

Chapter 9

ICT management

This chapter focuses on recent developments in the area of ICT management. Attention is given to the organisation of ICT support services and to the tasks of ICT standard setters. Developments are moving fast in both areas as a consequence of e-government policies. Moreover, there is in all participating countries an increasing emphasis on net savings as an objective of ICT investments.

The reforms presented in this chapter focus on savings and preventing losses. For that purpose standards of ICT management have to be upgraded, including open and mobile standards, and the organisation of standard setting has to be streamlined. Furthermore, there are large opportunities for co-operation between sectoral divisions of ministries and agencies concerning ICT systems that are part of their primary process. These include the basic registers of population, land, legal persons and motor vehicles, but also systems that are used by a limited number of ministries and agencies, such as the tax administration, the police registers, the client registers of the social security agencies, the student registers and the registers of subsidy clients in various areas of government policy. Another area of co-operation that grows rapidly in importance is that of cloud computing. The use of public clouds can lead to substantial savings on software, hardware and services.

In many participating countries, there is an increasing concern about failing ICT projects. In order to minimise the probability of failure, several countries have established gateway procedures. The chapter presents one reform concerning recent, well designed and evidence based gateway procedures.

Introduction

ICT and Value for Money

Technology can make a difference in improving services and cutting costs, but it can do more than that. Technology enables the government not just to cut costs but to adopt fundamentally different ways of task performance. Government operations can be run differently, citizens can interact with government in new ways that focus on the needs of the individual.

Currently, many OECD countries are in the process of reviewing their ICT management procedures to ensure that IT solutions help generate savings, but also generate value for money¹. This means that today's governments are trying to find the right balance in ICT management between a pure cost savings perspective on ICT projects and the need to invest in the government of the future and to achieve the transformation ICT can also potentially bring.

The context of e-government policy

All OECD countries currently have plans and strategies in place for digitising government services, including the countries included in the study. These plans and strategies are profoundly changing the nature of public services provision and will continue to do so in the near future. Although, as argued in Chapter 1, this transformation is not seen in this study as the predominant feature of the next stage in the development of public administration, it is without a doubt an important feature, and it will, more than any other development concerning support services, have a profound effect on the practices of public administration. The transformation towards digital government entails particular challenges to ICT management. For a proper understanding of the reforms presented in this chapter, it is useful to pay attention to the context of e-government policy.

Although the countries included in the study are in different stages as far as the development of e-government is concerned, it is possible on the basis of current plans and strategies to identify a number of aims that countries seek to achieve. While the aims may differ from country to country, common components typically include:

1. The government sector should be accessible online to the extent possible. Digital information exchange should be the general rule for communication with the government.
2. Web-based services are to be the general rule for all services that consist of processing of cash payments (payments of taxes and fees by citizens and businesses to the government, and payments of subsidies, grants and social benefits by government to citizens and businesses), processing of legal decrees in individual cases (permits, licenses, concessions, admissions) and processing of access procedures for service delivery in kind (health services, education services, social services in kind, etc.).
3. Digital services should lead to an improvement of service delivery for citizens and businesses in the sense of cheaper, faster and simpler administrative procedures.
4. The government should focus service delivery on the needs of individual citizens and business. The importance of developing citizen and business centred services

is clear: the more user-centred and personalised government services are, the more their take-up is likely to increase and the more benefit can be realised.

5. Digitalisation of the government sector should free up resources for areas in need of more resources or for tax relief or deficit reduction.

An important new approach in e-government policy is known as “lean government”². This approach refers to the application of lean production principles and methods to both identify and then implement the most efficient way to provide government services. Government agencies have found that when lean methods are implemented, they see an improved understanding of how their own processes work, that it facilitates the quick identification and implementation of improvements and that it builds a culture of continuous improvement. Lean government proponents generally believe that the government should cut out “waste” and “inefficiency” from government organisations; this in turn will result in better services overall.

Other relevant initiatives focus on collection of information about public sector innovation. There have been various notable projects in Europe such as the “Measuring Public Innovation in the Nordic countries” (MEPIN) project or the UK government’s creation of a national Public Sector Innovation Index. The European Commission publishes an annual “European Public Sector Innovation Scoreboard” as a first EU wide attempt to better understand and analyse innovation in public sector (EC, 2013a). The OECD is developing an Observatory of Public Sector Innovation. The Observatory aims to systematically collect, categorise, analyse and share innovative practices from across the public sector, via an online interactive database (OECD, 2013a).

The tasks of ICT support service units

ICT support includes: advice concerning ICT solutions, development of ICT solutions and support in the procurement of ICT equipment and services (hardware, software, expertise).

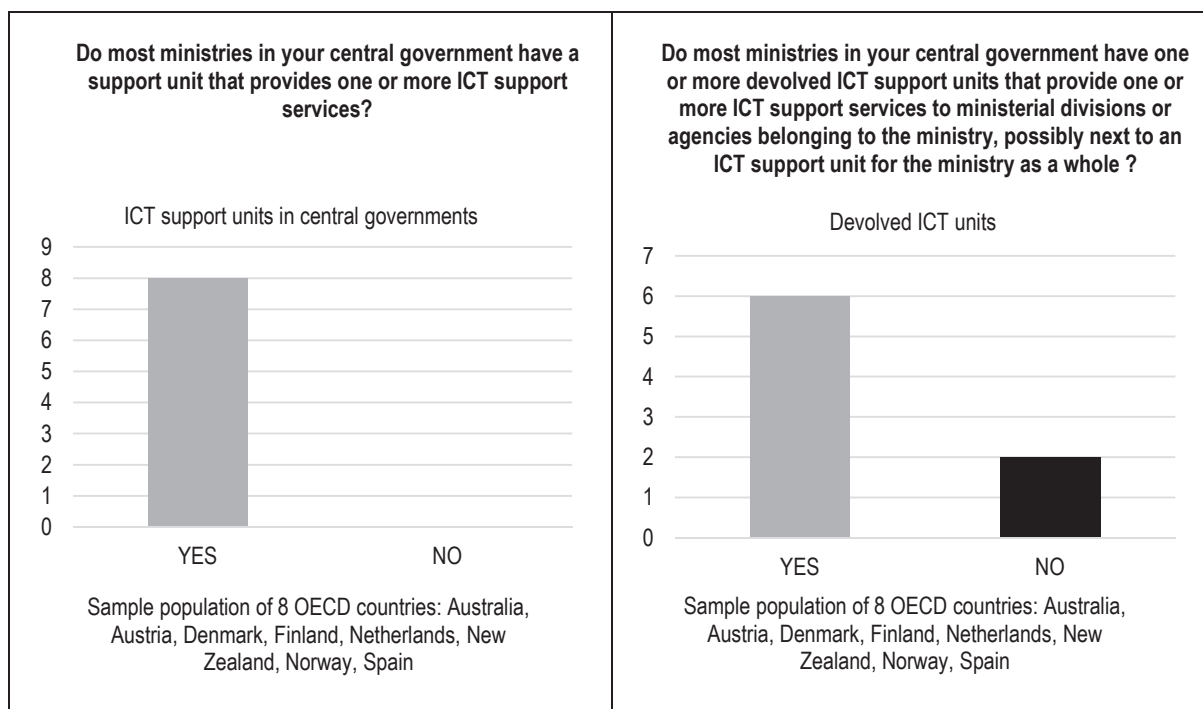
ICT support may also include the management and maintenance of ICT systems that can be considered as belonging to the primary process of the ICT units themselves as well as services connected to these systems. At the de-central level this typically includes: office automatisations, intranet, help-desks, website development and maintenance. At the central level this typically include: management of government portals and platforms for information exchange (including electronic IDs), digital citizen mailbox and government-wide intranet and information services.

According to the OECD Value for Money questionnaire all the countries that answered had ministerial ICT support units (Figure 9.1). These covered slightly different tasks, of which all included:

- Maintenance of an intranet or part of a wider internet;
- Providing desk top facilities;
- Providing a help desk for desk top facilities;
- Design and maintenance of common portals;

Most countries that answered had ministerial ICT support services but also had devolved ICT support service units in ministerial divisions and agencies.

