



RIKSREVISIONEN
The Swedish National Audit Office

RiR 2009:19 Summary

Electronic identification - an underused resource

Summary

The Swedish National Audit Office has currently audited the system for electronic identification. In this paper a summary of the audit projects is presented. The project was carried out with a qualitative method (document studies, interviews, expert help and the use of a focus group).

The Swedish National Audit Office concludes that the system for electronic identification for the most part meets the demands for legal certainty, accessibility, cost efficiency and technology neutrality set by the Riksdag. The Swedish National Audit Office's assessment of the actors, i.e. the Government and responsible authorities, is that they have not completely acted according to the Riksdag's intentions for the development of a system for electronic identification. The overall picture is that the system for electronic identification in itself has had a positive effect on the development of electronic administration. However, certain areas of the electronic identification system can be improved regarding legal certainty, accessibility, cost efficiency and technology neutrality.

Background

Providing good service to citizens and companies is the public sector's most important task. In order to function efficiently it is largely dependent on modern information and communications technology. Access to smoothly functioning electronic identification is thus of vital importance. An electronic identification is an electronic means of identification for private persons. By using their electronic identification, a person can prove their identity and thus securely access services and information from agencies and companies via the internet. There are currently a number of services in place at various government agencies, municipalities and private companies that use electronic identification systems. By using electronic identification, individuals can fill in their income tax return forms, report that they are staying home to care for sick children, or conduct their banking business. The Riksdag has stated that:

“The role of the state should be to promote the use of electronic identification, stimulate competition between issuers of such identification, and eliminate any obstacles in infrastructure, market or competition. Likewise, in order to secure the dynamic development of security solutions for the information society, and promote competition and cost efficiency in security solutions, work for the establishment of technology neutral standards for electronic signatures in the public sector.”

The Riksdag has also stated:

“It should be pointed out that the use of IT must not impair legal certainty or the conditions for agencies to function.”

Access to a smoothly functioning electronic identification system is vital for the confidence, legal certainty, cost efficiency and future development in electronic administration. However, there are indications that the current system for electronic identification is marred by problems and difficulties that risk obstructing the development of electronic administration within the State. In a preliminary study, the Swedish National Audit Office found indications that today's system for electronic identification does not meet the demands set by the Riksdag. Therefore the Swedish National Audit Office has audited this system.

Audit questions

The Swedish National Audit Office has audited the system for electronic identification. The audit was based around the following questions.

- Is the system for electronic identification characterised by legal certainty, accessible, cost efficient and technology neutral?
- Have the Government and the responsible authorities acted according to the Riksdag's intentions regarding the development of the electronic identification system?

The Audit Project

Audit objects

The audit objects in this audit are:

- The Government
- Verva (the Swedish Administrative Development Agency)
- Statskontoret (the Swedish Agency for Public Management)
- Kammarkollegiet (the Legal, Financial and Administrative Services Agency)

Delimitation

An electronic identification is an electronic means of identification for private persons. By using their electronic identification, a person can prove their identity and thus securely access services and information from government agencies and companies via the internet.

The audit has focused on issues *directly related to electronic identification*. However, in some areas it was necessary to address problems related to the electronic administration sector in general.

Audit Methods

The audit is based on *document studies* and *interviews* with representatives for the concerned agencies, the business sector and the Government Offices.

The choice of qualitative method is based on that the intention of the audit is to shed light upon the system for electronic identification and problems associated with the area rather than to measure frequencies or establish quantitative differences.

The documents and interviewees were selected to ensure the greatest possible variation regarding their connection to the sector. Therefore we have interviewed representatives of both the municipal and state sectors as well as representatives of e-service providers, customers and suppliers of identification services. The interviews were carried out both as unstructured and semi-structured interviews.

The majority of the interviewees were involved in developing the system. Several of them were therefore interviewed based on their role during this process and not based on their current employment. In addition to the audit objects we also interviewed representatives for the Swedish Association of Local Authorities and Regions and for Finansiell ID-teknik AB. We have also asked the Swedish Financial Supervisory Authority, the Swedish Data Inspection Board and the Swedish Post and Telecom Agency a number of questions about supervision and electronic identification.

