

Conclusions and recommendations of the Dutch temporary committee on government ICT projects

Between July 2012 and October 2014, the House of Representatives of the Netherlands conducted an investigation into the failure of a series of central government information and communication technology (ICT) projects. This has led to an unnecessary waste of taxpayers' money.

For the investigation, the House of Representatives appointed a Temporary Committee on Government ICT Projects. This first engaged an external research agency, Policy Research Corporation BV, to carry out two investigations of its own. Then, in the spring of 2014, the Committee held public hearings with 32 witnesses, all with wide experience of government ICT projects from different perspectives.

The Committee examined a number of projects, primarily in an attempt to find a common factor or pattern of mistakes from which lessons can be learned to prevent such failures being repeated in the future. The problem as a whole is intractable and will never be brought fully under control. Nevertheless, the committee feels that a few robust organizational measures – provided they are implemented consistently and coherently – will be sufficient to prevent a repeat of a large proportion of the problems identified. The Committee's recommendations are closely interrelated and should be viewed as a total package of measures for the Cabinet to adopt.

Much will be gained simply by involving not only ICT specialists in government projects of this kind, but also users and those responsible for monitoring government spending. On this point the Committee is strongly critical of the House of Representatives itself, as up until now it has not made sufficient efforts to scrutinize public expenditure in this area.

If only some of the recommendations in this report are implemented and others ignored, the Committee foresees a repeat of the mistakes of the past. The fundamental problems will still not have been solved. Instead, the government will continue to "muddle along" and yet more taxpayers' money will be wasted. For the Committee, that would be a real lost opportunity – and not the first of its kind.

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Ton Elias (VVD, chair)
Paul Ulenbelt (SP, vice-chair)
Manon Fokke (PvdA)
Hanke Bruins Slot (CDA)
Paul van Meenen (D66)

Conclusions and recommendations

The Committee draws the following conclusions:

1. The Dutch government does not have its ICT projects under control.
2. Politicians may not realize it, but ICT is everywhere.
3. The government is not achieving its policy ambitions for ICT.
4. The governance structures for ICT projects are very poor.
5. The government is insufficiently aware of the costs and benefits of its ICT projects.

6. The government's ICT knowledge is inadequate.
7. ICT project management is weak.
8. ICT procurement processes incorporate perverse incentives.
9. The contract management of ICT projects is unprofessional.
10. The government lacks the ability to learn from its mistakes concerning ICT.

1. The Dutch government does not have its ICT projects under control

The government has great ambitions in respect of ICT. This makes it all the more disappointing that the governance of projects with an important ICT component are not in order. Taken as a whole, the government's ICT organization is chaotic and lacks transparency. Tasks and responsibilities are fragmented and unclear. The interests of key players involved in an ICT project are too divergent. In many cases, the government is not in control of the costs, the timing or even the final result of its projects. Moreover, there is no-one who has the final say over ICT-projects. Since no comprehensive report on the national public finances has been drawn up after 1995, nobody knows how much money the Dutch public sector is really spending on ICT. Nor how much is being wasted on failed projects. A conservative estimate based on information from a variety of experts suggests that the figure may be anywhere between €1 billion and €5 billion euros each year. Whatever the true amount, the Committee believes it to be unacceptably high.

The Committee has established that much is amiss, especially as regards the culture surrounding government ICT projects. On the one hand there is unbridled enthusiasm for ICT, with proponents viewing it as the solution to every problem. On the other hand the House of Representatives regularly demands policy measures, without realising that ICT is almost always needed in order to implement them. The minister in question promises delivery, without first checking whether the measures required are technically possible in ICT terms.

Even when they know that the promises being made to Parliament cannot be fulfilled, officials do not challenge the political leadership enough. When they do voice their concerns, the necessary information does not reach the top political level. This results in ministries issuing tenders for, as they were called during the hearings, "cars without steering wheels": something, which, by its very nature, cannot work.

The government frequently ignores the expertise proffered by ICT suppliers, even though its own knowledge in this domain is often far inferior to theirs. On the rare occasions when a supplier does point out avoidable problems, these warnings are all too often not taken seriously. The House fails to perform its scrutinizing function because of a lack of interest in ICT and a lack of expertise in this area. Moreover – as the Committee itself experienced during the course of its investigations – there are shortcomings in the Cabinet's provision of information to the House.

