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Foreword

This report is one in a series of country reviews undertaken by the OECD to analyse the successes and challenges of e-government in a national context, and to make proposals for action that can help countries improve their e-government efforts. By placing e-government in the context of national public management reform and good governance initiatives, these reviews help countries identify how e-government can best support overall government objectives and performance.

The report, which was financed by the Belgian governments, was completed in January 2008. It draws on a survey of Belgian governments administered in January 2007, extensive review of information about public management and e-government in Belgium, and a series of interviews with Belgian officials and other commentators held in January 2007. The report was drafted with the participation of peer reviewers from the governments of the Netherlands, Switzerland and Quebec, Canada. These e-government practitioners played an invaluable role by participating in interviews and contributing to the drafting of the report.

The analytical framework for the report is based on the OECD synthesis reports The e-Government Imperative *(2003) and* E-Government for Better Government *(2005). The review was carried out under the auspices of the OECD Network of Senior E-Government Officials, which considered its main findings as part of the work programme of the Public Governance and Territorial Development Directorate (GOV). While maintaining its comparability to previous OECD reviews, the analytical framework was adapted to the specific Belgian state structure to adequately reflect e-government policies of all governments in the federal context.*

Under the leadership of Christian Vergez and Yih-Jeou Wang, the review was managed and written by Gwendolyn Carpenter and Barbara Lörincz, who were assisted by Jean-François Leruste (survey and statistics), Jamal Shahin (writing and research) and Melissa Peerless (writing, research and editing). Special thanks are given to the three peer reviewers: John Kootstra (the Netherlands), Yvan Lauzon (Quebec, Canada) and Hanna Muralt-Müller (Switzerland).

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Assessment and Proposals for Action

Introduction

Since the mid-1990s, e-government in OECD countries has often emerged from one of two policy areas: a broader Information Society policy, or a more technically focused public sector ICT policy. In addition, more recent experience[1] has shown that ICT use within the public administration has changed ideas about how tasks are handled or could be handled. Political questions have been raised with regard to division of responsibility among public authorities and levels of government – and political solutions must be found. No longer seen as primarily a technical issue dealt with by ICT professionals, e-government has become a strategic public governance issue supporting and enhancing change in the public sector. In other words, OECD countries are increasingly using e-government as a tool for public sector transformation.[2]

Common priorities for the Belgian governments are to improve the user-focus of e-government by providing higher-quality, seamless e-government services, and to increase user take-up of these services. This is a particular challenge in a federal country, where power is balanced between the centre (the federal level) and the decentralised levels (regional, provincial and/or local levels). Political discussions are sometimes required to determine which of these separate entities has responsibility for specific policy areas and concrete activities.

The Belgian governments asked the OECD to review e-government policy and to make proposals for action on how the governments can specifically improve *user centricity* and *co-ordination issues*.

Background

E-Government development in Belgium began to take off at the end of the 1990s. E-Government programmes grew in response to the rapid development of the Internet and increased use of ICT, also seen in other advanced e-government OECD countries. E-Government development has been dispersed throughout the governments, with significant differences in approach, scope and speed due to considerable variations in size of administrations and resources dedicated to e-government.

With respect to full online availability of services for businesses and citizens, Belgium has recently considerably improved its position in international benchmarks. According to the European Commission Benchmark of European Online Public services,[3] Belgium evolved from a fully online availability of 50% in 2006 to 60% in 2007. In a wider European Union comparison of online sophistication of basic public services for businesses, Belgium ranks among the leaders.

User take-up of e-government services in Belgium is a challenge, as in other OECD countries. The most significant barrier to high user take-up in the short term is Belgium's digital divide. A persistent hard-to-reach 30% of citizens do not see the value in using ICT in the near future.[4] Despite considerable growth in broadband take-up, Belgium has a comparatively low total Internet penetration, ranking 23rd out of 30 OECD countries (see Chapter 2). Statistics reveal significant differences in access, use, and sophistication of usage across regions, age groups, and socio-economic groups.

The Belgian federal state structure, as defined in its Constitution, establishes equality among all governments. There is no hierarchical relationship between Belgian governments – and each government has its own legislative and executive powers in its field of competence, and its own parliament and government to exercise these powers.

Each government in Belgium is setting up e-government programmes, and bodies dedicated to e-government services have been created at each government level. However, these organisations generally have "support" roles and narrow responsibilities. Their services must be requested.

There are varying degrees of political and administrative leadership and support for e-government in the Belgian governments; incentives for public sector institutions to work together to exploit the benefits of e-government are limited. All governments face a similar challenge: to improve collaboration and co-ordination within their jurisdictions. Mechanisms are required to ensure medium – to long-term commitment to the development of integrated services.

- At the **Federal Government** level overall responsibility for broader public policy goals – such as transformation of the public sector and the Information Society – are spread across three key institutions: the Federal ICT Ministry (Fedict), the Federal Agency for Administrative Simplification, and the Federal Ministry of Economy, SMEs, Self-employed and Energy. Synergies among these institutions are limited and could be improved to allow for clearer ownership of end-to-end business processes. The Copernicus Reform has not led to a complete centralisation of e-government competences in a single federal body, and e-government responsibility is still a part of each federal ministry's portfolio. Each

ministry manages its own e-government budget and strategies. Fedict is still largely perceived as a "back-office" institution, technically supporting other federal-level bodies. It cannot require others to use its e-government applications, but rather has to convince potential customers with the features of its services such as reliability, cost-efficiency, and security.