Figure 9.1. ICT support services units



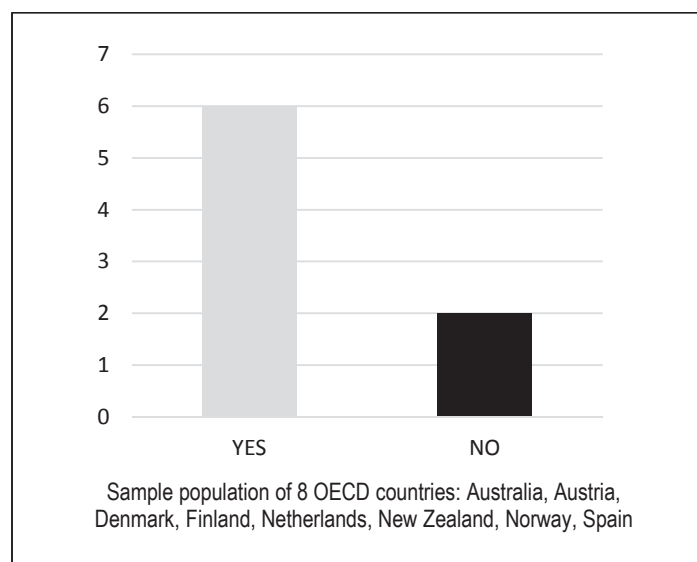
Source: Responses to the Value for Money questionnaire.

The separation of responsibility between units tasked with ICT support service delivery and line units can differ in the countries included in the Value for Money study. ICT support service units are sometimes responsible for the management and maintenance of ICT systems that are seen in other countries as belonging to the primary task of line units. However, in each country, there are ICT support units at the government level, as well as at the ministerial and sometimes division or agency level that have a different role and responsibility than the line units that make use of their services. Both types of units report in different lines of hierarchy and can thus clearly be distinguished in each country, although the task distribution may differ between countries.

As mentioned in Chapter 6, central support services are often organised as divisions or agencies of a central ministry (often Ministry of Finance or Ministry of the Interior or Public Administration). They provide services to the government as a whole. Examples are: the government's buildings office for accommodation, the government's purchase office for procurement, and the government's information office for communication. This also applies to central ICT support services.

Central support services can be distinguished from shared service centres. These centres are a relatively new phenomenon and have arisen in the last decade in order to rationalise de-central support services by concentration, allowing specialisation, economics of scale and a more attractive working environment for specialists. They are often organised as agencies of a central ministry as well, but they are generally tasked with de-central support service delivery. This distinction can also be observed in relation to ICT support services. Answers to the OECD Value for Money questionnaire reveal an increasing trend towards shared service centres for ICT support services (Figure 9.2)

Figure 9.2. Is there one or more shared support service centres in your central government that provide ICT support services to ministries?



Source: Responses to the Value for Money questionnaire.

However, in the fast moving area of ICT, the distinction between de-central and central support services is losing relevance. Therefore the focus in this chapter will be on support services provided at the central governmental level, regardless of whether they should be seen as genuine support services for the government as a whole or as shared services of ministries and agencies. The task of these units can be described as the development and maintenance of the central ICT infrastructure for the government as a whole.

This includes:

- a. advise to the government and to ministers and agency heads concerning ICT solutions, development of ICT solutions and support in the procurement of ICT equipment and services (hardware, software, expertise).
- b. ICT primary processes, including:
 - the development and maintenance of the central government portal and the technical platform for submission of digital forms to the government; the platform should also be able to provide for transmission of digital messages to and from the government and to provide access to publicly available data as well as to individual privacy sensitive data;
 - the development and maintenance of government-wide intranet and information services;
 - the development and maintenance of the digital mailbox for citizens and businesses;
 - shared services in the area of office automatisation, intranet, help-desks and website development.

The task of ICT standard setters

In order to achieve the aims of e-government, standards in the area of ICT must ensure that:

- the government provides unified and user friendly digital services;
- digital service provision is obligatory for businesses and specific citizens groups such as students; for other citizens it is the default option next to paper procedures, telephonic procedures and face to face procedures that must remain available for citizens unable to handle digital procedures;
- the government provides assistance to businesses and citizens in handling digital service provision through help desks as well as telephonic and face to face assistance;
- all citizens and businesses will receive mail from government in a secure digital mailbox and be notified about messages via post, SMS text messages and e-mail;
- protection of privacy and information security is safeguarded; this requires among other things electronic ID procedures;
- digitization measures of relevance for several services is co-ordinated; it must be ensured that citizens and business are to provide information only once;
- citizens and business have access to all databases held by the government that do not contain privacy sensitive data, including central registers (“open government”); and
- citizens and business have safe access to all data that the government holds about them and are able to correct these data.

Devolved standard setters in ministries are responsible for the implementation and specification of central standards within ministries and the agencies under their umbrella and may set additional ministry specific standards.

Savings through ICT

In their endeavours to digitise public service provision, OECD governments are trying to find the right balance between a pure cost savings perspective on ICT projects and the need to invest in government of the future and to achieve the transformation of service delivery that ICT makes possible.

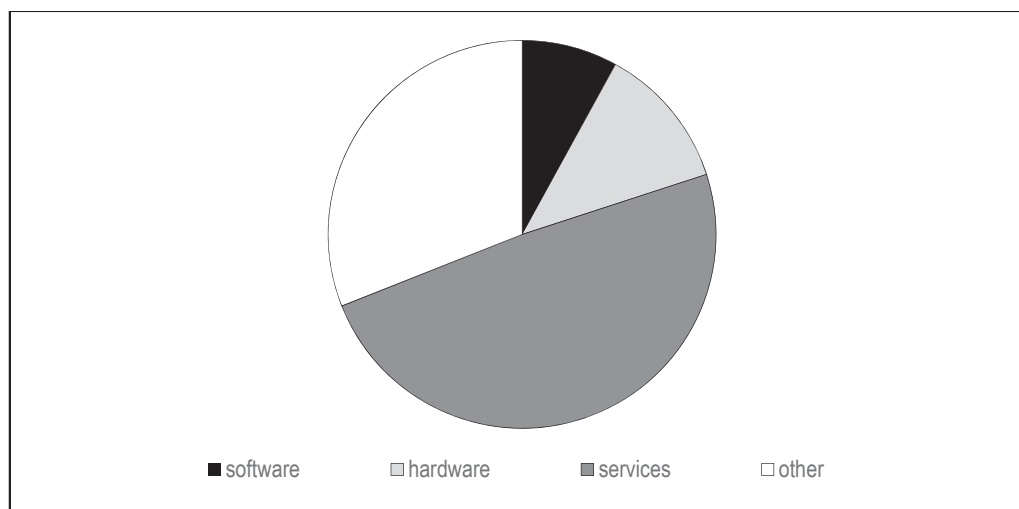
In order to record savings, it is necessary to first define ICT expenditures. This is not an easy task, as ICT expenditure cannot simply be equalled with the expenditures of ICT support units. Since ICT is a tool that is used in the primary process of line units of ministries and agencies in the first place, its costs must be composed of ICT costs in line divisions as well of the costs of support units.

The recent “UK Public Sector ICT Overview and Forecast to 2014/15” report³, published by Kable in November 2009, lays out the following break-down of ICT spending in the UK as an example.

In 2009, the UK public sector spent a total of GBP 17.9 billion on ICT (Figure 9.3). Of this, 8% (GBP 1.4 billion) was spent on software. A further 12% (GBP 2.2 billion) of the total spent was on hardware whilst the largest single category was for services which

consumed 49% (GBP 8.7 billion). Of services, the largest sub-category is IT outsourcing at GBP 4.9 billion (56% of the total Services cost). The costs of ICT support services of the government and of ministries and agencies were equally recorded as services.

Figure 9.3. ICT spending in the UK



Source: UK Cabinet Office (2012a).