The government must take firm and decisive action to bring its ICT projects under control. The total package of recommendations by the Committee, as contained in this report, provides a firm basis for such action.

Recommendation: a BIT with bite

To create order out of chaos, a temporary ICT authority should be established: the BIT (Bureau ICT-toetsing). This must not be yet another bureaucratic body, but a compact, efficient and decisive organization. It should be staffed by independently-minded and autonomous experts – not necessarily all ICT specialists – who can use their knowledge, expertise and experience to judge quickly whether a project has a good chance of success. The BIT should be led by someone with authority, expertise and experience.

Before they are put out to tender, the BIT should assess various specific aspects of all government projects worth in excess of €5 million in which ICT plays an important role. In this respect, the Committee interprets the word “project” in very broad terms: it includes trials and pilots, programmes, plans, reorganisations and any other process in which the ICT component plays a major role or is a determining factors as regards cost and duration. Because of this wide scope, it will not be possible to use semantic ruses in order to avoid BIT assessment.

The BIT will have a gatekeeper function. In other words, a project cannot proceed until it has received a green light from the bureau. Ministries must submit their projects plans for assessment at an early stage. The BIT will also be authorized to request documents from all relevant various bodies. In assessing plans and documentation, it is guided by a number of common-sense rules (the BIT rules). Only once it has approved a project in line with these terms of reference can the project go ahead. The BIT may also decide to give a project a provisional green light. In this case it is authorized to terminate the project at an early stage if it becomes apparent that the conditions set have not been met.

The BIT rules are shown below. They are intended primarily to ensure that the basic principles underlying the project are in order. In other words, that the principal has thought the project through before initiating it. After all, as the saying goes: “A good start is half the battle”. However obvious that may sound, the Committee’s investigations have shown that this is the very point where most projects go wrong.

The ten BIT Rules¹

1. Draw up a business case for the project which includes all the key elements needed to come to a sound decision.
2. Demonstrate the added value of the project for the end user and for society as a whole.
3. Ensure the project is supported by all relevant parties, including the end users, and assess its organizational, administrative and financial viability.
4. Start by reorganizing and standardizing the ICT-supported work processes, and only then introduce more advanced technological solutions.
5. Make an inventory of the technical, organizational and administrative risks, and of measures to address them, and so eliminate “muddling along” in advance.
6. Ensure that the responsibility for the budget *and* the contract lies with a single person.
7. Phase project development as efficiently as possible, and ensure that each phase delivers directly useable products.
8. Comply with government standards and demonstrate technical feasibility.
9. Demonstrate what measures have been taken to ensure that criticism and dissent may be given and will be taken seriously, from the beginning to the end of the project. Openness and transparency form the basis for this.
10. Include a clear procurement strategy in the business case.

Changes during the course of the project

The BIT should continue to monitor the progress of the project in each of its phases. The ICT-related risks, for example, might be assessed in the initiation phase or even as early as the planning phase. Indeed, such an initial assessment could be conducted as soon as the House or the Cabinet formulates particular policy plans in which ICT is to – or might – play an important role. During the later procurement phase, the BIT could carry out a “monitoring consultation” at the request of a relevant body (for example, an assessment of the technical specifications). For this purpose, the contracting authority should be able to submit tenders to the BIT in confidence.

¹ In drawing up the BIT rules the Committee used the Raines' Rules as a source of inspiration. More information about the BIT Rules and their substantiation is provided in chapter 6 of this report.

During project implementation, the BIT carries out further regular assessments (for example, after six months and again after one year). Are the underlying principles still valid? Has the business case been brought up to date? Is the project running smoothly, on schedule and in accordance with the agreements governing it? The BIT can base these assessments on such standard documents as audits, evaluations and assessments from ministerial chief information officers (CIOs), as well as Gateway Reviews (peer reviews) where these have taken place. The BIT also has the right to request documentation on its own initiative.