- In the **Flemish Region**, e-government and administrative burden reduction are now considered as one integrated policy objective; however, the Better Administrative Policy reform (*Beter Bestuurlijk Beleid* or "BBB reform") has resulted in a fragmentation of the public sector in the Flemish Region. This fragmentation has made it considerably more difficult to achieve the goal of integrated e-government. However, the last couple of years major steps forward were nevertheless made by CORVE, the Flemish E-government body towards this goal, such as the successful development of the MAGDA platform. The necessary capacity to support user-focused e-government development and implementation may still be lacking, especially due to the large number of public institutions at the regional, as well as the local, level.
- The **Walloon Region** displays strong leadership for user-focused e-government development and implementation. Direct supervision by the Minister President has ensured strong political leadership. The current action plan lays out ambitious, user-centric objectives; it defines a holistic vision of its future administration, taking into account a wide range of related matters such as cost-benefit of e-government for administrative burden reduction, e-inclusion, and the efficient transformation of government.
- The **Brussels-Capital Region** faces the challenge of reconciling different viewpoints on e-government and related matters within its multiple governance structure: every political actor tends to prioritise personal objectives and budgetary choices. As a result, apparent divergences slow e-government projects and risk lowering their potential impact. Awareness about e-government must be increased, especially as the Region could – because of its high population density and the widespread presence of businesses on its territory – benefit from geographic advantages typical for urban agglomerations.
- Regarding the **French Community**, the responsibility for the implementation of the e-government strategy is assumed both by ETNIC and the ISA cell of the Ministry based on the strategic plan for e-government and administrative simplification 2005 – 2010. Re-use of solutions developed by other governments seems to be increasing along with increasingly closer collaboration with the Walloon Region.
- The **German-speaking Community** benefits from adopting and reusing e-government solutions from other governments.

Designated e-government bodies support other entities in delivering e-services – but this collaboration is voluntary, not mandatory. Autonomous development of e-government solutions is prevalent throughout Belgian governments.

Formally, the Inter-governmental Co-operation Agreements define the framework for collaboration and co-ordination among Belgian governments, supporting a common prioritised goal across and within governments: delivering integrated services.

- Co-ordination within governments is ensured by the e-government bodies set up by the federal, regional, and community governments individually.
- Two Inter-governmental Co-operation Agreements for e-government (2001 and 2005) have been signed by the Federal Government and the regional and community governments, cementing formal commitments to e-government co-ordination efforts across governments. A co-operation agreement on administrative simplification was also signed in 2003.

The Inter-governmental Co-operation Agreements aim to compensate for the lack of formal co-ordination structures for vertical and horizontal discussion and management of policy implementation. Such agreements are rare. **E-Government is therefore one of the few policy areas where co-ordination is governed by formal agreements among all governments.**

E-Government challenges

Belgium's governments are gradually realising the potential of ICT to modernise the public sector. Public sector reform has been competing with other policy areas that were high on the Belgian political agenda throughout the past years. Additionally, all Belgian governments have not linked e-government and public sector modernisation, leading to different approaches to public sector transformation:

- **From a political perspective, e-government is not always seen as a high priority in Belgium.** Compared to issues like healthcare and security, e-government is mainly viewed as a "technical" issue, rather than a strategic issue with high impact on the transformation of government that can ensure the delivery of priority policy areas.
- **From the financial perspective, Belgium faces an important fiscal crunch due to its ageing population, high unemployment and difficulties regarding the sustainability of public finances.** Despite considerable governmental efforts, the government debt/GDP ratio was still at 93.3% in 2005,[5] among the highest throughout OECD countries. Reducing spending seemingly clashes with the goals of a classical welfare state. More budget surpluses will need to be generated during the coming years through a combination of sustainable measures (such as spending restraints and effective labour market policies); one-off measures must be avoided. Labour

policies are crucial to reduce the relatively high unemployment rate of 7.2%, compared with the OECD average of 6.4%.[6] Of particular concern are older workers and the participation of the younger generation in the active workforce. These needed economic actions are not clearly linked with the e-government as an issue on the political agenda.

Experience in OECD countries has shown that e-government can support government efforts to reduce spending and increase public sector efficiency and performance, as well as long-term policy effectiveness. Currently, financial pressures challenge all governments in Belgium – and all governments are playing a role in the modernisation and consolidation process. Therefore it will be crucial to for all governments to carefully balance future savings and gains generated by e-government with the investment costs of projects in the short run.

While all Belgian governments have created specific strategies and action plans for developing and implementing e-government, each defines the scope and pace for implementation of its e-government programmes. Each Belgian government has identified its own priorities, leading to different e-government outputs and outcomes across the Belgian state structure.

E-Government is now increasingly being included in major policy initiatives concerning administrative simplification and the development of the Information Society:

- **E-Government has mainly been positioned as a technical aspect of government reform.** ICT specialists have emphasised back-office restructuring, and the link between e-government and public sector reform has not been clearly defined. This has led to different approaches, hindering a more holistic view of reform efforts. E-Government can easily be positioned as a key tool for future reforms.
- **Recognition of the potential of ICT as a significant tool for public sector transformation and reform is gradually growing.** For example, the Walloon Region's e-government body, *EASI-WAL*, is being consulted in ongoing public sector modernisation efforts in the region, based on its success in reducing administrative burdens. Experience in OECD countries has shown that e-government can support governments' efforts to reduce spending and increase public sector efficiency and performance, and policy effectiveness.
- **The Federal Government has taken primary strategic responsibility for promoting the Information Society to citizens and businesses.** However, the governments' successful co-ordinated approach – there is a National Action Plan for eInclusion (2006-2010) – to reducing the digital divide – alongside their individual actions – indicates room for further co-ordination efforts for user-focused e-government.

Assessment and proposals for action

Developing a user-focused e-government depends heavily on being aware of the different roles people have when interacting with public authorities and institutions – tax-payers, parents, voters, etc. This is important to consider to ensure that implemented e-government services respond users' needs, and to simplify users' interactions with public authorities.