The UK governments report “One Year On: Implementing the Government ICT Strategy” (UK Cabinet Office, 2012a) mentions the following savings at central government level from May 2010 to March 2011 prior to the publication of the ICT strategy:

- GBP 300 million by applying greater scrutiny to ICT expenditure and departments stopping or reducing spending on ICT projects which show a low return on investment;
- GBP 570 million from renegotiating deals with some of the largest suppliers to government;
- GBP 140 million by centralising procurement.

In 2012 the UK’s Cabinet Office reported the following savings:

- GBP 159.6 million by demanding a rigorous business case for any significant ICT spend;
- GBP 140 million of the GBP 490m saved by centralising procurement of common goods and services;
- GBP 64.2 million from telecommunications networks budgets by applying better, common standards.

In response to the OECD’s questionnaire, the Australian government noted that the Australian Government initiated an independent review of the Australian Government’s use and management of ICT in 2008. The review provided a comprehensive and detailed analysis of a wide range of issues affecting the Government’s use and management of

ICT and also outlined a staged plan for the implementation of recommendations. In November 2008, the Government endorsed recommendations of the Review in full and initiated the ICT Reform Programme. Phase one of the programme was completed with savings of approximately AUD 570 million being identified. The completion of the second phase of this programme has now been completed with savings of close to AUD 430 million identified between 2010-11 and 2012-13.

In the Netherlands an attempt is under way to estimate the costs of ICT according to the scheme of Table 9.1. The scheme makes a distinction between the costs of ICT support units (“administrative costs” or “apparatus costs”) and ICT costs as part of the primary process of line ministries and agencies (“programme costs”).

Table 9.1. Costs of ICT

	Hardware	Software	Outsourced services	Inourced services
Programme costs				
Administrative costs				

Sources: Responses to the Value for Money Questionnaire and update from the Ministry of the Interior and Kingdom Affairs.

ICT reforms can give rise to savings in three different ways:

1. Central standard setters may impose reforms of the central ICT infrastructure. This leads in general to additional costs of ICT support units (administrative costs) and savings on the costs of the primary process of line ministries and agencies (programme costs, including ICT programme costs);
2. Central standard setters may impose reforms to increase efficiency or adjust the service level of ICT support services. This leads in general to lower costs of ICT support units (administrative costs);
3. Line ministries or agencies may adopt reforms of ICT applications in their primary process. This leads in general to savings on the costs of the primary process of line ministries and agencies (programme costs, including ICT programme costs).

Examples of reforms of the first kind concern the shift towards “Digital by default” as were implemented in the UK and Denmark (see Box 9.1 and Box 9.2).

Box 9.1. Digital by default in the UK

In June 2012 the UK government published its Civil Service Reform Plan that stressed the need for change in response to the economic downturn coupled with rising consumer expectations. The Plan stated: “The public increasingly expects to be able to access services quickly and conveniently, at times and in ways that suit them, and the Civil Service needs to meet these expectations rather than expecting citizens to meet the Civil Service’s processes. It needs to become Digital by Default, in its skills, its style, how it communicates and how it enables service users to interact with it”. Digital by Default means that digital services should be so straightforward and convenient that all those who can use them will choose to do so, whilst those who cannot access digital services should not be excluded.

Following on from the Civil Service Reform Plan the Government published its Government Digital Strategy in November 2012. This strategy document sets out how government will redesign its digital services to make them so straightforward and convenient that all those who can use them prefer to do so.

The strategy:

- follows the March 2012 Budget commitment to digital services being the default;
- has been developed collaboratively across government, as part of the Civil Service Reform Plan;
- has been followed up with departmental digital strategies, published in December 2012;
- is supported by a cross-government approach to assisted digital provision.

The strategy also describes how delivering services digitally will result in savings of GBP 1.7 to GBP 1.8 billion each year, and commits government to a series of actions that are mainly about transactional services such as applications, tax, licensing and payments. The strategy explains how the civil service will develop new skills and approaches to complement its existing expertise. It also includes actions to improve the way the government makes policy and communicates with people.

Sources: UK Cabinet Office (2012a, 2012b); UK Government (2012b).

Box 9.2. Digital by default in Denmark

Denmark has a long tradition of digitization and has been ranked as world-leading and trendsetting in many independent international surveys. Since the mid-1990s, Denmark has developed ICT in government and in society through ambitious information society plans. Since 2001, Denmark has focused on how to reap the full benefits of using ICT in the public sector. Digitisation of the public sector has therefore been a key contributor to public sector modernisation for more than 15 years.

Building on a digitally mature population, the Danish government approved a new e-government strategy and action plan for the period 2011-2015. Across the whole of the public sector digitisation is aiming at: permanent cost-savings of €403 million, 80% digital communication in the public sector by 2015, and demonstration and documentation of work-saving potentials along with making the public service delivery easy to use, efficient and effective through digitization.

A key component of the strategy is to move users online, including using an important policy lever of regular so-called “e-days” as deadlines and targets by which specific milestones become mandatory, not only for the public agencies but also for citizens and companies.

Box 9.2. Digital by default in Denmark (*continued*)

Denmark has an excellent starting point for reaping the full benefits of ICT use in the public sector. As the Danish population generally is ready for e-government services (among the highest uptake of computers and the Internet in Europe), Denmark has taken the next logical step towards making mandatory the use of online public services. A government strategy and action plan covering the period 2011-2015 will – when fully implemented – make “digital by default” a reality for citizens and businesses and public service delivery more cost-efficient.

Source: Danish Government (2011).

Reforms of this chapter

The current chapter presents three reforms in the area of ICT management that fit in the current trends to digitise public service delivery while ensuring both savings (for the government) and improved service quality through faster, cheaper (for citizens and businesses) and simpler administrative procedures.

These reforms focus on:

1. Improvement of ICT standards;
2. Common ICT process units;
3. Stricter gateway procedures for new ICT projects.

This chapter focuses on ICT management in central governments and has not been intended to deliver an extensive review of ICT adoption in government, e-government or of innovative government solutions (such as the potential of social media for government, and collaborative government solutions). These issues are examined by OECD reports⁴.

Reform 9.1. Improvement of ICT standards

Characteristics of the reform

This reform consists of the setting of government wide standards that aim to ensure safe communication and transmission of data between governments and citizens/businesses and between units of government, as well as interoperability within government and public accessibility of data and data sources, including from mobile devices. The reform does not cover all standards as mentioned in the introduction but it covers a large domain⁵.

Where did it occur?

Countries that are at the forefront of innovation in the area of ICT standard setting include the UK and Denmark.

Analysis

Key areas of standard setting.

Standard setting is defined in this study as issuance of general rules with respect to operational management. Managers responsible for operational management have to

respect these rules. These standards are generally set for the whole of central government by authorities who are located in central ministries (Finance, Interior of Public Administration, and Prime Minister). Furthermore, central standards are often complemented by de-central standards which are set by the permanent secretaries (highest civil servant) of the ministries.

In order to facilitate the wider diffusion of electronic administration, it is important for citizens to have confidence that electronic procedures are performed as securely, efficiently and under the same legal safeguards as traditional paper-based procedures. This calls for strict government wide standards.

Standards lay the foundation for a sound e-governance architecture, which should be open and technology neutral, thus ensuring vendor independence. Standards based applications can be customized easily, enabling faster deployment. Standards facilitate interoperability and process sharing between units of government.

Key areas that need to be addressed in the reform of ICT standards include:

- Standards for authentication and trust services;
- Interoperability standards;
- Open standards;
- Mobile standards.

a. Standards for authentication and trust services

One of the areas where most savings can be achieved is the area of transactional public services. Electronic transactions require authentication and trust services. Furthermore, authentication and trust services are the backbone of all online activities. For instance, electronic authentication provides assurance as to whether someone or something is who or what it claims to be in a digital environment. Thus, electronic authentication plays a key role in the establishment of trust relationships for electronic commerce, electronic government and many other social interactions. It is also an essential component of any strategy to protect information systems and networks, financial data, personal information and other assets against unauthorised access or identity theft. Electronic authentication is therefore essential for establishing accountability online.