In the event of any doubt, the BIT examines the project more closely. And, should it believe that is necessary, it may even terminate the project altogether. It should be accepted as normal that a project may be stopped in this way; that is better than continuing to "muddle along". The BIT must take seriously all indications of problems with government ICT projects and investigate them, even if these are reported by people or bodies not directly involved.

Independent and temporary

It is important that the BIT can function as an independent body. In order to be objective in its assessments, it must operate at arm's length from the ministries responsible for government ICT policy. This ensures a separation of powers between policy and control, and prevents situations in which the "butcher inspects his own meat". This is one of the reasons why the BIT should be brought under the auspices of the Ministry of General Affairs.

The BIT should also be established for a limited period of time. The idea is that, over the course of time, awareness of the BIT Rules should become so widespread that assessment by an independent body is no longer necessary. Such a transformation of the ICT culture should eventually render the BIT redundant. With this in mind, the BIT is intended to have a lifespan of five years, with the option to extend it for a further two years if necessary.

Information

BIT judgements must always be followed. The BIT is to assess projects that fall under the responsibility of different ministers, and it can decide to terminate these projects in the planning or implementation phases. For this reason, the BIT should preferably be established by law. Its duties and powers, including the BIT Rules, should be laid down in either primary legislation or orders in council. Moreover, the regulations should stipulate expressly that the ministers concerned must accept and follow up on BIT decisions.

In addition, the BIT should keep the House of Representatives informed about government ICT projects. This means informing the House of all its negative and conditional assessments, through both the Ministry of General Affairs and a new version of the (currently useless) Government ICT Dashboard (Rijks ICT-dashboard). A proposal for changes to the substantive content and presentation of this tool is included in this report. As for the House itself, it is essential that it actually act upon the information provided.

The information used by the BIT to make its assessments should be submitted through the CIO system. Ministerial CIOs will have the duty to supply this material, apart from their current task to make their own standard assessments of projects within their own departments. Ministerial CIOs will be members of the civil service management team. The director of the BIT will join the Interministerial Committee of Chief Information Officers (Interdepartementale Commissie Chief Information Officers, ICCIO). Moreover, the BIT should be empowered to autonomously gather information on project progress.

Establishment

The BIT should be established as quickly as possible. To achieve this, the government will have to make a number of significant changes to its own organization as well as probably drafting new legislation. Moreover, given the tasks entrusted to the BIT, the government will need to employ people with a high degree of expertise. For these reasons the Committee proposes 1 April 2015 as the bureau's date of inauguration.

2. Politicians may not realize it, but ICT is everywhere

The House of Representatives, the Cabinet and politicians in general do not fully realize the extent to which ICT has permeated every area of government policy and domain of public administration. The House does not display sufficient involvement when ICT projects are initiated. This means that it makes requests, and the Cabinet makes commitments, which in many cases would not pass the BIT's basic criteria. A lack of ICT awareness makes it difficult to enter into meaningful debate with the House on ICT-related topics. Given the omnipresence of ICT in this day and age, this deficiency adversely affects the very core of the task of government. The Committee has been forced to conclude that the ICT awareness of both the House in general (members, party groups and officials) and the Cabinet is woefully inadequate.

Recommendations

- a. The House of Representatives must examine the technical feasibility and lead times of ICT projects in greater depth before making its political choices. For this reason the House should include in its Rules of Procedure the provision that, at the request of a member, motions and bills be assessed by the BIT. In its turn, the BIT should inform the House of the consequences of the choices the latter makes.
- b. The House must become aware of the importance of ICT. From now on, therefore, the induction programme for new MPs should include ICT-related issues. Specific ICT briefings could also be introduced for the party groups, providing them with an opportunity to receive more in-depth information and put questions. The BIT could give these briefings. In any case, the BIT should introduce itself to the groups and explain its role in the work of the House.
- c. The House should make more use of existing tools like the Major Projects Scheme (Regeling Grote Projecten), and actually do something with this more extensive supply of information.
- d. The Committee specifically requests that the Cabinet henceforth explicitly consider ICT in its decision-making processes, in a structural manner. This could be done by including a reference framework for ICT on the checklist accompanying proposals to be discussed by the Council of Ministers ("ministerraadsformulier"). A decision could also be made to include a section on ICT in policy documents and the explanatory memorandums accompanying parliamentary bills.

