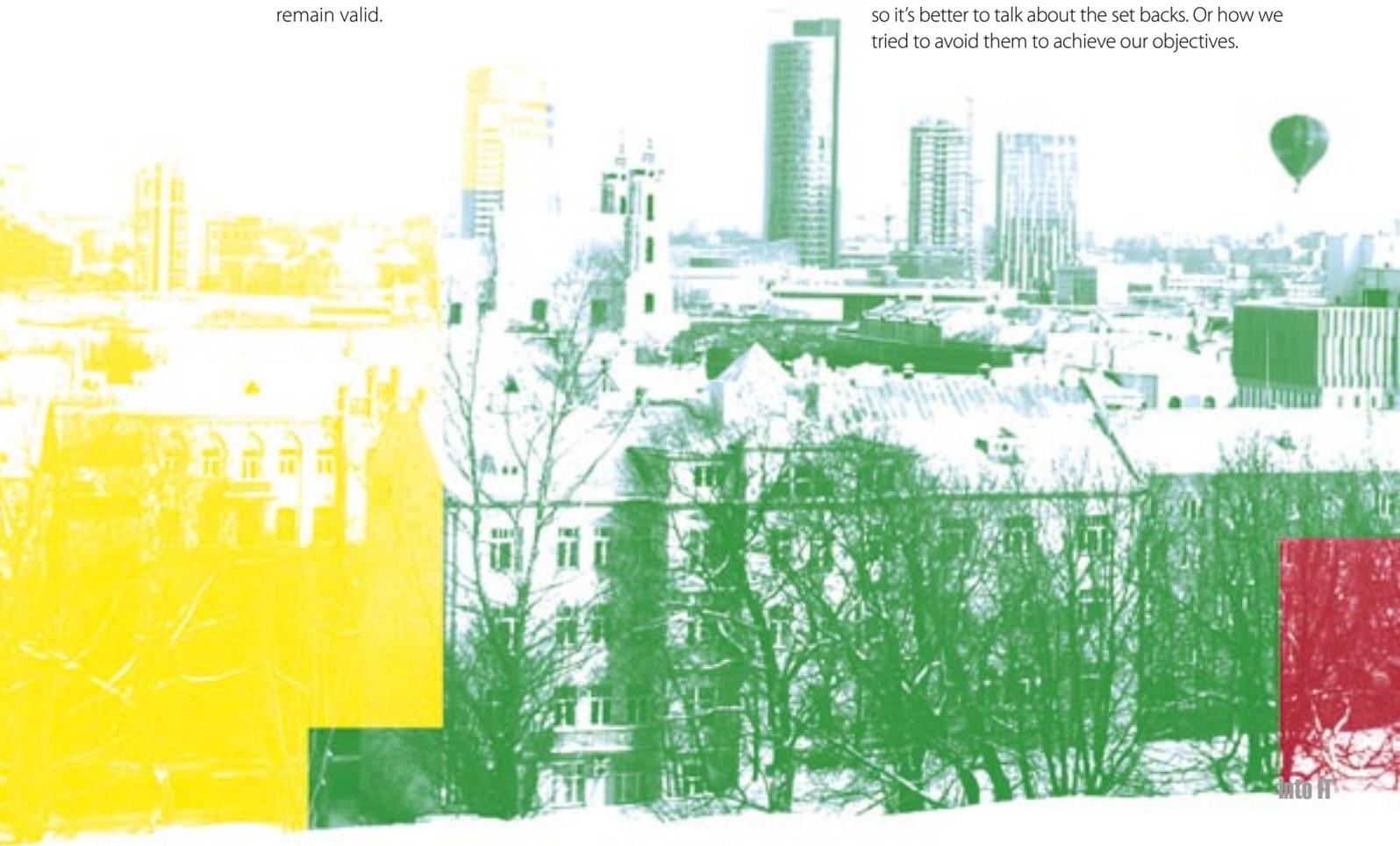
The development of information technologies at the Lithuanian NAO is determined by the rapid development of global information technologies when new and attractive solutions are becoming functionally outdated quickly. So, it is important to project IT development perspectives not only taking into consideration the present innovative decisions, but also forecasting perspectives of future development.

Well, it's true, but it sounds too high and looks too general – but if you replace the *Lithuanian National Audit Office* with another supreme audit institution, it will remain valid.

What are the elements which make the Lithuanian NAO different from the others? Probably the time we are living in. Restructuring the Office's activities from control to audit at the time when Lithuania was in the process of joining the European Union, a time when IT innovations blew in so suddenly giving us scant time to recognise how much had to be done and in how little time.