Authentication and trust services are provided by electronic identification (eID) and electronic trust services (eTS) and include electronic signatures, electronic seals, time stamp, and website authentication. These procedures are inseparable and are needed to ensure legal certainty, trust and security in electronic transactions. The OECD has carried out several initiatives to support Member countries' efforts. The importance of authentication for electronic government and global electronic commerce was recognised in 1998 by OECD Ministers at the Ministerial Conference "A Borderless World: Realising the Potential of Global Electronic Commerce" held in Ottawa, Canada (OECD, 1998a). In their "Declaration on Authentication for Electronic Commerce" (OECD, 1998b), Ministers outlined a number of actions to promote the development and use of electronic authentication technologies and mechanisms (OECD, 2007b).

The EU has also taken the initiative to define EU standards for these procedures (Box 9.3) to work on cross-border solutions.

Box 9.3. e-ID and trust services in Europe – towards a common framework

The European Commission has recently adopted a new regulation on electronic identification and trust services for electronic transactions in the internal market (June 2012). It is aimed at ensuring cross-border legal recognition of electronic IDs, electronic signatures and other electronic authentication services in Europe as foreseen in the Digital Agenda for Europe. The measures will enhance trust in pan-European electronic transactions and enable electronic identification, authentication, signatures and related trust services, as well as a high level of data protection and user empowerment in the Single Market.

An Action Plan on e-Signatures and e-Identification has been adopted in 2008, with the aim to remove interoperability barriers.

Sources: EC (2013b); EU (2013).

b. Interoperability standards

Digital devices, applications and services should interact seamlessly anywhere, anytime. However, this is far from being the case across OECD countries. Fragmentation of technologies and services can hamper efficiency within the public sector and growth within the relevant ICT sector. Interoperability issues have been a growing development area in order to facilitate the seamless exchange of information. In the public sector these efforts are focused on the designing/adopting of Government Interoperability Frameworks (GIFs) and of Enterprise Architectures (EAs) for implementing interoperability, and increasingly issues such as better use of common databases.

The UK and Australia (Australian Government, 2013) have formulated an e-Government Interoperability Framework that lies at the heart of its strategy for ensuring that IT supports the business transformation of government to deliver better, more efficient public services (for the UK see box 9.4).

Box 9.4. UK's e-government Interoperability Framework

The UK's e-government Interoperability Framework (e-GIF) is based on the assumption that interoperable systems working in a seamless and coherent way across the public sector hold the key to providing better services, tailored to the needs of the citizen and business and at a lower cost. The e-GIF is one of the most mature of the national interoperability frameworks.

E-GIF is focused on specifications that are relevant to systems' interconnectivity. It sets out the government's technical policies and specifications for achieving interoperability and coherence of ICT systems across the public sector and defines the essential prerequisites for "joined-up" and web-enabled government.

The e-GIF's stated underlying principles are:

- Interoperability (only specifications that are relevant to systems interconnectivity, data integration, e-services access and content management are specified).
- Market support (the specifications selected are widely supported by the market, and are likely to reduce the cost and risk of government information systems).
- Scalability (capacity to be scaled to satisfy changed demands made on the system, such as changes in data volumes, number of transactions or number of users).
- Openness/transparency (the specifications are documented and available to the public at large).
- International standards.

Box 9.4. UK’s e-government Interoperability Framework (*continued*)

The e-GIF’s primary goals are to reduce the cost and risk for government systems while “aligning them to the global internet revolution” by facilitating the creation of interoperable systems that can work together coherently across the public sector in order to provide better and cheaper services, tailored to the needs of the citizen.

The e-GIF defines interoperability as the coherent exchange of information and services between systems, coupled with the ability to replace any component or product used in an interface with another of a similar specification while maintaining the functionality of the overall system. To be e-GIF compliant, a system should satisfy both of these requirements. Compliance is considered mandatory for all new systems that fall within the e-GIF scope. Public sector organisations, including government departments, their agencies, Non-Departmental Public Bodies, the National Health Service, devolved administrations (Scotland, Northern Island, and Wales), and local authorities are all bound by the recommendations and mandates of the e-GIF.

Source: Rothenberg, Botterman, van Oranje Nassau (2008).

c. Open standards

Many OECD governments aim to create open governments with the explicit policy aim to transform government services to make them more efficient and effective for users. The promise is that open standards will make public services simpler, clearer and faster for users and make government services more efficient. The main benefits of using open standards are: more choice of products and suppliers, less dependency on a single supplier, avoiding proprietary lock-in, stability or reduction in costs and the possibility to accommodate future changes more easily (Borras, 2004).

From a technology perspective, open standards encompass two key areas:

- **Open Data** – Leading Open Government advocate David Eaves (Eaves, 2009) defines Open Data as “the sharing of information government collects and generates freely towards citizens such that they can analyse it, re-purpose and use it themselves.” Nigel Shadbolt, a member of the UK government’s Public Sector Transparency Board (Shadbolt, 2010), uses a similar definition for his concept of “public data”: “public data is the objective, factual, non-personal data on which public services run and are assessed, and on which policy decisions are based, or which is collected or generated in the course of public service delivery.”
- **Open Source** –The Open Source Initiative (Open Source Initiative, 2013) defines Open Source as “a development method for software that harnesses the power of distributed peer review and transparency of process.” OSI has published a ten point definition of open-source software which covers issues of licensing, redistribution rights and derived works as well as source-code.

An example is the Open Government Initiative in the USA. It addresses many ICT areas such as open data standards (see Box 9.5).

Box 9.5. The Open Government Initiative in the USA

The Open Government Initiative is an effort by the administration of President Barack Obama to "creating an unprecedented level of openness in Government". On his first day in Office, President Obama signed the Memorandum on Transparency and Open Government, ushering in a new era of open and accountable government meant to bridge the gap between the American people and their government. The memorandum stated:

- The Administration is reducing the influence of special interests by writing new ethics rules that prevent lobbyists from coming to work in government or sitting on its advisory boards.
- The Administration is tracking how government uses the money with which the people have entrusted it with easy-to-understand websites like recovery.gov, USASpending.gov, and IT.usaspending.gov.
- The Administration is empowering the public – through greater openness and new technologies – to influence the decisions that affect their lives.

On December 8, 2009, the White House issued an unprecedented Open Government Directive requiring federal agencies to take immediate, specific steps to achieve key milestones in transparency, participation, and collaboration.

All Open Government milestones can be tracked on the Open Government Dashboard.

Source: United States Government (2013).

d. Mobile standards

The mobility of people and use of mobile devices necessitate the provision of anytime, anywhere access to government resources. Mobile government, m-government, is the extension of e-government to mobile platforms, as well as the strategic use of government services and applications which are only possible using cellular/mobile telephones, laptop computers and wireless internet infrastructure (see Box 9.6). The benefits of m-government can include cost reduction, efficiency, transformation/modernisation of public sector organisations, added convenience and flexibility, better services to the citizens and the ability to reach a larger number of people through mobile devices than would be possible using wired internet only⁶.

Box 9.6. Examples of projects looking to design better value for money with mobile solutions

NOMAD is a pilot National Project of the United Kingdom in which 9 authorities participate. It started in November 2003. The project aims to facilitate local authorities to begin mobile computing operations and assist staff to be more productive thus reducing operating costs, improving field worker productivity and increasing processing time.

The Mobile Public services (Mobud) project started in 2004 in Berlin, Germany, in order to solve public administration problems originating in low population densities in rural areas. As a consequence public service offices were considered costly and it was difficult for people with limited mobility to visit the public service office.

The government of Canada has launched a project called "Government of Canada Wireless Portal" in order to provide people access to government information and services through web enabled devices such as web enabled mobile phones.

Sources: UK Government (2004); U., O. Schiewe (2004); Government of Canada (2006).

Relevant considerations in standard setting

Standard setting is policy making about operational management through general rules. In general this involves a trade-off between efficiency and quality of support services (see Chapter 6). In the particular area of ICT, there are large potential efficiency gains involved. Standards should lead to savings in development costs and maintenance and upgrading costs of bespoke ICT systems.

