



RIKSREVISIONEN

Summary:

State IT-projects which overspend
their budget

RiR 2011:5

Summary

The National Audit Office has examined whether it is a common occurrence among state IT-development projects that they overspend their budget. Our overriding conclusion is that a third of the IT-projects suffer from problems. The major projects are more open to risk and have a considerably larger average budget overspending percentage than smaller projects.

Background to the audit

Motives: The costs for state IT-activities (including system development, administration and operation) are of the order of magnitude of between SEK 20 and 25 billion per year.¹ According to other calculations, IT-costs within national administration are the third largest cost after personnel and premises and in 1999 constituted roughly 9 per cent of the total administration costs of the authorities.² According to the Government, IT-gear development of activities is one of the most cardinal means for developing the activities of the authorities. Consequently, it is crucial that such activities be conducted efficiently and with good husbanding of public funds. In this context, budget overspending is a worrying signal. Budget overspending per se does not need to imply that concrete problems have arisen in the activities. It may be a matter of defective planning of project activities which need not involve concrete efficiency problems. But that an authority allows its IT-projects to overshoot the budget is nevertheless a sign of shortcomings in direction and control. This in turn may result in delays, in deliveries not meeting requirements and in the creation of unnecessary overhead costs. And in such an event we are talking of considerable negative consequences for the economy and activities of the authority concerned. In addition, it should be noted that budget overspending which is caused by over-optimistic calculations may give rise to problems for an authority if it results in other planned activities being negatively affected.

Purpose: The purpose of the audit conducted by the National Audit Office is to show whether it is a common occurrence among state IT-development projects that they overspend their budget. The result of this audit should make a contribution in more efficient management of state projects. The audit reflects the presence of such problems in a selection of the projects of the authorities which were completed during one calendar year.

¹ Cag Gemini Consulting 2007, IT-control in state administration, report.

² Report by the Swedish Agency for Public Management 1999:37, IT-costs in public administration.

Implementation: The data gathering of the audit was put into effect by a web questionnaire containing questions on completed IT-projects, direction and control of IT-projects as well as the communications of the authorities with the Government on IT-projects being sent to the 73 authorities which have the largest administration grants. In order to provide an in-depth aspect to the volume of information gathered, we have examined one major project each at three authorities, the Swedish Mapping, Cadastral and Land Registration Authority, the Swedish Courts Administration and the Swedish Coastguard, which were completed in 2009 with a budget overspend. In addition, representatives of the Ministries of Finance, Defence, Justice and the Environment were interviewed, together with representatives of the administration department of the Government offices. The interviews with the ministries principally addressed questions relating to case studies and the direction exercised by the ministries and their follow-up of these projects. The interviews with the Ministry of Finance related, on the one hand, to dialogues between the budget department of the Ministry of Finance and the individual ministries in question relating to costs for projects, and on the other hand the general direction and control exercised by the Government of the IT-development of public administration. The audit of the Government offices related to the authority's own IT-projects in the same manner as the other authorities subject to audit.

The results of the audit

The audit has resulted in the following cardinal conclusions and observations.

A minor proportion of the projects suffer from problems

A third of the IT-projects overspend their budgets. According to the National Audit Office, it is reasonable to assume that the total budget overspending for completed projects in a normal³ budget year probably lies in the range of between SEK 200 and 300 million.

When the National Audit Office conducted a similar audit of 215 projects in 1999, the results were similar.⁴ Our assessment is that the capability of the authorities to keep to their budget within projects has not improved.

The major projects are at greater risk

While those projects which had overspent on average overshot their budgets by 30 per cent, the larger projects among them exceeded their budgets by an average of 55 per cent. In our assessment, this difference is principally attributable to the greater difficulties in handling risks in the large projects, since they are more difficult to overview and more difficult to understand because of their greater complexity.

³ In other words a year when some major IT-project was also completed.

⁴ However, the audit results are not entirely comparable.