How do you manage things in transition when they are new to you? You feel like you are sitting in the pilot's seat for the first time staring at a lot of controls while your university knowledge dwindles away somewhere in a corner of your brain. The take-off decision point is so close and there are only two alternatives: "go" or "no go". But it is also challenging because you feel integrated with a power which is under your control. I would wish anyone to experience such a feeling.

If to talk about the success of the Lithuanian NAO, the story might be similar to the stories of the other countries, so it's better to talk about the set backs. Or how we tried to avoid them to achieve our objectives.



## I Importance

It is obvious that importance of IT is determined by the nature of a supreme audit institution which may be seen as information manufacturer. Firstly, its main product is information: both initially accessible from the auditees and the other sources and used for execution of public audit, and conclusive – reports, conclusions and recommendations – prepared by the auditors, as well as audit standards, guides and other audit documentation. The transformation of primary into conclusive information may be described as a complex process which is affected not only by analytical skills of auditors but also progressive management of information technologies. Secondly, information technologies influence the national audit office indirectly. The increasing importance of IT for the auditee (for example, financial management systems of the auditee institutions are becoming more complex) means that traditional audit – both financial and value for money – unavoidably inherits the new features suggested by the renewed auditee environment.



Therefore, it would be unfair to look at IT only as an important support function of office activities. It is also a challenge which changes the audit environment, and, therefore, audit methods applied to it.

## II Legacy

I found one essential moment in the past developments of IT at the Lithuanian NAO when IT developments were somehow (perhaps intuitively) aligned with the office needs driven by external environment. Those were the years of 1995-1997, when, following provisions of the Law on the State Control passed on 3 May 1995, the creation of an information infrastructure had started.

In 1995 the concept of information systems had been outlined, and, later, worked out technical requirements. In 1996, the technical project of information system of the Lithuanian NAO had been developed which reflected input from specialists of the UK National Audit Office. This project (VAKIS – the Lithuanian acronym for computerised information system of the NAO) was implemented in 1997. Its purpose was to automate administrative processes of the office (management of documents and job assignments, management of personnel, assets, library, as well as audit planning and management of audit process). It was a monstrous Oracle-based idol with a lot of possibilities, options and controls, able to do almost everything, perfect for those who have learned how to manage it, and scary for those who have not. A good way of sorting users using such a criterion.



An 100 Mbps Ethernet LAN was installed in 1997, and 6 territorial branches were linked to the central office over leased lines.

The changes made between 1995 and 1997, to the legal environment, to the Office and IT support happened simultaneously.



### III Alignment

I was happy to be employed by the Lithuanian NAO in mid 2001 when the office life entered into another cycle of up and running. Amendment of the Law on the State Control was passed on December 13, 2001, setting out new requirements for state audit. The Office Strategic Development Plan was designed with the assistance of SIGMA. Following provisions of the Law and the Strategic Development Plan of the Lithuanian NAO, a Strategic Development Plan for IT (main principles) in the Lithuanian NAO was drafted in January 2002, and approved together with implementation part of it by the decree of the Auditor General on 13 September 2002. The plan was based on INTOSAI best practice advice for applying IT to the audit process and covered five years and three phases: inception (2002), implementation (2003-2004) and consolidation (2005-2006).

In order to have practical impact to the institutional change, the first PHARE project "Strengthening of institutional capacities of the Lithuanian National Audit Office aimed at implementation of *acquis*", which gave a significant support to the Lithuanian NAO both in general issues of public auditing and in IT in particular, started in September 2001. Important issues, necessary for transition of the office from a control institution to an audit institution were planned, also the relevant IT infrastructure to support that change.

**The main achievement of 2001 was start of the first PHARE project which formulated the main IT needs later dealt by the Twinning (expert advice) and investment (IT infrastructure) components.**

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#### Equipment purchased in 2003, funded by the 1st PHARE investment project:

- 185 notebook computers – for auditors
  - 62 desktop computers – for administration and audit managers
  - 35 network printers
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### IV Enforcement

The IT Strategic Development Plan for the years 2002-2006 became an important push for the development of IT at the Lithuanian NAO while the main enforcement tools were the first (2001-2003) and the second (2004-2006) PHARE projects, also the active involvement of the office in the activities of EUROSAI Information technology working group.

The first PHARE project "Strengthening of institutional capacities of the Lithuanian National Audit Office aimed at implementation of *acquis*" started in September 2001 and consisted of two sub-projects: the Twinning project (started in May 2002) managed by the UK NAO (with partners Danish NAO and Swedish NAO) and the Investment project (started in June 2002).