Relevant considerations in the area of ICT standard setting are:

- *International versus national standards.* With respect to the development or review and update of standards the question might arise whether international standards should be applied or national ones developed. In areas where international collaboration is important or might soon become important, international standards - when available - are in principle preferable.
- *Focus on government-wide business transformation.* Criticism is often directed at a too narrow technical view of standards. The lack of involvement of the responsible ministers (Finance, Interior or Public Administration) may lead to the adoption of standards that everybody can live with but that are not very effective in terms of efficiency gains. Focus should be on re-use, sharing and collaboration for better government. As argued in Chapter 6, standard setting is a policy making task that should not be delegated to an arm's length agency.
- *Keep it simple for the sake of innovation.* Research has shown that there is a wide variation in interoperability standards (eGIFs). At one extreme there are over 700 standards listed in the Netherlands whereas at the other end Norway has just 47 entries. Here criticism has been voiced that countries should not try to micro manage standards as it could stifle innovation.
- *Market relevance of ICT standards.* Standards need to be accepted in the market place, including a choice of suppliers whose products support the standard. The ICT sector has a diversity of voluntary, market-led, standards setting organisations with global reach. These standards setting environments have diverse structures to accommodate specific needs. Governments are often criticised that their standards become too specific and therefore create lock-in effects. Governments should therefore work with market suppliers to ensure that agreed standards will actually create value for money and then ensure that standards are included in the procurement policy to achieve wide distribution of standards (Box 9.7 for a UK example).

Box 9.7. ICT procurement rules with a focus on Value for Money in the UK

The UK has revised its ICT procurement rules to improve the share of SMEs in the supplier list and to promote innovative solutions from the market. This involves a fundamental break from large, long term contracts that restrict the department’s ability to change quickly or from tapping into innovation.

This strategy focuses on:

- Aggregating spending where possible and purchasing once as the ‘Crown’: one price for government.
- Procuring common ICT goods and services against a set of standard specifications, as defined by the Chief Information Officer community.
- Increasing efficiencies through the use of online catalogues via Government e-Marketplace.
- Developing Software Asset Management expertise to facilitate the transfer and reuse of assets.
- Improving interoperability between solutions through the use of open standards.
- Embedding full transparency in all new ICT contracts to enable effective management of the supply chain, pricing and unit costs.

Benefits:

- GBP159.6 million has already been saved in the accounting period from April 2011 to April 2012, by demanding a rigorous business case for any significant ICT spend.
- Improved pricing on contracted services to deliver verifiable cash savings for all customers.
- Standardised specifications for hardware and services are bringing price transparency for all and helping facilitate reuse/redeployment of assets.
- Software licensing optimisation is delivering savings through licence transfer and renegotiation of terms.
- Online catalogues for commodities make purchasing easier and offer Open Source alternatives for new software investments.

The UK’s Office of Fair Trading (OFT), has recently launched a study into ICT procurement by the public sector to determine the “degree of competition” between dominant providers, and to evaluate the role of SMBs in the existing procurement system.

Sources: UK Cabinet Office (2013); Smolaks (2013).

Organisation of standard setting

Standardisation of information and processes can provide significant benefits to governments through reduction in risk, increase in reuse and a higher level of interoperability (and hence efficiency) within and across jurisdictions. They support the effective delivery of services to citizens and business.

Procuring ICT that is based on standards accessible to all ICT suppliers can help promote competition among suppliers responding to public sector ICT tenders, and reduce the risk of public authorities becoming excessively dependent on a single vendor for the provision of ICT products or services beyond the timeframe of the initial procurement contract, a situation known as “lock-in”.

While established national and international standards bodies are active in delivering standards across a wide range of domains, their processes take significant time. This is partly due to the much wider range of stakeholders (international, private/public sector) and the treatment of intellectual property (IP) issues.

Since standard setting is a policy making task, it is important that it is organised within the core ministry (Finance, Interior or Public Administration). It has been argued in previous Value for Money assessments (OECD, 2010, 2011a, 2011b) that unlike support service delivery, standard setting is not an executive task and that, essential political considerations are involved. Even if the combination with service delivery tasks can be beneficial in order to ensure that standards are informed by practical experience, this should imply that the combined task units be organised inside the core ministries, rather than be put on arm's length distance. This is true both at the central level of government as a whole and at the de-central level of ministries and agencies.

Across OECD countries there is not a “one size fits all” solution to the organisation of standard setting. While governments share common challenges, they are starting from very different places in terms of technical and administrative development.

Fundamental to ICT-enabled transformation of government is the ability to construct, co-ordinate and deliver e-government across the silos of government and to ensure that government's budget, management and regulatory processes are aligned to support, rather than hinder. Organisational approaches to ICT standard setting include approaches with more administrative or political control, the latter ranging from ministerial committees to task forces in the cabinet office (Table 9.2).

Table 9.2. Broad organisational approach to e-government

← More administrative control		More political control →		
1	2	3	4	5
Ministry with specific responsibility for IT	Ministry of Finance ¹	Ministry of Interior/Public Administration ²	Ministerial board or shared ministerial responsibility	Unit/Group created by or in executive office
Belgium	Australia	Germany	Japan	Austria
Czech Republic	Canada	Greece	Korea	France
Italy ³	Finland	Luxembourg	Switzerland	Hungary
Poland	Denmark	Mexico	Slovakia	Iceland
	Sweden	The Netherlands		Ireland
		New Zealand		Portugal
		Norway		Turkey
		Spain		United Kingdom
				United States [*]

Notes: ¹ Have shared budget/finance and public administration portfolios; ² Interior (Germany, Greece). Public administration (Luxembourg, Mexico, the Netherlands, New Zealand, Spain, Norway); ³ The Italian Ministry of Innovation and Technology shares some e-government responsibility with the Ministry of Public Administration.

Source: OECD (2005).

Among leading OECD countries one can further observe the trend of the rise of the CIO or CIO board in federal countries. The 2002 survey (Accenture, 2002) of e-government leadership Accenture pointed first to the crucial role of the CIO with cross-government authority as evidence that ICT-enabled government is moving to the core of the government's agenda. Whilst CIOs have been appointed with a range of roles and responsibilities, it is widely acknowledged that advising on cross-governmental ICT standard setting responsibility is one of them (see Box 9.8 for some examples).

Box 9.8. The rise of the CIO (or equivalent)

Austria is a significant example in this regard. The “Platform Digital Austria” is the overall framework for e-Government activities and engages all levels of government; it is chaired by the Federal CIO and contains task forces and thematic working groups. Coordination at federal level and cross-cutting projects are managed by the ICT Strategy Unit.

In Germany, a new Federal IT Steering System aiming at improving IT management within the federal government has come into force in 2006. It aims to optimise Federal Administration services, enhance effectiveness and efficiency in IT-based operations and promote IT innovation. Each government ministry has a Chief Information Officer (CIO) with wide-ranging responsibilities concerning all of the ministry's IT. All CIO's of the government ministries form an IT Council and decide on all relevant strategic issues concerning the IT-steering of Germany's federal government. A high-ranking IT-Steering Group guarantees a smooth congruence between IT-issues, budgeting and overall political steering. Large-scale projects are co-ordinated centrally by the IT Steering Group. The State Secretary in the Federal Ministry of the Interior, responsible for Administrative Modernisation and Information Technology is appointed as the (first) Federal Commissioner for Information Technology.

The Federal CIO role in the USA largely focused on 1) ensuring that the USD 71 billion costs of federal ICT are spent effectively and efficiently, 2) driving a transparency and open government agenda to ensure that the public has access to information, and 3) looking at innovations that are happening in the private sector or in the NGO community and applying them to the federal government.

Sources: EC (2009, 2011); Computer Sciences Corporation (2013).

To ensure wide-spread knowledge of standards, countries have further created a range of centres or forums. For example, in the Netherlands a Standardisation Forum and Board were established in 2006 in order to promote the interoperability of the Dutch public and semi-public sectors. These institutions do not develop standards, but can assign a status (required or recommended) to existing standards.