3. The government is not achieving its policy ambitions for ICT

Within government, there is insufficient overall authority and centralised control in order for its declared ICT policy ambitions actually to be achieved. The Committee notes that the governance in this area is inadequately organized. Moreover, the cost savings and societal benefits resulting from ICT policy in general are not visible. This poor structure and lack of insight into costs and savings are impeding the government in achieving its desired results.

The present distribution of the ICT portfolio across no fewer than four ministries indicates just how poorly the government is exercising control over policy in this area. The situation is not helped by the fact that the ministers responsible and the officials involved lack sufficient decisive power. For example, at present the national government CIO has no more power than his ministerial counterparts. His most important weapon is his power of persuasion. The independent position of the individual ministries is also an important factor here. Moreover, the sheer number of governmental bodies involved in ICT matters makes the situation chaotic and unclear. Some improvements have been made in recent years, such as the centralization of ICT procurement and the clustering of facilities, but much remains to be done.

Recommendations

- a. Ensure more centralized control of government ICT policy. Make one minister responsible for policy surrounding ICT project management, digital services and the shared government ICT. The Committee also emphasizes that the range of bodies involved in ICT should be reduced, streamlined and simplified in the short term.
- b. Changes must be made to the national government CIO's position and powers. At present he has no more power than his ministerial counterparts. His most important weapon is his power of persuasion. Instead, just as in the business world, he should be given greater authority and decisive powers in respect of overall ICT policy. These changes should be implemented immediately.
- c. The cost savings and societal benefits of ICT policy in general must be made visible. A summary of the amount of taxpayers' money saved through the ICT strategy, the open source policy and the expansion of digital government should be included in a separate chapter in the annual report of the central government's operations.
- d. The government has already decided to choose open source and open standards wherever possible. However, this policy is still not being implemented sufficiently in practice. This needs to change: not only can this approach bring about enormous cost savings, but also opens the door to criticism and dissent.
- e. Continue the centralization of ICT procurement and government-wide ICT facilities. The committee sees positive developments in this area, which would benefit from an acceleration of the process.

4. The governance structures for ICT projects are very poor

The Committee notes that, all too often, the tasks, roles and responsibilities related to government ICT projects have not been properly established, are fragmented and unclear. Moreover, it is not clear who is in charge of projects. As a result of this "shared non-responsibility", project control and management are dysfunctional.

The management of ICT projects breaks down due to the marginal involvement of managers and users, a lack of learning ability and self-criticism, insufficient exchange of information *between* projects (portfolio management) and a shortage of information *within* them, including even an understanding of their the scope or the personnel involved (operational information). This latter point is of particular concern for the Committee. The course of ICT projects is far more predictable than is often supposed. Many patterns can be identified within them, including the fact that large projects are significantly more likely to fail than smaller, and that deploying more staff to them can actually result in lower productivity.

Taking these patterns into account when managing projects can prevent failure. For example, a large project could be divided into smaller, less risky subprojects. Thus, discovering such patterns can increase the government's learning ability. In order for this to work, more management

information is needed than is presently available. Moreover, the amount, quality and presentation of public information regarding ICT projects – such as that brought together in the annual report of the central government's operations, and in particular in the Government ICT Dashboard – remain inadequate.

Recommendations

- a. All ICT projects under government auspices, including those at executive agencies, should be assigned a project organization with clear management. The same department or individuals should be responsible for implementation from beginning to end. Also, a single minister should always bear final responsibility for any ICT project in which there is major public interest, even if its implementation is in the hands of an executive agency or other party.
- b. Allow ministerial CIOs to give greater priority to managing ICT projects and give them more decisive powers. Those CIOs employed by central government should be members of their ministry's executive committee.
- c. Improve the quality of information regarding large and high-risk ICT projects in the annual reports, and expand it. Add data on the scope of the project in terms of what the system is capable of (functionalities), the quality and the size of the team, as well as the names of the suppliers involved. In addition, the content and presentation of the Government ICT Dashboard should be improved and this tool should be updated regularly and realistically.
- d. Continually and consistently gather information about as many government ICT projects as possible, including BIT assessments. Use analyses of this information, and of any patterns found, to advise project managers effectively.
- e. Ensure that the government is able to effectively prioritize ICT projects. This can be done based on previous experience with projects and by exchanging knowledge and information between projects (project portfolio management). Adapt the existing *Portfolio Management Handbook* (Handboek Portfoliomanagement) so that it provides a high-quality basis for professional ICT portfolio management.