Delivering user-focused e-government services requires the creation of a coherent system of tailored public services that meet user needs – whether users are citizens, businesses, or civil servants. From the point of view of governments, user-focused e-government is a priority and a main concern; for several years, political arguments have stressed ICT's potential to enable a simpler and more accessible public sector. Goals are internal efficiency and effectiveness gains, as well as external improvements in the quality, accessibility, and customisation of services. A user-focused e-government therefore builds on the following principles:[7]

- **Know users and their needs:** formally and regularly monitor user needs and expectations.
- **Customise services to user needs:** develop e-government services according to needs and expectations and establish multi-channel management strategies to meet customisation challenges.
- **Create the look and feel of one single public sector entity:** simplify, integrate, and standardise front and back offices (*e.g.* business processes, application navigation structures, databases, etc.) to enable the provision of seamless services from a public sector acting as one entity.

According to the OECD Survey of E-Government in Belgium (see Figure 1.4 on Key objectives for implementing e-government), Belgium is aiming to pursue e-government not as an end in itself, but rather as an enabler for wider public sector development. The survey suggests that e-government – at least at the policy development level – should increasingly focus on enabling administrative burden reduction, and other user-related goals. However, the survey results also indicate that efficiency gains remain *the* top priority; there is a risk of users coming second, especially when it comes to implementing concrete e-government actions.

OECD interviewees confirmed that the Belgian governments lack understanding of user-focused e-government, and have not focused on participatory e-government initiatives (such as online consultation, e-petitioning). Interviewees were conscious that the Belgian public sector lacks knowledge of user satisfaction with government and the services it provides. They felt, however, that the development of more user-focused services through e-government was a pressing priority across all Belgian governments.

Creating user-friendly e-government services and ensuring user take-up depends on giving users the look and feel of a single public sector entity by providing seamless services customised to user needs without regard to formal competences and responsibilities. The consequences will be front- and back-office integration requiring operational pragmatism and focus from parties across the Belgian public sector. Joining-up governments in the Belgian federal state structure is a question of ensuring a whole-of-public-sector approach.

Successful e-government development providing seamless services depends on whether Belgian governments are successful in achieving maximum synergies from their joint e-government development efforts. Users – whether they are citizens, businesses, or governments themselves – do not care about the structure and division of competencies within the public sector. They want targeted help when necessary. Creating the right environment among Belgian governments, and allowing each to reap the benefits of synergies, is about creating a coherent system of user-tailored public services. An increasing number of OECD countries are looking at ways to deliver "networked", "joined-up", or "seamless" government by transforming traditional administrations into collective multi-faceted bodies which interact with citizens, businesses, and government itself as a single entity.

Effective e-government environments that create results for the public sector depend on three main principles:[8]

- **Achieving strong e-government synergies:** establish a common vision and a set of objectives.
- **Sharing resources – "mutualisation":** agree to the principle of sharing resources and implement a number of building blocks.
- **Pragmatic outcome-focused engagement:** effectively use these building blocks and build the necessary capacities to deliver services.

Governments searching for e-government synergies must strive to comply with these principles to achieve a whole-of-public-sector vision for e-government development and implementation. Users benefit from the provision of a truly integrated and interlinked system of services, and the public sector and its institutions are enabled to reap the full benefits of their investments.

Systematically monitor user needs and user satisfaction

The Federal Government has in 2005 and 2006 monitored user needs through the *Fed-e-View/Citizens* surveys. The impact of these monitoring activities is not yet obvious, and systematic use of results in the development of governments' e-government services is not apparent. This leaves each

government with a limited knowledge of user needs and how to integrate them into the design and development of e-government services. **Even though different Belgian governments have emphasised the importance of a user-focused approach, it appears that analysing and integrating knowledge on users in e-government services is in its infancy and needs to be developed further by all governments.**

According to the *Fed-e-View/Citizen* study on user needs, priorities for Belgian citizens are:

- **Rapidity and flexibility** (in terms of location and time of access). Electronic services are seen as an advantage to Belgian citizens, particularly with respect to the efficiency increases they can bring. However, the convenience of any-time/any-place access must be complemented with the traditional channels currently available to citizens in order to increase the flexibility of the system.
- **User-friendliness of electronic services** is a key to citizens, who are willing to use electronic services if they provide an easier alternative to traditional channels. Digital literacy in general is also an important consideration, as many citizens are unfamiliar with the way to use government electronic services.
- **Personalised services** are crucial if the digital channel is to become popular in Belgium. Belgian citizens are more interested in accessing relevant, personalised services online, rather than learning the complexities of Belgian governments' competences. In short, they are more concerned with services themselves, as opposed to which government agency is responsible for them.

The limited systematic monitoring and evaluation of user needs and the subsequent channelling of this knowledge into the development of e-government services has left Belgian governments with **few possibilities for developing targeted e-government services**, leaving each government to drive user-focused development efforts based on their current e-government development stage.

Related to user needs and satisfaction is the close monitoring of the digital divide. Research shows that the uptake of ICT in Belgium is comparatively low, posing a significant challenge.

Periodic surveys show that existing e-services do not provide high levels of user satisfaction to citizens. Of particular concern are:

- Non-interest in e-government services.
- The inability to find relevant information.

The OECD survey supports this perception and suggests room for improvement through the development of a multi-channel delivery strategy

and the effective implementation of e-government in back-office processes for the whole public sector.

Proposals for action

- **Belgian governments could consider acquiring a systematic basis on knowledge of user needs and channel this knowledge into the design and development of targeted e-government services, with the purpose of making these services more attractive to users and more adapted to their true needs.** This would also strengthen communication with users and make them aware of the services and how they can benefit from using them.
- **Belgian governments could strengthen their activities to reduce the digital divide by ensuring an efficient Belgian telecommunications market.** Supporting programmes might also be implemented to motivate citizens to participate actively in the Belgian Information Society, and to ensure that they achieve the appropriate level of ICT skills and competencies and the necessary confidence in using those skills and competencies.
- **Belgian governments could strengthen the strategic and operational links between their administrative simplification and e-government activities.** Even though some Belgian governments are in the process of organizing themselves in that direction, the governments must jointly commit to combining these areas in order to achieve higher user awareness and satisfaction. Positioning administrative simplification as a key focal point of e-government activities could eventually result in a simpler and more transparent Belgian public sector.

