

Audit of the National Land Survey of Sweden's internal management and control of information security

Summary

Almost one third of all public organisations in Sweden have been exposed to some kind of serious data trespass or virus attack. These attacks are becoming increasingly serious and more advanced. At the same time, government agencies are conducting more and more of their activity on the Internet in the form of electronic services and thus need to work to protect their information and the IT support for their activity. This work is both difficult and frequently makes heavy demands in terms of resources. It is against this background that the Swedish National Audit Office (SNAO) has increased its endeavour to audit information security within the State.

Responsibility for managing and controlling information security in the public administration is divided among the Riksdag, the Government, the Government-appointed supervisory and support agencies, and the management of the individual agencies. SNAO has chosen in this audit to focus on the way in which the agencies' management exercise their responsibility for information security.

In 2005-2006, SNAO audited information security at ten agencies. The focus of the present audit is the way in which the National Land Survey of Sweden has worked on its information security.

• **What does information security mean?**

Information security is about the right information being available, not being corrupted or destroyed and not being accessible for unauthorised persons. It should also be possible to trace how information has been used and altered. In its audit the National Audit Office has proceeded from an international code of practice for information security management (SS-ISO/IEC 17799), known as the LIS¹ standard. This covers all the areas that the security work needs to include, both purely technical protection and the matter of influencing employee behaviour.

• **What are the potential consequences of inadequate information security?**

The National Land Survey of Sweden, which consists of the National Land Survey and a land survey agency in every county, is charged with working to achieve an appropriate subdivision of land and an efficient and effective supply of fundamental geographic information and property information. This includes providing the information required to satisfy the needs of society for current, high-quality information. The National Land Survey has national responsibility for co-ordinating production, collaboration, provision and development within fundamental geographic information and property information.

¹ Swedish acronym for Information Security Management System

Important information at the National Land Survey is to be found in the real property register, geographic databases and a geodesic reference system. It can have serious consequences for society if geographic information and property information is not accessible or contains errors: for example, individuals can be affected due to the fact that lending by banks and credit institutions is based on the information contained in the real property register.

- **Does the National Land Survey have a functioning system for information security?**

The National Land Survey has an information security management system with a number of functioning parts. Some parts of the system are not sufficiently well developed, however. The audit shows that the management's information security work has three main inadequacies: the division of responsibilities is not clear, the risk analysis work has not been completed, and monitoring is not systematic. For instance, no-one has been made clearly responsible for monitoring that the security measures decided upon are introduced. It should however be noted that in 2006 the National Land Survey has begun work aimed at improving risk analysis.

The inadequacies mean among other things that the National Land Survey's management do not have sufficient support or sufficient facilities to create a survey of, or to manage or monitor, information security. Due to these inadequacies, there is a risk that information security is not at the level the management intend.

All in all, these inadequacies mean that, on the basis of current standards, the National Land Survey is failing to work fully systematically on its information security.

The recommendations of SNAO

In SNAO's opinion, a clear and coherent information security management system is essential in order for the National Land Survey's management to ensure that the security levels which have been decided upon are established and maintained within the entire agency. The LIS standard employed in the audit contains, in SNAO's opinion, the most important requirements that an information security management system should satisfy. Those parts of the system which the National Land Survey should devote particular attention to developing are:

- frame and describe more clearly how the information security management system should function, in order to strengthen the ability of management to survey, prioritise and monitor.
- specify and establish a clear division of responsibilities.
- decide how the risk analysis work and overall planning of the security work should be done.
- decide how the monitoring of the work on information security should be done.

The National Land Survey should also introduce systematic monitoring of IT incidents.

- complete the review of the system already started, including the review of system owners and the need for reserve operating procedures.