As part of the audit we have consulted *professor* Mats Bergman from Södertörn University who has expressed his opinion on the theoretical starting point for issues concerning competition and the negotiation of framework agreements that can be connected to current electronic identification solutions. Along with the observations made by the Swedish National Audit Office, his opinion forms the basis for the analysis of the framework agreement model that has been chosen to provide for the state's need for electronic identifications.

In order to assure the quality of our observations and conclusions we have invited a *focus group* consisting of various experts in this area.

Audit criteria

The government's responsibility

The basis for judgement when auditing the Government's work is based on Chapter 1, Section 6 of the Instrument of Government (1974:152) and Section 1 of the Budget Act. Chapter 1, Section 6 of the Instrument of Government states that the Government governs the country and is accountable to the Riksdag, and the Budget Act states that the state should seek to achieve high efficiency and good economy in its operations (Section 1 of the Budget Act).

In the audit, the Swedish National Audit Office assumes that the Government's responsibility, through steering, is to:

- promote the use of electronic identification
- stimulate competition between issuers of such identification, and eliminate any obstacles in infrastructure, market or competition
- secure the dynamic development of security solutions for information society
- promote cost efficiency in security solutions
- work for the establishment of technology neutral standards for electronic signatures in the public sector, and

- ensure that legal certainty or the conditions of the government agencies have not been obstructed because of electronic identification.

The responsibility of the agencies

The Swedish National Audit Office assesses that the agencies' responsibility is well formulated in the Authority Ordinance (2007:515) and in the ordinance (2003:770) on the electronic information exchange of government agencies. Therefore, these ordinances are used as the basis for judgement in our audit. In the audit, the Swedish National Audit Office assumes that the agencies' responsibility is to:

- continuously develop the operation (Section 6 of the Authority Ordinance) and to promote the development of safe and effective electronic exchange of information within the public administration (Section 2 of the ordinance on the electronic information exchange of government agencies)
- work towards making use of advantages for individuals and the State as a whole, in cooperation with other agencies and actors (Section 6 of the Authority Ordinance)
- notify the Government of the obstructions that make the agency's undertakings more difficult, as stated above (Section 3 of the Authority Ordinance).

Audit findings and conclusions

The Swedish National Audit Office concludes that the system for electronic identification for the most part meets the demands for legal certainty, accessibility, cost efficiency and technology neutrality set by the Riksdag.

The Swedish National Audit Office's assessment of the actors, i.e. the Government and responsible authorities, is that they have not fully complied with the Riksdag's intentions for the development of a system for electronic identification.

The overall picture is that the system for electronic identification in itself has had a positive effect on the development of electronic administration. However, certain areas of the electronic identification system can be improved regarding legal certainty, accessibility, cost efficiency and technology neutrality.

However, the Swedish National Audit Office can note that the e-delegation commissioned by the Government has presented a number of suggestions to handle several of the shortcomings presented in the audit. These suggestions can provide the Government and agencies with better conditions to achieve the steering and follow-up necessary to meet the Riksdag's demands regarding legal certainty, accessibility, cost efficiency and technology neutrality.

Is the system for electronic identification characterised by legal certainty?

The Swedish National Audit Office has found that legal certainty and the agencies' ability to function has not been impaired. On the contrary, there are indications that the agencies' ability to function has improved through being able to access services via electronic identification. Increased use of electronic identification would also further increase the legal certainty of individuals considering the high technical level of security that is achieved using an electronic identification. The Swedish National Audit Office can establish that there has been no supervision of the actual system for electronic identification. The use of electronic identification is expected to increase. This use also entails that large amounts of personal information is stored by suppliers. Therefore the Swedish National Audit Office considers that the responsibility for supervision needs to be specified to meet the demands that the Riksdag has set for protection of personal integrity.

Is the system for electronic identification accessible?

The Swedish National Audit office assesses that the system for electronic identification cannot be considered to fully meet the demands for accessibility and usefulness. A production point of view as opposed to a user point of view was used during the development of the system for electronic identification. The result is that it is unnecessarily complicated for users to use the solution.

The Government has not been clear enough in its steering of the transition to electronic administration. The weak steering of the agencies has resulted in the agencies not prioritising the development of e-services. The lack of e-services has in turn meant that there has been no incentive for citizens to get electronic identifications. This in turn means that the transition from traditional administration to e-administration has not happened fast enough.