Refocus e-government to serve whole-of-public sector interests and goals

Public administrations in OECD countries are under increasing pressure to improve efficiency and effectiveness of their services, as well as increase user satisfaction. **Belgian governments could consider increasing the priority of harvesting the benefits of e-government investments.** The basic philosophy behind e-government services is that demand will increase as applications are rolled out. In other words, e-government services are launched independently from user demands and *generate* user demands. This approach is difficult in relation to bottom-up thinking, where final products are designed from an end-users' perspective.

Belgian governments do not yet dispose of the necessary resources to adequately monitor and evaluate e-government projects. Monitoring and evaluation of e-government could broadly cover: impact on public sector efficiency and effectiveness, impact on administrative burden reductions, user take-up, etc. Analysis of user demands and needs, and satisfaction surveys clearly indicate the following:

- Current assessments mainly cover citizens and businesses.
- Little information is available on the needs of governments in government-to-government e-services.
- User demands, needs, and satisfaction are not systematically assessed.
- User-focused e-government development requires bottom-up design of e-government services.

Evaluation of e-government outputs and outcomes by independent research institutes or private sector consultancies are mainly *ad hoc* and do not necessarily cover all Belgian governments. **The lack of a common methodology for evaluation of e-government makes it difficult to compare results among studies.**

Ownership of business processes and e-government projects can be fragmented throughout governments, potentially disrupting end-to-end ownership of e-government projects (from project development to project execution, and actual service delivery and evaluation). E-Government decision makers are distanced from their (end-) users. Different actors tend to plan, implement and measure e-government, and synergies among them do not yet seem to be sufficiently exploited.

Proposal for action

- **In order to more effectively use knowledge about users and their needs, Belgian governments could jointly agree on and implement a common concept for monitoring and evaluation** of user needs; this could include how such information can be systematically utilised in the design, development, and implementation of e-government services by each government. As part of a joint concept for monitoring and evaluation, a common "user charter" such as has been developed in the Netherlands could be developed as a tool for dialogue as well as the basis for a framework for monitoring and evaluation activities. Such a charter could become the foundation for a broader value-based discussion among e-government responsibles within the public sector as a whole.

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Increase marketing and promotion of e-government

Communication of e-government benefits is limited, both within administrations and externally towards users. OECD interviews indicated that benefits of a user-focused approach to e-government service provision have not yet been illustrated sufficiently.

Citizen involvement requires accessibility, transparency, responsiveness and accountability on the part of the government – and a desire or demand to participate on the part of the citizen. OECD interviewees confirmed that the Belgian approach is missing a broader understanding of user-focused e-government, and that participatory e-government initiatives (such as online consultation, e-petitioning) have often remained unrealised. Interviewees were therefore conscious of the Belgian public sector's relatively low level of knowledge about user satisfaction with governments and services. They felt that development of more user-focused e-government services was a pressing priority throughout all Belgian governments.

Belgian governments have developed only limited channels of communication for implementing electronic participatory initiatives in order to engage citizens in policy development and implementation.

Belgian governments need a joint communications and marketing activity towards e-government users, especially citizens. All Belgian governments are experiencing low take-up of services, and citizens have limited knowledge of e-government services.

Proposals for action

- **Belgian governments could consider strengthening activities with regards to electronic participatory initiatives as an incentive to provide an e-government service which could engage citizens and contribute to increased user take-up of other e-government services.** A participatory approach could also be an alternative and more sustainable communication channel for politically engaged citizens, and a way for governments to broaden the possibility of informed dialogue with citizens.
- **A joint and co-ordinated e-government communications and marketing effort by all Belgian governments could help increase awareness within the Belgian population and motivate potential users to use e-government services by all the Belgian governments.** Likewise, a targeted e-government communications and marketing effort could be considered *within* each of the Belgian governments to ensure that common e-government visions, strategies, and values are effectively communicated in the public administrations themselves.

Improve seamlessness, equity and responsiveness

Belgian governments have successfully developed their own e-government strategies, with limited or no co-operation. Belgium's federal governance structure demands careful planning for co-ordination within and between governments to avoid duplication of work and ensure coherence of e-government activities. Sharing good practices and concrete pilot programmes to identify "lessons learned" provides informed background for consensus and a coherent view of e-government development and its impact.

The governments generally develop e-government solutions without prior consultation with stakeholders and other governments, and afterwards provide these solutions to other potential users. This leads to the risk of incoherence in approaches, incompatibility and (semantic, organisational, and technical) interoperability, and redundancy of e-government building blocks. Efficiency losses are highly likely Belgium-wide. Enabling re-use of readily available components does not necessarily satisfy governments and cannot replace bottom-up sharing of application and experiences.

Belgian governments' search for e-government synergies is formally exercised through the Inter-governmental Co-operation Agreements, which define the framework for co-ordination among Belgian governments. The Co-operation Agreements are narrow and mainly focused on technical co-operation for back-office integration, so broader public sector development has been undertaken individually within each government and its respective parts of the Belgian public sector. This limitation on formal co-ordination may keep the Belgian e-government landscape fragmented and incoherent, with limited possibilities of achieving in-depth synergies and proper integration of e-government into broader public sector transformation policies.

The operational weaknesses of the Inter-governmental Co-operation Agreements have forced Belgian e-government actors to find effective ways of circumventing the formal institutional frameworks of silo-based competences. This includes the apparently effective "grey zones" of informal meetings and get-togethers, which provide common ground for operational leadership and allow for informal consultations and negotiations among actors that are essential in the process of reaching consensus on joint projects and programmes.