5. The government is insufficiently aware of the costs and benefits of its ICT

The Committee notes that many problems arise at the start of ICT projects. A lot of planned projects are in fact trying to achieve the impossible. They are too large and too complex, even though statistics show that especially projects of this kind are particularly prone to failure. Moreover, many projects lack a good business case. The business case is all too often regarded as a mere formality, a way of receiving approval to spend money, after which it disappears into a drawer. "*Businesscase, klaar is Kees*" ("The business case is done, and that's that"), was a much-heard phrase during the hearings. In reality, it is hugely important that the business case be reviewed and updated regularly during the course of a project.

According to the Committee it is indisputable that failing ICT projects should be terminated as early as possible. At present, principals too often realise that a project is at risk of failure only when it is already too late. A realistic and up-to-date business case that is reviewed regularly can limit the damage. Good justification is essential in order to reach the right decision on whether to terminate or continue with a project.

It is truly lamentable that the government has no overall picture of the cost of its ICT projects, never mind an overview of the cost of management and maintenance of ICT systems. At present, too many different methods are used to calculate and monitor these costs. It galls the Committee that the government was able to produce useable overviews of these costs until 1995. It is even more painful that the House failed to take sufficient action when the then Minister of State for the

Interior announced in that year that such overviews would no longer be compiled because they were “of no practical use”.

Recommendations

- a. Do not use the business case only at the start of a project, but review it at regular intervals throughout the entire process and update it as and when necessary. If a project can no longer be justified objectively, action should be taken to terminate it.
- b. Introduce a compulsory initial test for projects worth more than €5 million with a significant ICT component. This should be used in the policy phase to confirm that a proposed project is technically feasible, before a detailed plan is compiled. The test should take the form of either a "starting gate" (an initial test by and for colleagues, part of the Gateway Reviews) or of an assessment of the policy plans by the BIT. Its results should be included in the business case, and the BIT should take them into account in its general assessment of the project plan under the BIT Rules.
- c. Ensure an annual overview is issued of government ICT costs, including personnel, management and maintenance expenditure. This overview should also include the costs incurred by executive agencies. Including a thorough comparative analysis of the figures, the overview should be submitted to the House as a document in its own right and also published on the new and improved Government ICT Dashboard.

6. The government’s ICT knowledge is inadequate

The government does not have sufficient in-house knowledge to manage ICT properly or to conduct large, high-risk projects in this domain. There is a good reason why many people have said that senior officials are “subconsciously incompetent”. This is partly because there are very few true ICT experts in the labour market. According to a number of people the Committee spoke with, such experts often feel that the salaries offered by the government are too low. This aspect needs further investigation, but in any case the Committee notes that it has proven difficult to bring ICT know-how up to the required level and maintain it there. The government needs to consider what ICT knowledge is essential to have in-house.

Additionally, many policy-making staff lack the expertise needed to recognize the importance of ICT. This means that they do not always sufficiently appreciate the consequences of their policy proposals for the government’s ICT systems. At present, indeed, there is an almost unbridgeable gap between ICT and policy departments.

Recommendations:

- a. Ensure that the government employs enough high-quality ICT experts. This will enable it to be a better and more expert commissioning body, as well as a more competent partner for the market. Whether the government is unable to attract good experts because the salaries are too low should be investigated. Whatever the results of that exercise, the Committee feels that any solutions should fit within the existing government salary structure which itself should display more flexibility.
- b. Develop a centralized, structural ICT education programme for principals and project leaders within the government. For example, introduce an internal certification of project leaders of large-scale projects, as has been done in the United Kingdom. Also ensure that these people remain in government service for a longer period of time. Those who bring projects to a successful conclusion (which can also mean terminating failing projects on time) could be rewarded by promoting them to larger, more high-risk projects. Those who are not up to this task should be taken off ICT projects. Project managers should continually share best practices.