The twinning project has left behind it a lot of know-how in IT management with direct application to the Lithuanian NAO environment. Drafts of policy papers and comments on the implementation plan of IT strategy reinforced the Lithuanian NAO institutional perception which (as it appeared later) was in just at the right time to build subsequent organisational and infrastructural layers. And even now, reading again those policy drafts, you can feel the real synergy between the donor and the recipient, between policies and procedures and development of infrastructure. Once again, a nice coincidence between understanding what, when and how to offer, and capacity to understand what, when and how to implement. It was like being back in school with both the teacher and pupil happy.

Investment project of the first PHARE project "Strengthening institutional capacities of the Lithuanian National Audit Office at implementation of *acquis*" supported complete renovation of information technology infrastructure at the Lithuanian NAO. All servers, PCs, printers, hubs and switches were replaced by modern ones, while all auditors were equipped with laptop computers which allowed use both within the network of the Lithuanian NAO and at remote locations.

**The main achievement of 2002 was the preparation and approval of an IT Strategic Development Plan for 2002-2006 to strengthen information technologies both in terms of upgrading infrastructure and introducing principles of corporate IT management, and encouraging the pro-active role of IT users in IT development.**

The second PHARE project “Strengthening functional capacities of the Lithuanian National Audit Office aimed at implementing of acquis” was the logical continuation of the first PHARE project. It consisted of three sub-projects: Twinning project (managed by the UK NAO with partners Danish and Swedish NAOs and Court of Audit of Portugal), investment project and service project. Project partnership has been maintained and extended, and we hope that the partners are happy to stay together for another couple of years.

The sharp-eyed will notice that there is only a slight difference in headings of the first and the second PHARE projects: “institutional” has been changed to “functional”, and indeed activities were re-designed to go down from an institutional to a functional level – more practical things targeted at individual functions of the office.

The Information system of the Lithuanian NAO – VAKIS, established since 1997, foresaw audit planning, audit management and audit statistics functions, but not electronic audit document management. Therefore, starting from mid 2002, the Lithuanian NAO started to look at ways of planning electronic audit documentation in the future. Already in September 2002, when the outline of the second PHARE project was submitted, the creation of an audit management and documentation system was foreseen as the main objective of service sub-project. The first PHARE project, and bilateral cooperation with the Danish NAO, proved that the new audit management and documentation systems had to be based on existing PricewaterhouseCoopers TeamMate software. It's difficult to say now which was the reason for replacing the monstrous idol: the difficulty of adding any new function, or complexity and unfriendliness of the system to most users.

While the first PHARE project created the necessary preconditions for electronic document management, the second one (having in mind its service component) was expected to suggest an approach for a new electronic audit documentation management and to implement it.

**The main achievement of 2003 was complete renewal of computer hardware at the Lithuanian National Audit Office – all network equipment, user computers and servers, printers.**

In October 2005 the Lithuanian National Audit Office obtained 300 licences for TeamMate R8 release which forms the main part of the present Information system of the office. TeamMate is going to be used as much as possible, not just the Electronic Working Paper (EWP) module. The other parts of the system – administrative document management and assignment subsystem, personnel management subsystem were designed separately to be “friendly” with the TeamMate. We thought then that building a completely new system would be better than repairing the old one.

Thanks to the investment sub-project of the second PHARE project, our training rooms were equipped with modern multimedia equipment including multimedia projectors, wide screen plasma monitors, DVD players and recorders, conference discussion and interpretation systems, audio system and conference cameras, giving possibility for audio-video transmissions, including transmission over computer network, single-panel equipment control solutions. High-speed document scanners, sending images directly to selected e-mail boxes, were also introduced.

Participation in PHARE projects of the European Union were useful not just to improve the IT infrastructure of the Lithuanian NAO substantially and to acquire necessary IT infrastructure management skills, but also to get project management skills as well. Both projects were successful: rated “very good” (the first one) and “good” (the second one) by external assessors, which does not always happen for PHARE projects.

Therefore, the IT Strategic Development Plan of the Lithuanian NAO supported coherent planning and building information technology infrastructure by means of the first (2001-2003) and the second (2004-2006) PHARE projects.