The organisation of institutional responsibilities for ICT security policy is challenging in Belgium – it is spread over a number of authorities at the federal level, with limited apparent coherence and co-operation, and no focal point for national policy development and implementation. As ICT security covers society-wide issues, clear leadership for policy collaboration and co-ordination across the Federal Government is necessary. As ICT security measures (technical,

managerial, or organisational) are only as strong as the weakest link in the public sector, it is necessary to strengthen the co-ordination of both policy development and operational implementation across all Belgian governments.

Proposals for action

- **Belgian governments could consider strengthening synergies based on a common vision and a set of common strategic goals.** Operational e-government co-operation has been proven within specific projects and specific areas/sectors; there is a need to discuss, decide, and implement e-government pragmatically with the minimum political idealism to move towards a whole-of-public-sector approach and away from the current compartmental approach, as sometimes experienced today.
- **Belgian governments should provide users with e-services with a common look and feel.** The political desire for customisation of e-government services should be considered at the presentation level only, and functionalities shared across the public sector. This will achieve a common look and feel towards users without regard to formal competences among the governments. Shared generic services among all governments could achieve the necessary economies of scale.
- **Co-operation should be enhanced at the programme level** and must extend beyond the current Inter-governmental Co-operation Agreements to practical, rather than formal, issues.
- **Inter-governmental projects and programmes should be clearly defined.** Areas with obvious common public sector value must be agreed upon, prioritised, developed, and implemented. Such areas are:
  - eID services and applications.
  - A common public sector ICT security policy framework.
  - A shared governance model for authentic databases.
  - Shared applications and components.
  - A common practical approach to information and data sharing respecting European legal frameworks.
- **As Belgian governments are focusing on mainly technical back-office issues (per the formal co-ordination agreement), it is necessary to improve the effectiveness and the outcomes of the formal co-ordination agreement.** Belgian governments could also consider whether a jointly agreed and pragmatic approach to e-government in general could be extended to cover front-office integration; this would enable each government to deliver fully integrated, standardised, and seamless services which differ at the presentation level based on each government's strategic goals for individualisation.

Create a more coherent framework for legislative challenges

To create end-to-end services, legislative/regulatory challenges need to be addressed across levels of government. OECD interviews confirmed that Belgian governments have made a deliberate, strategic choice to pass laws to support e-government goals and intentions on an as-needed and step-by-step basis. All governments appear to have adopted a pragmatic and rather operational, project- or sector-focused attitude towards e-government legislation.

- Each Belgian government updates its legislative framework according to its own priorities. OECD interviews suggest that the timeframes put in place by the European Union Directives have influenced these decisions. Overall, however, **all Belgian governments put their respective legal frameworks into place at the speed and in the order which they see fit, leading to asymmetric legal and regulatory frameworks for the development and implementation of end-to-end e-services**. This fragmented environment poses a challenge for user-focused, integrated e-government and seems to hinder the development of e-government front-office applications that effectively convey the image of integrated e-government services to Belgian users.

There is a need to find synergies among the legislative/regulatory frameworks across administrative boundaries. The capacity to harmonize European Union directives and approaches of the Belgian governments is a significant challenge to the development of user-focused, seamless services.

Given the role of information and data sharing in the development of e-government solutions for efficient and user-focused government, privacy legislation and regulation is particularly sensitive. OECD interviews revealed disconnects between existing privacy legislation and regulation, and efforts to implement information and data sharing; these issues must be resolved across governments. Increasing information and data exchange across organisational boundaries has intensified debate among stakeholders on issues of privacy and the protection of sensitive data. The electronic ID card (eID) has increased the importance of these matters, and the potential use of eID in e-government applications is likely to further foster the privacy debate in the near future.

Proposals for action

- **A broad, common understanding of the legal and regulatory framework for e-government development, implementation and use must be established across the governments to support end-to-end services.** This can be achieved in many ways, but it should begin with proactive and service-oriented engagement and dialogue between the relevant governmental and non-governmental stakeholders.
- **The capacity to harmonise different governments' approaches when each government separately is trying to transpose and implement European Union directives should be reviewed.** The directives have proven to be a useful tool to create a binding legal framework for e-government – but differences in the transposition and implementation of these directives by the different governments might create barriers for a seamless user experience.
- The social security sector in Belgium conceived a concept which both respects the need for privacy protection and creates an operational system providing efficient and effective information and data sharing among public authorities Belgium-wide. The Crossroads Bank for Social Security experience is transferable. However, stakeholders need to be convinced about the benefits of the basic principles of data management, ownership and exchange – as institutions like the Crossroads Bank for Social Security can exercise significant legal power over their operations.

Improve implementation capacity

E-Government implementation frameworks must allow each government to develop e-services for its respective constituencies while making use of synergy mechanisms whenever appropriate. It is up to each Belgian government to define the scope and pace of e-government implementation. The Inter-governmental Co-operation Agreements from 2001 and 2005 are a first step towards more coherent e-government implementation, and could address the apparent inequalities in e-government maturity across governments.

Regardless of their size, local authorities in Belgium are experiencing the same opportunities and challenges for e-government services.[9] These three specific issues are:

1. Implementation of e-government at the local level remains challenging due to human and financial resource issues.

2. The perceived need for e-government at the local level is low.

3. Take-up of e-government at the local level must be increased.

Regional governments and a small number of regional associations of municipalities support local authorities and inter-municipal co-operation and alignment, while respecting municipal autonomy.

The municipalities are currently supported in their e-government efforts by the regional/community governments and, to a lesser extent, the Federal Government. However, **there are concerns about local capacity to deliver and implement e-government.** The concept of sharing resources ("mutualisation") is increasingly used by municipalities to achieve economies of scale for e-government investments, to maximise their joint buying power towards e-government solution providers, and to strengthen their bargaining position with other e-government actors.