Furthermore, there is a strong tendency that standards should be approved by a formal committee that is open to participation by all interested parties and operates on a consensus basis. In other words, a key requirement is that standards are developed, and seen to be developed, in an open collaborative, transparent manner to ensure both quality and trust. This implies a clearly defined process, timelines and decision making rules.

The standards development process should aim to maximise re-use of standard ICT components that have already been developed. And an open standard should always be publicly available and developed, approved and maintained via a collaborative and consensus driven process.

Standards-based ICT and information management allow government ICT to be driven by policy considerations and objectives such as value for money rather than by the

technology itself. It also separates technical and programme integration. Common technological standards can actually give agencies greater decision-making freedom in terms of how they deliver the programmes and services for which they are responsible.

Repeatedly, formal standardisation has been criticised for issuing standards that are not up-to-date and difficult to implement. Hence governments should apply basic principles of standard setting that the European Commission supports (Europa.EU, 2013):

- The use of ICT standards in public procurement.
- The use of ICT standards in public procurement.
- Fostering synergy between research, innovation and standardisation.
- Protection of intellectual property rights.
- Open procedures.
- Integration of fora and consortia.
- Enhancing dialogue and partnership with stakeholders.

Feasibility of the reform

Generally, centralised ICT standard setting is a key to value for money for participating OECD countries paired with a consultative open process to develop and evaluate existing standards. To avoid excessively detailed standards or out-of-date standards OECD countries should apply the following rules:

- Assess and evaluate ICT standards on a regular basis. Public authorities should also make use of the work of specialised bodies in assessing and evaluating standards, such as international, European or national standards setting bodies and the European Commission’s multi-stakeholder platform.
- Learn from other member states. A number of countries publish lists and catalogues of standards which include recommendations as to the quality and openness of the standards.
- Develop and maintain expertise on standards relevant to each area of ICT. Some countries, regions and sectors have set up competence centres on standards, in order to alleviate the need for individuals to be aware of all issues associated with the use of standards. Examples include Single Face to Industry in Sweden and the Standardisation Forum in Norway. These centres can give advice upon request, but also maintain catalogues of standards.

Reform 9 2. Common ICT process units

Characteristics of the reform

This reform consists in the merger and centralisation of ICT systems that are used in the primary process of ministries and agencies. Key areas to achieve higher value for money are basic registers, and cloud computing.

Where did it occur?

Whereas all countries participating in the study are making efforts to streamline, simplify and merge the ICT systems that are used in the primary processes of line

ministries and agencies, Denmark and the UK are at the forefront of innovation in this respect.

Analysis

Current trends

While governments continue to modernise ICT infrastructure, they are also working to merge and centralise sectoral ICT systems in order to better share information, internally and externally, to deliver integrated services and to realise savings.

In the past, government departments worked to their own requirements and often procured expensive bespoke ICT systems and solutions to meet them. As a result, departments have been tied in to inflexible and costly ICT solutions which together have created a fragmented ICT estate that impedes the efficiencies created by sharing and re-use. Many line ministries and agencies that use large scale ICT systems in their primary process are now making efforts to share or “join up” their systems with those of other ministries or agencies. In addition many OECD countries are seeking consolidation of data centres and the introduction of cloud computing.

Overview of current governance arrangements

In the 1990s, important reforms occurred in the areas of operational management in many OECD member countries. These reforms were inspired by the ideas of New Public Management. These reforms led to a substantial de-centralisation of ICT systems. ICT systems were initiated in many ministerial divisions and agencies. Recently, one can observe a certain swing back from the New Public Management reforms. This involves not only a certain re-centralisation, but the rise of enabling conditions as for instance government-wide standards for operational management.

A key subject investigated as part of the Value for Money study are large scale ICT systems that are used in the primary process of line ministries and agencies. Such systems include the basic registers of population, land, legal persons and motor vehicles that are used government wide, but also systems that are used by a limited number of ministries and agencies, such as the tax administration, the police registers, the client registers of the social security agencies, the students registers, and the registers of subsidy clients in various areas of government policy.

In most OECD countries, including the countries included in this study, the basic registers and inter-ministerial systems are not subordinated to the central ICT support unit, but to a line ministry or an agency of a line ministry. The databases are in some cases populated by information gathered from different agencies, but their operational management falls under the responsibility of a line minister. Table 9.3 provides an overview of the basic registers in the countries included in the study and the ministries to which they belong.

Table 9.3. Responsibility for central registers in selected countries

	Austria	Australia	Denmark	Finland	Norway
Total number of central registers	10	2	8	13	7
Population	Ministry of Interior	-	Ministry of Interior	Population Register Centre	Tax Directorate, Ministry of Finance
Land	Ministry of Interior	Australia Public Sector Mapping Agency	National Courts	--	Norwegian Mapping Authority
Businesses	Ministry of Economy	Australian Taxation Office	Commerce and Companies Agency	National Board of Patents and Registration	Ministry of trade and Industry, Registers
Motor vehicles	Ministry of Interior	-	-	Transport Safety Agency	Public Road Administration

Source: OECD (2012).

Many OECD countries participating in the Value for Money study now have basic registers that are organised as common process units. Common process units are characterised by the following features⁷:

- They are organised as arm's length agencies;
- The owner ministry is responsible for operational management;
- They are co-financed by the client ministries;
- Performance is supervised by a committee chaired by the owner ministry.

In Denmark most basic registers are organised as common process unit (Table 4).

Table 9.4. Overview of 8 basic registers in Denmark

	Name of electronic database (in English)	Type of data	Name of common process unit that manages the database	Employment of unit (FTEs)	Name of ministry to which the unit belongs	Other ministries that co-finance the database
1	CPR-database	CPR-numbers (Central personal register)	Part of the core ministry	18 FTEs. The actual number of FTEs is substantially larger due to local updates in the municipalities.	The Ministry of the Interior	Financed by user fees
2	The register for persons in Denmark	Registering people	Part of the core ministry	5,3 FTEs	The Ministry of Ecclesiastical Affairs	Financed by user fees
3	The register for businesses in Denmark	CVR-numbers (Central Business register)	Danish Commerce and Companies Agency	9 FTEs	Ministry of Economic and Business Affairs	Financed by user fees
4	Register for foreign providers of services	Foreign businesses operating in Denmark	Danish Commerce and Companies Agency	2 FTEs	Ministry of Economic and Business Affairs	Financed by user fees
5	The building and housing register	Data on every building and real estate	Danish Enterprise and Construction Authority	2,5 FTEs	Ministry of Economic and Business Affairs	Financed by user fees.
6	The register for real estate	Data from homeowners on their own real estate	Local government in Denmark	Not available	Independent from ministries	Not available
7	The cadastral register	Cadastral data	The National Survey and Cadastre	2 FTEs	Danish Ministry of the Environment	Financed by user fees
8	The land register	Register for private owned land	The Courts of Denmark	Not available	Danish ministry of Justice	Not available

Source: Responses to the Value for Money questionnaire.

More systematic use of common process units for ICT systems that are used by several client ministries and agencies contributes to improved service quality, in particular for other ministries and agencies than the owner ministry and better incentives for cost control.

In the case that an ICT system is used government-wide, such as the basic registers, transfer of the ICT system to the central support unit (in the Ministry of Finance, Interior or Public Administration, etc.) should also be considered. This implies that the system becomes part of the primary process of the support unit in a similar way as a government wide portal and that its budget is transferred to the central support unit. That the Minister under which it resorts (Finance, Interior or Public Administration) takes over the responsibility for operational management.

Centralisation, modularisation and consolidation of ICT processes

Scalable and modular solutions are indispensable today in ensuring the efficient and cost-effective use of the ICT infrastructure. Governments must process and store ever-increasing amounts of data in their daily operations. This requires more powerful data storage, processing and transmission, securely and without interruption. As this becomes increasingly complex it leads to outsourcing and external hosting. Moreover, cost reduction is a major concern for OECD countries. Using redundant, scalable and modular solutions serves to improve the availability, security and the gradual expansion of the systems.