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### Equipment purchased in 2005, funded by the 2nd PHARE investment and service projects:

- multimedia equipment for training classes (with discussion and interpretation systems and video-conferencing possibilities)
  - equipment for training classes (computers, printers, multifunctional devices)
  - 300 TeamMate licences
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## V IT Governance

Governance of IT was something new for us: in Lithuanian we use the same word *valdymas* both for governance and for management. And if the language allows, it's always easier to reduce concept of governance down to management, finding all the problems and looking for all the solutions at the level of the IT department only. Of course, it's easier, and you will always find the CIO responsible when things go wrong. Who knows, maybe CIOs invented the IT governance concept to share responsibility with the office executives, or at least to discuss mutual responsibilities!

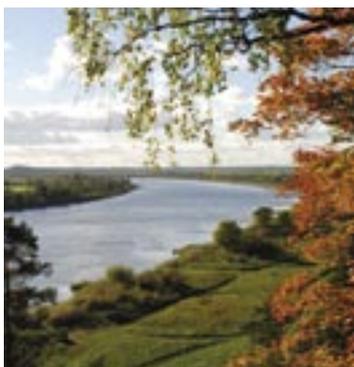
However, IT governance is a serious issue and a complex task which may not stay within IT only. Designing strategic issues of IT and linking them with the main objectives and priorities of the office cannot be done without active support of top management and with pro-active contribution of the main business units.

To increase the capabilities of SAIs in the field of IT governance, to learn how the main business processes of the Office correspond with the most important IT processes, to increase the Office's capability to analyse and summarise factors of inter-relation of such processes – those were the objectives of a project group "Information technology self-assessment for supreme audit institutions" by the EUROSAI Information Technology Working Group (EUROSAI ITWG). The project started in autumn 2002, and the Lithuanian NAO is among six participating institutions with the SAIs of the Netherlands, Norway, Slovenia and Spain, under the guidance of Switzerland.

The task of the project group was to prepare an IT self-assessment methodology, to extend and maintain it taking into consideration outcomes of the IT self-assessment seminars in different SAIs, to collect and summarise data on the status of IT and its links with the main business processes. The subject of IT self-assessment is very close to IT audit therefore it is doubly important for SAIs.

When the first version of the IT self-assessment methodology was produced, the Lithuanian NAO was one among the first SAIs to organise an IT self-assessment seminar on 13-17 October 2003. In the seminar, moderated by representatives of the Court of Audit of the Netherlands our IT maturity level was determined, links between the main business and IT processes were defined, an action plan produced and targeted to the most important IT-related tasks.

Self-assessment of IT produced reliable evidence that straightforward improvement of the IT may do some harm by weakening integration of the main office business processes and IT. This may happen if the main business priorities of the Office are not formulated precisely and the management of IT is not integrated with corporate management. Therefore, less attention should be given to technological innovation, and more to strengthen relations between the main business and IT processes, resulting in timely and more accurately formulated needs for IT.



## VI People

Knowledge and confidence in IT management, obtained in 2002-2003 by means of the Twinning component of the first PHARE project and participation in EUROSAL ITWG made the practical implementation of key IT management principles at the Lithuanian NAO easier.

Following resolution of the Council of the Lithuanian NAO of 16 January 2004, the IT Management Committee was established on 4 February 2004 by the decree of the Auditor General. Establishment of the IT Management Committee was the timely and correct organizational mechanism for formulating the business needs of the Lithuanian NAO and drafting the IT budget of the Office, and, in general, aligning Office demands with the possibilities offered by IT. In the other words, mutual responsibility (therefore, quality) for short-term IT actions, for drafting IT budget has been established and it took away a lot of the criticism from business units to the IT department. The IT Management Committee took a role of an intermediary body between administration and the Council. The majority of draft documents concerning IT have to be approved by the IT Management Committee before going to the Council. This was how the committee increasingly strengthened its authority, becoming a reliable expert on IT matters both for the Council and the Auditor General.

After setting up the IT Management Committee, further activities, foreseen by the IT Strategic Development Plan, progressed more smoothly. The meeting of the Council of the Lithuanian NAO on 18 March 2004 approved the main actions for 2004-2007 aimed at design and implementation of the new information system, and a working group for preparation and implementation of a new computerised audit management and documentation system was approved by the decree of Auditor General on 21 May 2004.

The group was created at the right time. Business units already were aware of their ownership (and importance, of course) of IT products and processes, and a good time (approximately 18 months) was still left until the product has to appear. Challenged by the sense of ownership, the group was productive in drafting requirements for the system. IT staff only needed to translate the requirements into IT terminology.

The group was well balanced with minor involvement of IT staff to exclude possible domination of IT professionals in the area which a year or two earlier was terra incognita for the majority of NAO staff.