E-Government is financed on project-based, short-term funds rather than programme-based funds covering multi-year perspectives. **The concept of "mutualisation" to address budgetary challenges at the local level and also between governments has been increasing; this represents an opportunity for the development of more sustainable programme solutions in the future.** Further, OECD interviews indicate a project management culture with limited systematic usage of business case analyses, monitoring, project evaluations, and prioritisation of choices. E-Government implementation is taking place in this context.

Effective measurement of e-government progress requires basic indicators; this may include evaluation of costs and benefits, as well as other qualitative and quantitative indicators describing progress towards stated policy goals. Newly introduced management tools that support different government activities (*e.g.* quality management tools, human resource performance management systems, e-government monitoring methodologies) are not designed to exploit synergies among policies.

Although centrally imposed e-government synergies cannot exist in Belgium, a common business case methodology could be beneficial. All independent and equal actors must be convinced about the added value of working together. Thus, both trust and accountability across governments are issues.

Financial incentives and public sector efficiency do not seem to be sufficient to improve collaboration and co-operation. Due to the fragmentation of the Belgian e-government landscape, there is no whole-of-public-sector view of e-government investments and harvesting efficiency and effectiveness gains. All governments are currently struggling to develop relevant concepts of economic analysis underlying their e-government investments. The business case for closer co-operation has to clearly map out the financial and non-

financial benefits, allowing different governments to streamline their efforts in developing and implementing such methodologies to coherently assess financial and non-financial e-government indicators.

Implementation of e-government is further constrained by the limited number of ICT-skilled human resources in the Belgian public sector. The link between competency frameworks and performance management is crucial in the field of e-government, where an increasing proportion of civil servants are hired on a contractual basis through arms-length organisations.

The private sector is mainly involved in e-government activities on a project-by-project basis around outsourced services. **The framework for private sector co-operation – used throughout all governments – seems non-systematic and limited.** Each government keeps its power of procurement, capabilities, and power of negotiation with ICT providers. This does not necessarily lead to optimal purchases from the public sector point of view. Public-private partnerships are limited among the governments, and no commonly agreed policies exist.

Proposals for action

- **There is also a need to ensure a holistic and depoliticised approach to e-government providing fully integrated services based on common public sector standards.** The cross-cutting nature of e-government development and the need to focus on operational implementation requires a whole-of-public-sector perspective and approach. Therefore, it is urgent to ensure that the necessary and sufficient development of common public sector e-government components ("building blocks") and services can take place.
- **An institutional or "virtual organisational" framework of an "arms-length" public body (as, for example, in The Netherlands)[1] is a possible solution.** Such a physical or virtual body – jointly created, financed, and mandated by all Belgian governments – could act as an operational e-government development, implementation, and shared services centre focused on providing generic e-government services and components to the public sector as a whole.
- **Municipal-level service delivery issues – like equity of services, local capacity to develop and implement e-government services, and oversight and support – could be given special attention.** Belgian governments will need to find a delivery model that is efficient, transparent and participatory, and matches political goals while being responsive to changing user needs.

Proposals for action *(cont.)*

- **Joint funding mechanisms and operational practices need to be further developed both within and among Belgian governments.** These mechanisms could be of particular relevance for common e-government services and applications using shared public sector e-government building blocks, as well as joint e-government programmes and future shared seamless services.
- **The business case for closer collaboration and co-operation has to clearly map out financial and non-financial benefits,** as different governments could streamline their efforts in developing and implementing such methodologies to coherently assess financial and non-financial indicators of e-government. E-Government activities should be regularly evaluated in order to allow for re-alignment of projects and activities.
- **Building capacity to deliver and implement e-government in the public sector will require careful review of the project management culture, with the systematic use of business case analyses, monitoring, project evaluations, and prioritisation of choices, as well as the development of skills and competencies.**
- **Belgian governments could improve the usage of skills and competencies in the private and voluntary sectors and optimise the buying power of the public sector through a jointly agreed common policy on outsourcing and the use of public-private partnerships.** A coherent framework for partnerships with the private and voluntary sectors could improve the overall capacity of the public sector as a whole.

1. OECD (2007), *OECD e-Government Studies. Netherlands*, OECD, Paris.

Notes

1. "OECD e-Government Studies – Finland", OECD, 2004. "OECD e-Government Studies – Norway", OECD, 2005. "OECD e-Government Studies – Mexico", OECD, 2005. "OECD e-Government Studies – Denmark", OECD, 2006. "OECD e-Government Studies – Turkey", OECD, 2007. "OECD e-Government Studies – Hungary", OECD, 2007. "OECD e-Government Studies – Netherlands", OECD, 2007.
2. OECD (2007), Working Paper "E-Government as a Tool for Transformation", [GOV/PGC(2007)6], background paper for a meeting at the OECD in Paris, 28 March 2007, see *www.olis.oecd.org/olis/2007doc.nsf/4582bc8915d31134c12573a70050a430/c5bfb886ebcafe06c12572ac0057513c/$FILE/JT03224646.PDF*.
3. CapGemini Report for the European Commission, Directorate General for Information Society and Media: *The User Challenge – Benchmarking The Supply – Of Online Public Services,* 7th Measurement, September 2007, *www.capgemini.com/resources/*.

4. According to the ICT Household survey 2007: Usage of Internet by 67% of the citizens aged 16-74 – in the last 3 months, 29% of the citizens have never used Internet – *www.statbel.fgov.be/downloads/ict_in_2007_fr.pdf,* accessed 25 February 2008.
5. Basic Statistics of Belgium, (2005), quoted in: OECD (2007), *OECD Economic Surveys: Belgium*, OECD Publishing, Paris.
6. OECD (2007), *OECD Economic Surveys: Belgium*, Paris.
7. Elaborated from E-*Government for Better Government*, OECD 2005, Paris. Page 17 ff.
8. Elaborated from *The e-Government Imperative*, OECD 2004, Box 38, page 98ff.
9. See, for example, Lourdes Torres, Vicente Pino and Basilio Acerete (2006), "E-Governance Developments in European Union Cities: Reshaping Government's Relationship with Citizens," *Governance: An International Journal of Policy, Administration, and Institutions*, 19:2 (April) pp. 277-302.