- c. Make ICT a permanent component of the internal training of all civil servants. Everyone employed by the government should have sufficient ICT knowledge to gauge the consequences of their work in that domain. This is of particular importance in the policymaking departments.

7. ICT project management is weak

The organizational structures and processes within projects (the project management) are inadequate. Project staff do not have sufficient expertise, and it is not clear who is responsible for what. In many cases, insufficient thought is given to such management aspects as time, money, quality and scope. Generally accepted project-management procedures are used, but are not applied properly, or only in part. This means that risk management at the government is inadequate and principals are insufficiently involved in their projects. Moreover, in many cases the interests of the end user are completely forgotten.

In addition, not everyone working on an ICT project has the same information. Knowledge held by those implementing the project, such as programmers and testers, frequently fails to reach other relevant parties (in particular the senior officials and managers). A lack of knowledge among managers outside the project organization leads to unrealistic expectations concerning the lead-time, budget and quality of a project. This leaves them incapable of properly judging its progress and risks and of making any necessary adjustments. The hearings revealed that those implementing the project do have this information, but often just tell the decision-makers what they think they want to hear.

Recommendations

- a. The ministerial CIO should make sure that roles and responsibilities are clearly understood. Ensure that a single senior official bears final responsibility for a project. In principle, those in strategic positions within a project (such as the principal and the project leader) should remain in place throughout its entire course.
- b. Ensure that it is in everyone's interests that the project be successfully concluded. For example, draft results-based agreements so that a supplier is only paid in full once the principal is satisfied with the end result. Incentivize officials by offering the prospect of a financial reward or enhanced career prospects for successfully concluded projects. Conversely, failure should also have consequences for the officials involved. If at all possible, reach agreement with senior officials that they will not leave their positions so long as they are responsible for a high-risk project.
- c. Those implementing the project and *every* layer of management should provide senior officials and managers with realistic information concerning its progress. If anyone withholds important information, this should have financial, career or other consequences.
- d. Make it a requirement of government human resource policy that officials have sufficient ICT knowledge to perform their work. This ensures that officials and administrators personally understand relevant decisions concerning the project's progress. Using clear language and avoiding jargon are of great help.

8. ICT procurement processes incorporate perverse incentives

The Committee is astonished that there has been no explicit, in-depth attention to ICT procurement processes before now. It is during the procurement phase itself that choices are made and agreements reached which influence the entire further course of the project.

The Committee notes that the relationship between the government and its suppliers is immature and contains perverse incentives. Despite its inadequate ICT knowledge, the government often thinks it knows better than the market. During procurement processes it rarely gives suppliers the opportunity to contribute their own ideas or solutions. Tenders are often extremely specified and procurement processes are lengthy and expensive for the supplier, placing too much weight upon the pricing. Suppliers should refuse impossible projects by either not submitting a quote or by reporting the unfeasibility to the principal and the BIT. However, the government's procurement processes do not contain sufficient incentives to do this. Consequently, interests that should come together in the tendering and award phase in fact diverge. In this scenario, expecting suppliers to act in the interests of the government is like asking the fox guard the henhouse.

Many people have pointed out to the Committee the restrictions that the strict procurement rules place on the government. However, the Committee notes that far too little use is made of the possibilities actually provided by these rules.

Recommendations:

- a. Compel the government always to consult the market before and/or during procurement processes. If consultation is not useful or possible for any reason, this decision should be justified ("comply or explain"). Ensure that this obligation is included in the new Public Procurement Act when it is amended of 2016. The nature of such consultations may of course vary from project to project (market consultations, feasibility tests, competitive dialogues, et cetera).
- b. Make functional procurement compulsory unless the principal can explain satisfactorily why this would be detrimental to a specific project. In practice, this means that specific technical details are left to the supplier. Include this obligation in the amended Public Procurement Act of 2016.
- c. From now on, past performance should be taken into account when evaluating tenders. This is not the case at present. Nor is at this time any systematic record kept of supplier performance in previous ICT projects. The new European directives offer an opening to exclude deficient suppliers from future procurement processes. For this reason, make a record of past performance compulsory under the amended Public Procurement Act in 2016.
- d. Draw up a code of conduct for ICT suppliers. Every supplier responding to an invitation to tender must sign this. Moreover, it should be included in new ICT contracts between the supplier and the government. The code should include definitions of what it means to be a good principal and a good contractor, as well as the associated duty of care. The code of conduct should take the existing "good tendering code" by Nederland ICT into account.
- e. Explore the opportunities offered by the Public Procurement Act. Do not just point out what is not possible, but rather what is possible. For example, consider reformulating provisions such as, "contracting authorities may (under certain circumstances) apply a competitive dialogue" to read "Competitive dialogue must be applied". This will force the government to make avail of the already existing opportunities under the rules in place. Also, explore other forms of procurement (such as Best Value Procurement), which may simplify the processes involved. This would prevent the exclusion of small companies, which often occurs at present due to the stringent requirements and high cost of procurement procedures.

9. The contract management of ICT projects is unprofessional

Much is wrong with the current contract management of government ICT projects. The Committee notes that whilst strong contracts are usually drawn up and signed during the procurement process, these subsequently tend to disappear from view. Additional work and Time and Materials constructions are all too frequent. Managers do not sufficiently monitor compliance with the original

agreements by the principal and the supplier. Moreover, it takes too long for problems to surface. There is not enough structural consultation between the principal and supplier during the project, and what consultations do take place occurs at the wrong levels within the organizations concerned.

The contracts themselves are not always drafted properly, so that important agreements are missing. Often, for example, there is no agreed procedure for making changes during the project (change management). There also tend to be few exit clauses, which determine when a project can be terminated early and what the consequences of such termination will be. Nevertheless, court cases are very rare. Instead, disputes are settled between the parties themselves, in confidence and – insofar as the Committee has been able to ascertain during its hearings – often with a certain degree of nonchalance about the sums of money involved. The Committee's conclusion, therefore, is that the government's contract management of ICT projects lacks in professionalism.

Recommendations

- a. The ministerial CIO should ensure that the government adopt a more professional and engaged position as the principal in ICT projects. More and better consultation is needed between the principal and the contractor during the contract phase, at the right levels and with daily involvement on the part of the principal. In this way the principal should be able to discover nascent problems at an earlier stage and intervene more effectively, thus preventing failures.
- b. Avoid additional work as far as possible, and avoid the use of hourly rates. In the rare event that such a rate has to be used, firm agreements about it should be included in the contract so as to prevent a "chargeable hours" mentality from setting in. The ministerial legal affairs departments should ensure this does not happen. If a fixed price is agreed, ensure there is a firm agreement concerning additional work and stick to it. If working on an hourly basis is the best choice, ensure there is an obligation to produce a specific result rather than merely a commitment to a best effort. Draft agreements in such a way that it is to the supplier's advantage to complete its work on time and to the agreed quality. In this way you ensure that any perverse incentives are turned into positive incentives.
- c. Always include exit clauses and procedures for changes to the project in contracts. Ensure that both sides are clear about what actions are needed to change the quality or scope of the product or service to be provided, or to terminate the project if necessary, and what the consequences will be.
- d. Once a contract has been signed, do not tuck it away in a drawer. Instead, use it. A contract contains a clear and detailed description of the agreements made. It has been signed by both the principal and the contractor, so hold them to the agreements it contains. Intervene promptly if there are problems, and do not be afraid to take legal action should this prove necessary.

10. The government lacks the ability to learn from its mistakes concerning ICT

The above conclusions, and the underlying analysis, show that the failure of government ICT projects is due to a combination of many different elements. Most of these have already been mentioned in other reports and investigations. Yet large-scale projects of this kind continue to fail time and time again. Consequently, the Committee believes that one of the most important causes of these failures is an inability by the government to learn from its mistakes. The most recent flagrant example of this is a major project at the Social Insurance Bank (Sociale Verzekeringsbank, SVB), SVB Tien, which was cancelled in September 2014 after eight years, with all the financial and other consequences that entailed.