Cloud computing delivers hardware, services, and software via the network on demand. Cloud computing transforms once-expensive capital assets like disk storage and processing cycles into a readily available, affordable commodity. The major driver of cloud computing has been the recognition that large data centres do not operate at full capacity, creating a surplus of computing resources. By using these resources more efficiently, cloud computing enables greater returns on data centre investments. The primary savings would come from data centre consolidation and aggregation of demand.

Box 9.9 and 9.10 provide information about cloud based reforms that have been initiated in the US and the UK.

Box 9.9. Cloud Computing strategies in the US

The US Federal Budget for 2011 has incorporated cloud computing as a major part of its strategy to achieve efficiency and reduce costs. It states that all agencies should evaluate cloud computing alternatives as part of their budget submissions for all major IT investments, where relevant.

Specifically:

- By September 2011 – all newly planned major IT investments acquisitions must complete an alternatives analysis that includes a cloud computing based alternative as part of their budget submissions.
- By September 2012 – all IT investments making enhancements to an existing investment must complete an alternatives analysis that includes a cloud computing based alternative as part of their budget submissions.
- By September 2013 – all IT investments in steady-state must complete an alternatives analysis that includes a cloud computing based alternative as part of their budget submissions.

To fast track adoption, the US General Services Administration has established a portal dedicated to cloud computing applications for the public sector. The portal: www.apps.gov provides the public sector agencies with the common platform for the procurement of cloud services – SaaS and IaaS – from recommended services providers.

Sources: Kundra (2010); Lohrmann (2010).

Box 9.10. G-Cloud and App-store in the United Kingdom

The UK Government established an UK onshore, private Government Cloud Computing Infrastructure called G-Cloud. The UK Government G-Cloud is an initiative targeted at easing procurement by public sector bodies in departments of the United Kingdom Government of commodity information technology services that use cloud computing. In June 2013 G-Cloud moved to become part of Government Digital Service (GDS) with the director becoming Chief Technology Officer of the Home Office.

The government published a strategy that states that the UK will adopt a “public cloud first approach” to procurement with a view to saving GBP 340 million between now and 2015. The cloud-first strategy is spearheaded by a G-Cloud Delivery Board, which comprises a cloud services group, a security working group, a commercial working group and a data centre consolidation project board. The Delivery Board will work alongside a G-Cloud Authority, which will oversee the longer term take up and assurance of commodity services. The service began in 2012, and had several calls for contracts. By May 2013 there were over 700 suppliers - over 80% of which are small and medium enterprises. GBP 18.2 million (USD 27.7 million) of sales were made by April 2013.

Much of the government’s G-Cloud work will focus on the consolidation of data centres, through which the government hopes to save GBP 20 million in 2012-13, GBP 60 million in 2013-14 and GBP 80 million in 2014-15.

Currently, it is estimated that the government is only using 10% of its data centre capacity, so the scope for savings is large. The government said it will monitor progress by looking at the number of data centres and associated hosting services in use as well as the cost per service.

The G-Cloud consists of: a series of framework agreements with suppliers, from which public sector organisations can call off services without needing to run a full tender or competition procurement process and an online store, the "CloudStore", that allows public sector bodies to search for services that are covered by the G-Cloud frameworks.

An essential part of the G-Cloud strategy will be the creation of a government app store, which serves both central and local government and be populated by competing services. Its key tasks are to:

- provide an open, visible, commoditised and cost transparent marketplace, that is the first point of call for any public sector ICT requirement;
- create a shop window where all the relevant public sector ICT services can be found encouraging innovation, competition and new suppliers;
- enable the information assurance and security community to have access to information related to the assurance and accreditation status of the service;
- be a key enabler for collaborative procurement, including:
 - driving up supplier performance by providing an open feedback mechanism;
 - facilitating re-use of a service to drive efficiency and cost savings.

Source: UK Government (2013).

Feasibility of the reform

The deployment of effective E-Government requires a coherent approach that aligns all government entities toward the provisioning of customer-centric e-services. To meet

this goal, they need to build common secure infrastructure, but also to prioritise co-operation between line ministries and agencies in common process units.

This approach requires the development of a plan, in the form of an ICT strategy for instance, which ensures that ministries combine their efforts, underpinned by rigorous controls and mandates. This will deliver the greatest savings benefits and provide the critical foundations to enable the re-use and sharing of solutions and services.

Different OECD countries have different maturity levels when it comes to their ICT systems. As most efficiency can be achieved by centralisation, modularisation and consolidation of ICT processes, countries need to identify the sectoral systems that can be shared. Common ICT process units enable large-scale deployment of public e-services rapidly on the basis a secured, scalable, and centralised ICT systems.

It is critical that procurement and contracting procedures are available to support this new model of ICT delivery and maximise the speed of implementation, and that the contracting landscape is clearly understood in order to fully ensure compliance.

Reform 9.3. Gateway procedures

Characteristics of the reform

This reform consists of the establishment of a special procedure for *ex ante* evaluation of ICT investments above a certain threshold by experts who have no stake in the project (gateway procedures). The aim of a gateway procedure for ICT projects is to provide information for the go/no go decision and keep the projects on track.

Countries where it occurred

OECD governments are working to improve the ICT governance structure to assist project managers in assessing and improving their capability to commission, manage and realise the benefits of ICT investment. Australia, the UK and Denmark belong to the countries that have introduced gateway procedures for ICT investments following a different approach. Whereas the Australian and UK procedures put emphasis on a step by step procedure aimed at providing guidance to the project team and the responsible minister or agency head, the Danish procedure puts emphasis on the business case and the requirement of savings.

Analysis

The reputation of government ICT project management has suffered from repeated high-level failures in many OECD countries. Numerous reports and articles have pointed to a long list of problems. To name but a few: chronic project delays; suppliers failing to deliver on their contractual commitments; not designing with the user in mind; divergent costs for simple commodity items; incompatible systems; the high cost of making even basic changes; “gold-plating” IT solutions; and failing to reuse existing investments. Moreover, there is a critical dependence on legacy systems⁸, and the need to deal with interoperability between these systems increases cost and complexity.

ICT projects come in very different sizes and fail for many reasons, including a shift in political priorities. For instance, in the UK particularly the attempt to digitize the NHS has had some spectacular project failures. The current government for instance scrapped a GBP 12 billion NHS national computer scheme only recently (Daily Mail, 2011). When the conservative government took office in 2010, it also stopped the GBP 4.5 billion

national electronic identity card scheme. The government said the move would save GBP 86 million over four years and avoid GBP 800 million in costs over the next 10 years that would have been raised by increased charges (The Guardian, 2010). It is difficult to get a full picture of ICT failure across OECD countries. Respondents to the questionnaire issued in 2009 highlighted that such data are not available, but anecdotal evidence points to the contrary.

Many researchers have identified the challenges associated with the *ex post* evaluation of ICT projects. These challenges apply even more to *ex ante* evaluation when evidence on effects is not yet available and must be estimated. Nevertheless, *ex ante* evaluation is essential, exactly because of the huge costs of failures. In general, governments are using *ex ante* evaluation procedures, in particular Cost-Benefit Analysis and Regular Impact Analysis in cases where failures can lead to large costs on society (see Reform 3.6), but for ICT projects special procedures are required in view of the complicated technical aspects.

Criticism of gateway procedures has included that guidelines with respect to ICT projects are not always kept up-to-date and hence can lead to lack of flexibility and lack of relevance.

Box 9.11 and 9.12 provide information about the gateway procedures established in the UK, Australia and Denmark.

Box 9.11. The Gateway Review process in the UK

At the heart of the UK approach is the Gateway Review Process™ (OGC 2005). This process was developed after a review in 2003 showed great disparity in the quality of e-government business cases. Business case guidance and new tools were developed in response to these findings. The Gateway process became the standard procedure for ensuring that these tools were used.