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Chapter 1

Introduction

E-Government development in Belgium began to take off at the end of the 1990s. E-Government programmes grew in response to the rapid development of the Internet and the increase in the use of ICT, also seen in other advanced e-government OECD member countries.

E-Government development has been dispersed throughout the Belgian governments, with ***significant differences in approach, scope and speed due to considerable variations in size of administrations and resources dedicated to e-government****. Each government in the Belgian state structure is setting up e-government programmes, and bodies dedicated to e-government services were created at each government level.*

All Belgian governments have created specific strategies and action plans for developing and implementing e-government. Each Belgian government has decided its own priorities, leading to different e-government outputs and outcomes across the Belgian state structure.

There is ***no hierarchical relationship between Belgian governments****, and each government has its own legislative and executive powers in its field of competence and its own parliament and government to exercise these powers. As far as co-operation and collaboration across governments is concerned, the Belgian public governance structure limits interference by governments in others' sovereign areas of responsibility: this also holds for e-government.*

Belgium has overcome constitutional challenges for ***jointly developing and implementing e-government to create an electronic ID card (eID) initiative****. Though rationally sound – and with the potential to transform user-focused service delivery – this common public sector electronic ID card has not yet resulted in a significant increase user take-up of e-services provided by public authorities.*

Modernisation of the public sector and reform of the political system have been key issues in Belgium since the 1980s. E-Government has so far not been used as an explicit ***tool for public sector modernisation****. Rather, e-government bodies in Belgian governments have played only a consultative or supportive role in reform processes. However, e-government as a tool for public sector transformation is gradually gaining ground.*

E-Government in OECD countries has often emerged from one of two policy areas: a broader ***Information Society policy****, or a more technically oriented* ***public-sector ICT policy****. E-Government in Belgium is now increasingly being embedded in major policy initiatives concerning administrative simplification and the development of the Information Society. Emerging common priorities for Belgian e-government are to improve the user focus of e-government by providing high-quality, seamless e-government services, and to increase user take-up.*

The first chapter of the review outlines the key factors that influence e-government development and implementation in Belgium. Following an overview of the country facts and figures and Belgium's federal governance structure, the approaches to e-government by the main actors are presented. An overview of the key e-government drivers then leads to a summary of the e-government visions and strategies.

Country profile

Belgium is bounded by the Netherlands, Germany, Luxembourg and France, and the North Sea (see Figure 1.1). With a population of 10.4 million inhabitants, Belgium is one of the smallest and most densely populated OECD countries.

Belgium's GDP per capita is among the highest in Europe (18% higher than the EU-25 average), and Belgium is considered among the wealthiest OECD countries (see Box 1.1).

Box 1.1. **Overview of Belgian socio-economic facts**

Population: Belgium's population was 10.585 million in 2006. Across regions, nearly 60% of Belgians lived in the Flemish Region, one-third in the Walloon Region, and about 10% in the Brussels-Capital Region.

GDP/Debt-to-GDP ratio: The Belgian economy – according to the OECD Economic Review 2007 – is in a strong recovery phase. The balancing of the budget since the start of the decade has allowed public debt to fall fast relative to the GDP. Debt to GDP according to BNB data is (86.6%) and the Euro zone (69.0%).

Unemployment rate: Belgium has a relatively high unemployment rate of 7.2%, compared with the OECD average of 6.4%. Lower employment rates among socially disadvantaged groups, youth and the elderly are major political preoccupations. Furthermore, the Euro barometer of autumn 2006 indicates that unemployment is the most pressing challenge of the state, as perceived by the Belgian population.

Source: BNB, Basic Economic OECD data (2005) as quoted in *OECD Economic Surveys: Belgium*, OECD Publishing, Paris.

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Figure 1.1. **Map of Belgium**

Source: Belgian Ministry (FPS) Economy, S.M.Es, Self-employed and Energy, *www.economie.fgov.be/investors/why_invest_in_belgium/frame_en.htm*, accessed 28 February 2008.

As reflected in its high GDP per capita, Belgium has a prosperous economy. The economy has capitalised on its central geographic location, highly developed transport network, and diversified industrial and commercial base. Industry is concentrated mainly in the populous Flemish Region in the north. Given its limited natural resources, Belgium imports high levels of raw materials and exports a large volume of finished goods, making its economy very dependent on the state of world markets. Consequently, Belgium's economy is one of the most open in the OECD, depending heavily on foreign trade. It is among the world leaders of export per capita, with industry accounting for 80% of exports.[1]

In terms of main economic challenges, Belgium faces an ageing population, high unemployment, and difficulties in the sustainability of public finances despite considerable governmental efforts. Despite considerable governmental efforts, the government debt/GDP ratio was still at 93.3% in 2005,[2] among the highest throughout OECD countries. Increasing budget surpluses will need to be generated during this decade through a combination

of sustainable measures such as expenditure restraints and effective labour market policies. One-off measures must be avoided. Labour policies are crucial to reduce the relatively high unemployment rate of 7.2%, compared with the OECD average of 6.4%.[3] Of particular concern are older workers and the participation of the younger generation in the active workforce. These needed economic actions are not clearly linked with the e-government as an issue on the political agenda.