The main goal of the group was to prepare and implement a new computerised audit management and documentation system. A shadow goal was to train users in becoming owners, and we used the second result time and time again.

**The main achievement of 2004 was the creation of institutional mechanisms allowing the deeper integration of IT to office work, and increased involvement of business process owners in IT-related projects via the IT Management Committee, working groups, etc. This allowed us to start more complex projects such as audit management and documentation system, already having user understanding and support for it.**

The important milestone in 2005 was a contract with PricewaterhouseCoopers Lietuva in August 2005 by which the Lithuanian NAO bought 300 TeamMate software licenses. Even if TeamMate is becoming a standard for audit document management in the leading supreme audit institutions, Lithuanian NAO may be seen as a nice exception. I hope we will have followers in the near future.

Active participation of the Lithuanian NAO in the EUROSAL Information Technology Working Group project "IT self-assessment for SAIs" demonstrated that the Lithuanian NAO can not only act as a good recipient, but also contribute to joint international activities. Representatives of the Lithuanian NAO acted as moderators in IT self-assessment seminars at the Chamber of Accounts of Russian Federation (April 2005), Latvian NAO (September-October 2005), Chamber of Accounts of Ukraine (July-August 2006). In June 2005 the Lithuanian NAO hosted the 2nd training seminar "Information technology self-assessment for supreme audit institutions" with 35 participants from 18 countries.

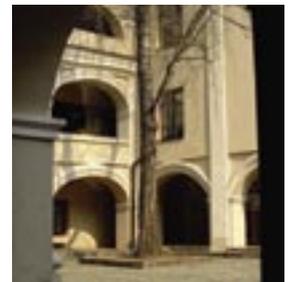
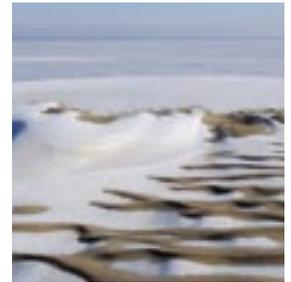
**The main achievement of 2005 was strengthening of IT governance issues and closer integration of IT with Lithuanian NAO business needs. This made it possible to design a user-driven IT Strategy for 2007-2011 with the implementation plans, results of which are measured by COBIT maturity level indicators and activities complying with international standards and best practice frameworks.**

Year 2006 was the year for planning an IT Strategy for the years 2007-2011 and implementation plans for the strategy: both long-term for 2007-2011, and operational for 2007. Work on the strategy was strongly related to the IT self-assessment mechanisms and COBIT. The strategy highlights those IT processes where increase of maturity level (measured by COBIT) is the most important for the Lithuanian NAO. To identify those critical IT processes, a self-assessment seminar took place on May-June 2006. The main strategic principles were discussed at the Council of the Lithuanian NAO on 4 July 2006 and on 20 October 2006. The final version was approved by the decree of the Auditor General on 27 October.

The importance of the IT Strategy for the years 2007-2011 is not only that the critical IT areas to be dealt with were identified using the IT self-assessment method (and COBIT), but also that indicators of achievement were indicated in terms of certain maturity level of the most important IT processes. In addition to that, activities to achieve strategic goals were required to comply with certain international standards or good practice frameworks: COBIT, ITIL, ISO 17799 (BS 7799), etc., and that means less improvisation when achieving the results.

The implementation plans of the strategy for the years 2007-2011 were approved the decree of the Auditor General on 21 December 2006; for the year 2007 – on 22 December 2006.

**The main achievements of 2006 were the upgrade of Lithuanian NAO information system with TeamMate as a central part of it, and approval of a user-driven IT Strategy for 2007-2011 with the implementation plans, results of which are measured by COBIT maturity level indicators and activities complying with international standards and frameworks of good practice.**




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Looking at the period of 2001-2006 one may say that the Lithuanian NAO has done a lot with IT to support its main office activities.

Have we left something to be done in the future? Probably yes, because success means not just having nice equipment but also users with smiles on their faces (the proper indicator!), and it does mean that IT makes their work easier.

What would we wish for the Lithuanian National Audit Office and for me? Perhaps patience and understanding. Patience, because the route to perfection is long and difficult. Understanding, that we have to move forward if we don't want to be knocked back.