The consequences of budget overspending are principally to be found internally in the authorities

None of the projects which were subject to the audit have entailed that the authorities have requested increased grants. Projects which greatly overspent their budget have been handled internally within the authorities concerned, where however consequences for other activities may arise. Often, such budget overshoots are financed by other development projects being allocated less resources, which in turn has resulted in their being delayed or being completed at a lower level of ambition. If the financing of the budget overshoot is instead charged to the general activities of the authority, which is also common, this may entail extended handling times and other quality losses.

In the assessment of the National Audit Office, the authorities involved do not examine to a sufficient extent the possible consequences of budget overspending in the short and long term.

The causes of budget overspending are shortcomings in procurement skills and the ability to direct and control IT-activities

The audit indicates largely well-known causes for the projects, in particular the large-scale projects, suffering from problems. The managements of the various authorities are not capable of creating procurement functions which can set out clear targets and requirements for the development work, or create a relevant risk management system or carry out reasonable resource calculations. Another conclusion to be drawn from the audit is that well operating routines for internal direction and control provide better conditions for well operating development projects. Those authorities who reported that they had made good progress in their work in compliance with the ordinance on internal direction and control tended to suffer from fewer problems involving budget overspending. It also appears that similar mistakes are repeated year after year. One conclusion to be drawn therefore is that the authorities have not paid sufficient attention to the follow-up of projects and feedback of experiences from earlier projects and other knowledge, for example from international standards. A further observation to be made is that there is considerable reliance on consultants in many projects. Half of the total annual budget for IT-development for 2009 related to consultancy costs. The assessment of the National Audit Office is that procurers who run major projects with consultants in key positions may find difficulties in communicating the demands of the activities on the outcome of the projects to the consultants as well as recycling the experiences of the consultants from the projects back to the authorities.

Recommendations

In order to rectify those problems which the audit has brought to light, the National Audit Office indicates a number of measures which principally authorities with medium and large IT-projects may need to implement:

- Develop internal direction and control

Since the audit demonstrates shortcomings early in 2009 in the internal direction and control at half of the authorities involved, the National Audit Office assesses that this is a measure which could give an effect on a broad front. Authorities which are not under obligation to comply with the ordinance on internal direction and control may also stand to benefit from intensifying their work on this point. It is therefore satisfying to note that the response to the questionnaire by the various authorities indicates that development work is in progress in many areas.

- Ensure that the procurement skills of the authorities correspond to the degree of difficulty of the projects

Those acting as procurer on behalf of the management of the authorities normally have other duties to perform in the activities of the authorities than those which are relevant in their role as procurer of IT-projects. Nevertheless, the procurer must be responsible for ensuring that the necessary skills are provided to both the steering committee and the project committee. If this does not function, it involves a considerable risk-taking for an authority to start a large development project. Improving procurement skills is a time-consuming and difficult operation. Consequently, the management of the authorities must find ways of balancing their risk-taking during the period.

- Develop learning skills inside the authorities

One important method of developing procurement skills and the ability to carry through projects as planned is to learn and study from experiences of what went wrong in earlier projects – both own projects and others’ – and then recycle and reuse these experiences. This does not happen automatically, particularly not in environments where there is a high mobility of personnel or where there are consultants in key positions in the projects. On the basis of the observations made during the audit, that less than half of the authorities produce follow-up reports, the National Audit Office is of the opinion this should be a task of high priority. One necessary condition to be able to learn from one’s experiences is to know what has happened. As a result, the authority must ensure that relevant tools are in place for being able, among other things, to report how the results in the projects have been achieved and how resource input was used. It must be possible to analyse the causes for the budget overshoot. On this point, the audit has thrown up serious shortcomings.

- There are also needs for development at authorities which have not reported problems with budget overspending

It is apparent from the outcome of the audit that a majority of the projects which were examined had experienced no major problems in keeping to the budget. This does not mean that the measures recommended by the National Audit Office need not be implemented by the majority of the authorities

conducting IT-development projects. The assessment of the National Audit Office is that considerably more authorities will need to manage more complex and high knowledge level projects in the future than those who have hitherto needed to do so. This creates a greater need for management of authorities and procurers at many more authorities than those who manage large or complex projects today develop their ability to direct and manage projects.