The Committee believes that a change of mentality is needed. The government must recognise and acknowledge that much is going wrong. To take the most recent example, SVB Tien, it was only at the last minute that it became clear that a large subproject within this programme was going to fail. The Government ICT Dashboard typifies the lack of urgency concerning ICT projects: even once the SVB project had been officially terminated, all the lights were still green – status normal.

It is high time that the government started learning from its mistakes. To achieve this, the House of Representatives must properly fulfil its scrutinizing role in the field of ICT. The findings of earlier investigations in this domain have resulted in changes of structure, whereas it should actually involve a change of behaviour and working methods. With the establishment of the BIT within the context of the other recommendations made in this report, the Committee offers a firm foundation for this change in behaviour.

In summary, the Committee recommends the following.

1. Establish a temporary ICT authority to act as a project gatekeeper: the BIT (Bureau ICT-toetsing).
2. The House of Representatives should include in its Rules of Procedure the provision that, at the request of a member, the BIT assesses motions and bills.
3. The House should increase its ICT awareness, for example by including ICT in the induction programme for new MPs and maintaining regular contact with the BIT.
4. The House should make more use of existing tools like the Major Projects Scheme (Regeling Grote Projecten), and take action based on this more extensive supply of information.
5. From now on the Cabinet should explicitly consider ICT in its decision-making processes, in a structural manner, weighing up the possible consequences and risks of its decisions from that perspective.
6. The government should introduce more central management of its ICT policy, among other things by appointing a single minister responsible for policy concerning ICT project management.
7. The national government CIO should be given more authority, including decisive powers over the implementation of general ICT policy.
8. The cost savings and societal benefits of ICT policy in general must be made visible.
9. The government should take steps to ensure that its “comply or explain” policy in respect of open source software and open standards is observed.
10. Continue the centralization of ICT procurement and government-wide ICT facilities.
11. Clearly define roles and responsibilities within all government ICT projects, including those at executive agencies. A single minister should always be responsible for any ICT project in which there is a major public interest.
12. The ministerial CIOs should give greater priority to managing ICT projects and should be granted more decisive powers.
13. The quality of information in the annual reports on large and high-risk ICT projects should be improved. Ensure that the Government ICT Dashboard contains useful information as soon as possible.
14. The government should continually and consistently gather and analyse information on as many ICT projects as possible, and project managements should make use of any patterns found.
15. The government should ensure that it is able to set effective priorities for all its ICT projects.

16. The business case should be used not only at the start of a project, but throughout the entire course of the project.
17. Introduce a compulsory initial test for projects worth more than €5 million with a significant ICT component.
18. Ensure an annual overview of government ICT costs is issued.
19. Ensure the government employs enough ICT experts.
20. Introduce a centralized, structural ICT education programme for principals and project leaders within government.
21. Make ICT a permanent component in the internal training for *all* civil servants.
22. The ministerial CIO should ensure that roles and responsibilities are clearly understood.
23. The government should ensure it is in the interests of all involved that a project reach a successful conclusion.
24. Those implementing the project and every layer of management should provide their senior officials and managers with realistic information concerning its progress.
25. Make it a requirement of government human resource policy that officials have sufficient ICT knowledge to perform their work.
26. The government is always to consult the market before and/or during procurement processes, on the basis of a "comply or explain" policy.
27. Make functional procurement compulsory and subject to a "comply or explain" rule.
28. From now on, a supplier's past performance should be taken into account when evaluating tenders.
29. Draw up a code of conduct for ICT suppliers, which includes definitions of what it means to be a good principal and a good contractor, as well as the associated duty of care.
30. Make better use of the existing opportunities offered by the Public Procurement Act.
31. The ministerial CIO should ensure that the government adopt a more professional and engaged position as the principal in ICT projects.
32. The government should avoid additional work and the use of hourly rates, turning any perverse incentives into positive incentives.
33. Contracts should always include exit clauses and procedures for changes to the project.
34. Make sure that contracts are not forgotten after they are signed, but are actually used throughout the project. Legal proceedings in the event of a default should be regarded as a normal course of action.