The agencies responsible have taken certain actions and also called attention to the need for further action from the Government. However, the Swedish National Audit Office believes that the agencies could have done more to market electronic identification and e-services in order to increase their use.

Is the system for electronic identification cost efficient?

The Swedish National Audit Office assesses that the system largely meets the Riksdag demands regarding cost efficiency. However, the solution chosen by the State in the form of general agreements has resulted in a situation with limited competition, which may have had a negative effect on prices and opportunities for technical development for the existing solution. However, it should be pointed out that one main reason why the current solution was chosen was to use an existing and smoothly functioning solution in order to quickly start up e-services. If the State had developed its own solution it would

firstly have taken longer to start up and secondly the State solution would compete with any private alternatives.

The Government decided that the responsible agencies would purchase a solution from the private market instead of developing a solution under the auspices of the Government. A comparison between the Finnish and Swedish solutions shows that the Government's position was less costly than the alternatives. The Swedish Tax Agency and the Swedish Social Insurance Agency's use of electronic identification services has led to more cost efficient administration compared to manual administration for these agencies. However, the Swedish National Audit Office believes that if the government had used clearer steering to promote the development of more e-services that use an electronic identification solution, then cost efficiency would not only increase for these two agencies but for the entire State administration. The agencies must, just like the Government, be considered to have benefited the cost efficiency in general. Several agencies have also complained about the problems that exist concerning steering, financing of e-services and choice of solution for electronic identification.

Has the Government promoted competition?

Regarding the competition aspect, the Swedish National Audit Office assesses that the choice of framework agreement procurement and the desire that issuers with an agreement relationship with a significant part of the population has resulted in competition in prices not functioning well. A potential bidder had to, upon tendering their bid, have a large, well electronically identified circle of customers and an extensive technical infrastructure in order to be able to issue and manage electronic identifications in large numbers. As a consequence of these two demands, three groups of suppliers have been of interest as framework agreement suppliers from 2001 onwards. These are a number of banks in the BankID sphere, banks outside the BankID system that offer their own solution, and some companies like Telia and Steria. By choosing the current solution, a system was created that was not based on open standards. Customers were "locked in" to their banks and customer flexibility between different alternatives was extremely limited. The system also has high entry barriers for potential suppliers.

The Government decision to not build a State-developed solution and instead purchase the current solution from private actors has resulted in a "lock-in effect" for the electronic identification system. The agencies responsible have had limited means to stimulate competition and therefore it is hard to criticise their passivity.

Is the system for electronic identification technology neutral?

Regarding the demand for technology neutrality, the Swedish National Audit Office assesses that the system for electronic identification cannot be considered to meet the Riksdag's demands. Nor can the Government be considered to have promoted the establishment of technology neutral standards for electronic signatures or to have secured the dynamic development of security solutions for information society.

The electronic identification system is not currently designed so as to make possible interaction with other systems, i.e. an interoperable solution. One problem regarding electronic identification is that the interfaces are not standardised. In order to achieve interoperable systems for the entire public sector, clear steering is needed from the Government regarding system specifications and choice of technology. Based on the Government's position, the responsible authorities have had limited possibilities of taking any action to promote technology neutral solutions. The technical solution for electronic identification is based on specifications developed in the late 1990s, and the solution is essentially the same today as it was then. The limited competition situation that is the result of the Government's position has probably entailed less technical development and innovation.

Recommendations

The e-delegation has submitted proposals for future solutions for electronic identification and the Swedish National Audit Office wishes to point out that several of the shortcomings presented in this report could be addressed by the suggestions of the e-delegation. For example, the proposals to introduce a federation architecture for electronic identification and to standardise the interfaces. Because these proposals are presented in detail in the e-delegation's recently published report, they are not mentioned as recommendations below. However, some of the shortcomings observed by the Swedish National Audit Office risk remaining even if the e-delegation's recommendations are implemented. Therefore, the Swedish National Audit office recommends that the Government should

- carry out an overhaul of the system for electronic identification and consider clarifying the mandate regarding supervision and selecting an individual actor that is given responsibility
- take action to create open standards and expose the identification process to competition in order to eliminate any obstacles to competition
- take action to increase accessibility and create a future solution for electronic identification based on user needs
- implement information campaigns for citizens, companies and government agencies of the advantages of using electronic identification.