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## Milestones

- September 2001** The first PHARE project “Strengthening of institutional capacities of the Lithuanian National Audit Office aimed at implementation of acquis” with Twinning and Investment components started.
- January 2002** IT Strategic Development Plan (main principles) of the Lithuanian NAO developed. The plan foresaw the main tasks to be dealt with during inception, (2002), implementation (2003-2004) and consolidation (2005-2006) phases.
- May 2002** The Twinning project of the first PHARE project started. 2002, June. The Investment project of the first PHARE project started.
- August 2002** Implementation plan of IT Strategic Development Plan of the Lithuanian NAO developed with concrete tasks, deadlines and responsibilities. The plan prepared with support of Lithuanian NAO twinning partners – UK NAO and the Danish NAO IT experts. Strategy and Implementation plan approved by the decree of the Auditor General on 13 September 2002.
- October 2002** Lithuanian NAO together with SAIs of the Netherlands, Norway, Slovenia and Spain, under the guidance of Switzerland started the project “IT self-assessment for SAIs”.
- December 2002** The second PHARE project “Strengthening of institutional capacities of the Lithuanian National Audit Office aimed at functional of acquis” with Twinning, Investment and Services components prepared. Services component was designed for the future audit management and documentation system.
- June 2003** The second PHARE project “Strengthening of institutional capacities of the Lithuanian National Audit Office aimed at functional of acquis” approved by the Financial Memorandum between Lithuania and the EU.
- October 2003** A Pilot IT self-assessment seminar took place on 13-17 October 2003, moderated by representatives of the Court of Audit of the Netherlands.
- November 2003** As the result of Investment part of the 1st PHARE investment project, computer hardware of the Lithuanian NAO was completely renovated with 185 notebook computers, 62 desktop computers, 35 network printers, 8 servers, network equipment, and server and client software.
- February 2004** The IT Management Committee has been established by the decree of the Auditor General of 2 February 2004. The committee, formed by the heads of the main business departments and IT department, takes responsibility for drafting IT priorities and for efficient use of IT resources.
- March 2004** Council of the Lithuanian NAO approves the main IT development directions for 2004-2007; organisational prerequisites for setting up a new audit management and documentation system are created.
- May 2004** Working group for preparation and implementation of a new computerised audit management and documentation system approved by the decree of Auditor General on 21 May.
- August 2004** Computer network of the Lithuanian NAO becomes a part of state secure computer network. VPN technologies are used to connect regional offices with the central office.
- February 2005** Terms of Reference for audit management and documentation system prepared.
- June 2005** Lithuanian NAO hosted 2nd EUROSAI training seminar “Information technology self-assessment for supreme audit institutions” with 35 participants from 18 countries.

- September 2005** Modern multimedia equipment installed in the training classes of the Lithuanian NAO (discussion and interpretation systems, video-conferencing possibilities, single-point remote control) according with the Investment contract of the 2nd PHARE project.
- October 2005** Contract with PricewaterhouseCoopers Lietuva signed on 12 August 2005 according to which the Lithuanian NAO received 300 TeamMate software licenses. This activity was a part of the Service contract of the 2nd PHARE project.
- June 2006** The Lithuanian NAO carries out a second IT self-assessment seminar. IT development needs indicated by the seminar are integrated into the draft Information technology strategy for 2007-2011.
- July 2006** The main principles of the Information technology strategy for 2007-2011 are approved by the Council on July 4, 2006.
- October 2006** End of Service component of the 2nd PHARE project on October 12, 2006. The new information system of the Lithuanian NAO with TeamMate as the main part of it is established.
- October 2006** The Council of the Lithuanian NAO agrees on the IT Strategy for 2007-2011 which is approved by the decree of the Auditor General on October 27, 2006.
- December 2006** Implementation plan for 2007-2011 (long term plan) of the IT Strategy of the Lithuanian NAO for 2007-2011 approved by the decree of the Auditor General on December 21, 2006.
- December 2006** Implementation plan for 2007 (operational plan) of the IT Strategy of the Lithuanian NAO for 2007-2011 approved by the decree of the Auditor General on December 22, 2006.

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Dainius Jakimavicius graduated from Vilnius University in 1983. He became a Doctor of Mathematics in 1993.

He has worked in the Lithuanian National Audit Office since 2001. He has been successively Head of Information Technology Division (2001-2002), Director of Information Management Department (2002-2004), Director of Information Technology Department (2004-2006) and currently Director of Information Technology Management and Audit Department.

Before that he has worked in the Institute of Mathematics and Information Technology, Academy of Science of Lithuania, in the Prime Minister's Office, in the Lithuanian Agency for Higher Education, Research and Development, in the Lithuanian TEMPUS Office, and in the Lithuanian Institute of Public Administration