The OGC Gateway Process examines programmes and projects at key decision points in their lifecycle. It looks ahead to provide assurance that they can progress successfully to the next stage; the Process is widely used in central government, the health sector and local government. The process is mandatory for ICT procurement OGC Gateway Reviews deliver a ‘peer review’, in which independent practitioners from outside the programme/project use their experience and expertise to examine the progress and likelihood of successful delivery of the programme or project. They are used to provide a valuable additional perspective on the issues facing the internal team, and an external challenge to the robustness of plans and processes.

The OGC Gateway Process provides support to senior managers, and helps them to ensure:

- the best available skills and experience are deployed on the programme or project;
- all the stakeholders covered by the programme/project fully understand the programme/project;
- status and the issues involved;
- there is assurance that the programme/project can progress to the next stage of development;
- or implementation and that any procurement is well managed in order to provide value for money;
- on a lifecycle basis;

Box 9.11. The Gateway Review process in the UK (*continued*)

- achievement of more realistic time and cost targets for programmes and projects;
- improvement of knowledge and skills among government staff through participation in Reviews;
- provision of advice and guidance to programme and project teams by fellow practitioners.

The results of the Gateway procedure are not made public. They are carried out at the request of the programme/project director and include a confidential report on the status of the project delivered to the authority that is responsible for the programme/project. The decision to keep reports confidential is an important ingredient to the success of the whole process, ensuring full and open participation from the project team during the review.

Since its inception, over 1700 Gateway reviews have been conducted in the UK. The effectiveness of the Gateway Process has been endorsed in the 2007 Treasury report on “Transferring Government Procurement”

Sources: UK Government (2007); OECD (2007a).

Box 9.12. The Gateway Review Process in Australia

In November 2005, the Australian Government endorsed, through Cabinet decision, the adoption of the Gateway Review Process™ (Gateway) of the United Kingdom’s Office of Government Commerce (OGC) in order to reinforce the capability of ministries and agencies to implement ICT projects. The Gateway process is led by the Department of Finance and Deregulation. In 2011, in recognition of the complexity and implementation challenges that can accompany programme delivery, particularly cross-portfolio programmes, the application of Gateway assurance methodology was extended to apply to programmes as well as projects. This underpins a more complete application of the assurance methodology across government, thereby supporting policy delivery.

The Gateway Review process applies to new projects undertaken by FMA agencies operating under the Financial Management and Accountability Act 1997 (FMA Act), which satisfy certain financial and risk thresholds. The current financial thresholds are:

- Projects of AUD 30 million and over including an ICT component of at least AUD 10 million; or
- Projects of AUD 30 million and over for other procurement and infrastructure projects; or
- Programmes with a total cost greater than AUD 50 million.

These thresholds apply to the total value of a project, regardless of the timeframe taken to deliver the objectives.

Source: Australian Government (2012).

Gateway strengthens the oversight and governance of major projects and assists governments to deliver new projects in accordance with the stated objectives, on-time and on-budget. It achieves this by providing an arm's length assessment of a project at critical stages of the project's lifecycle.

In Australia, lessons learnt reports regarding the gateway procedure are published regularly. The publication “Assurance Reviews Process – Lessons Learned Benefits Realisation Management” was released in July 2012. Based on the observations arising from the Australian Government’s Assurance Review Processes (including Gateway), it was developed to assist agencies to better identify opportunities for improving their Benefits Realisation Management practices. Guidance is provided to programme and project managers on how to apply a benefits management approach through the conception, pre-decision, implementation, and post-implementation phases.

The business case procedure used by the Ministry of Finance in Denmark on the other hand delivers a financial overview and allows the users to compare estimated benefits and costs for the government (Box 9.13). The model is based on international standards for ICT projects and business cases. Allegedly, the focus on costs and benefits for the government makes it somewhat easier for projects that aim at efficiency gains in administrative processes to get the green light than for projects that aim at broader aims. This may hamper the harvest of the full benefits from e-government projects. On the other hand this focus on measurable costs and benefits for the government fits in well with the demands of a budget procedure that is based on strict budgetary discipline. Such a procedure typically puts different requirements on proposals that lead to savings on the government budget than on proposals that lead to new spending, the latter being subject to trade off against other proposals for new spending and against tax relief (see Chapter 7, Reforms 7.2 and 7.3).

Box 9.13. The gateway procedure in Denmark: general business case methodology

Denmark uses a general business case methodology: a tool for better and more transparent decision making and effects measuring. The general business case model is regarded as an evaluation and monitoring tool for value-creating investments. The model balances costs, benefits and risk and it requires the use of the methodology continuously throughout the project cycle.

Since April 2008, the use of the general Denmark Business model has been mandatory to use for all central government agencies when starting up new ICT projects with budget equal to higher than DKK 10 million. The methodology is further recommended for the steering of ICT projects as subnational level. However, a recent OECD review of e-government in Denmark (2010) also found that “small” budget projects (below DKK 1 million) tend to use the business case methodology.

Initially used mainly with the purpose to improve project design and value, the business case model actually contributes to the improvement and decentralisation of project management, establishes a common understanding of what value is, and ensures that investments lead to economic or qualitative effects which can be measured.

One main limitation however is, that the business case model is precise and detailed regarding the financial measurements and requirements but less detailed regarding the more societal, qualitative and policy oriented benefits. From the point of view of budgetary discipline and the need to make a distinction between projects that lead to savings and new spending initiatives this does not need to be seen as a disadvantage.

Sources: Danish Government (2007); OECD (2010).

The OECD report on benefits realisation management (OECD, 2007a) found that the advantages of gateway procedures include:

- Gateways are a useful part of the project appraisal process and an opportunity to stand back and take an objective look at the programme.
- Review results identify well-articulated areas for improvement and highlight programme strengths.
- The process is viewed as flexible and supportive rather than prescriptive and rigid.
- The process does not significantly delay projects or programmes, and any delays that do occur are seen as positive steps towards making the business case stronger.
- Projects take place in the broader legal and institutional contexts that determine their ability to deliver on efficiency goals.

In other words, it was found that the gateway procedures are particularly strong on reviewing programme governance, personnel, management and risk management. However it also found that most of these procedures placed less emphasis on detailed financial scrutiny of business cases and evaluation of customer propositions, or the successful delivery of customer benefit.

Feasibility of the reform

It is now increasingly recognised that the adoption of a benefits realisation programme can be an important mechanism for proactively managing IT development projects, so that they more explicitly focus upon the delivery of value over a systems operational life. Gateway procedures can be an important element in benefits realisation management.

OECD countries should evaluate the pros and cons of different gateway procedures available. The Danish business case approach is particularly relevant for countries that practice a budget procedure based on strict separation between baseline spending and spending for new policy initiatives.

Notes

1. See for example the recent Report by National Audit Office UK on ICT: *“The impact of government’s ICT savings initiatives”* (National Audit Office of the UK, 2013).
2. Definition of “lean government”: http://en.wikipedia.org/wiki/Lean_Government
3. Quoted in a Microsoft Insight Report (2010).

4. Find out more about reviews and other services offered by the OECD Public Sector Innovation and e-government unit here: www.oecd.org/departement/0,3355,en_2649_34129_1_1_1_1_1,00.html
5. In particular it covers standards 5 to 8 mentioned in the introduction.
6. See definition and additional information about m-government here: <http://en.wikipedia.org/wiki/M-government>.
7. See chapter 4, Reform 2.
8. Definition by Tromp and Hoffman [2003] : “*A legacy system is an operational system that has been designed, implemented and installed in a radically different environment than that imposed by the current IT strategy*”. Said in a slightly different way: legacy systems utilize outmoded programming languages, software and/or hardware that typically are no longer supported by the respective vendors.

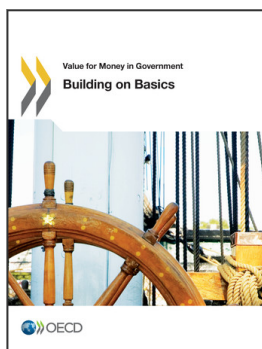
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