All governments face financial pressures, and all governments are playing a role in the reform and consolidation process. E-Government could help increase public sector efficiency and performance, as well as policy effectiveness if it is regarded as a savings centre rather than an expenditure centre and its contributions to the overall improvement of the public sector economy is recognised. Experience in OECD countries has shown that e-government can support governments in their efforts to reduce spending on the long run. Therefore, it is crucial to carefully balance future savings and gains generated by e-government, and the investment costs of projects on the short run.

Public governance structure

Key point

- *There is* ***no hierarchical relationship between Belgian governments****, and each government has its own legislative and executive powers in its field of competence, and its own parliament and government to exercise these powers. The Belgian federal state structure operates with a* ***strict separation of formal competences****, which is a challenge to all cross-cutting policy areas including e-government. However, an administrative culture of informal operational dialogues has developed in order to compensate for rigidity of formal and often politically sensitive discussions.*

Belgium is a federal constitutional monarchy. The current Belgian Constitution was adopted in 1993. Executive and legislative power is divided among the Federal Government, three regions (Flanders, Wallonia and Brussels-Capital) and three communities (a Dutch-speaking, a French-speaking, and a German-speaking community). Municipalities are autonomous, under the oversight of the regions (for more information on the political and administrative context, please see Annex B).

Competences are divided among the different types and levels of government:

- The **Federal Government level** is responsible for areas that have not explicitly been decentralised to the regions and/or communities. It also remains responsible for managing those areas that affect the interests of all

Belgians independently from linguistic, cultural or territorial considerations, such as social security and pension management, fiscal issues, transport and telecommunications, public health, home affairs (including police forces), defence, justice and foreign affairs.

- **Regions** are responsible for regional matters such as town and country planning, nature conservation, housing, water policy, environment, economics, energy policy, local authorities, employment policy, public works and transport. Belgian regions are – from the territorial viewpoint – subdivided into 10 provinces and 589 municipalities. However, provinces and municipalities operate as highly autonomous local governments.
- **Communities** are responsible for personal and cultural matters such as preventive health care, welfare, education and training.
- **Municipalities** are responsible for local matters including delivering services on behalf of or in co-operation with other Belgian authorities. Local matters include: public works, social welfare, maintaining public order, housing, education, civil and electoral registration, and verification and collection of personal data concerning birth, death, marriage, address changes, etc.

There is no hierarchical relationship between Belgian governments, and each government has its own legislative and executive powers in its field of competence and its own parliament and government to exercise these powers. However, the Flemish Region and Flemish Community merged their executive and legislative powers, creating one single Flemish Parliament, one single Flemish Government, and one unified public administration responsible jointly for regional and community matters.

The Belgian federal state structure maintains a strict separation of formal competences, which is a challenge to all cross-cutting policy areas including e-government. Each government has developed its own e-government initiatives. OECD interviews identified some advantages of these varying e-government approaches:

- *Firstly*, governments advancing at different paces and in different action areas have created a climate of "positive competition" among e-government actors in Belgium.
- *Secondly*, all governments develop their own e-government components, which they can then put at the disposal of other interested governments. This approach seems to have favoured mutual learning and could further be used to help governments benefit from each others' advances in terms of final e-government products.
- *Thirdly*, all governments can push e-government development forward by advancing with different actors on a project-by-project basis without being bound to the "speed of the slowest".

Two goals of Belgian e-government – increasing efficiency and effectiveness for all governments involved in the creation of e-government services, and offering citizens a "no wrong door" approach – require mechanisms to implement agreed and integrated solutions. The formal procedures in Belgium are based heavily on consensus building and judicial formalities, occasionally paralysing decision making and jeopardising the possibility of moving forward with policy development and implementation. An administrative culture based on informal dialogues among responsible public authorities and individuals in order to reach informal and operational agreements on issues at hand has proven necessary and operational.

Approaches to e-government

Key points

- *E-Government programmes are being set up by each government in Belgium. Bodies dedicated to e-government services were created at each level of the state. This* ***institutional fragmentation of ownership of business processes and e-government projects*** *throughout governments disrupts end-to-end ownership of e-government projects and challenges the development of integrated, user-focused e-services.*
- *There are* ***significant differences in approach, scope and speed*** *due to differences in size of administrations, resources dedicated to e-government, and relevance to constituencies.*
- ***Local authorities*** *in Belgium, regardless of size, are facing the same experiences and challenges concerning e-government services. These three specific issues are:*
  1. *Implementation of e-government at the local level remains challenging due to human and financial resource issues.*
  2. *The perceived need for e-government at the local level is low.*
  3. *Take-up of e-government at the local level must be increased.*
- *Regional governments and a small number of regional associations of municipalities support local authorities and inter-municipal co-operation and alignment, while respecting municipal autonomy.*

Belgium began to prioritise e-government at the end of the 1990s, responding to the rapid development of the Internet and the increase in the usage of ICT. The first policy declaration "The way to the 21st century" (June 1999), emphasised citizen centricity and modernisation of the public sector and set ambitious milestones for Belgian e-government. Since the beginning of e-government history in Belgium, key principles covered the unique collection of data ("deliver one, use multiple times") and the use of

reference registers. Further emphasis has primarily been on the technical aspects of e-government and back-office re-engineering – in contrast to other OECD countries. Today, emerging common priorities for Belgian e-government are to improve user focus by providing better quality and end-to-end services, and to increase user take-up of e-government services.

Belgium has overcome constitutional challenges for developing and implementing e-government to create a country-wide electronic ID card (eID) initiative. The Belgian government has taken first steps in addressing cross-broader interoperability issues for eID, including all EU member states. Though rationally sound – and with the potential to transform user-focused service delivery – this common public sector e-identification card has not yet paid off in a significant user take-up of e-government services provided by public authorities.

The Belgian public governance structure limits interference of governments in each others' sovereign areas of responsibility, limiting opportunities for co-operation and collaboration across governments; this also holds true for e-government. The Belgian Constitution puts in place three different procedures to support collaboration and co-operation among governments: inter-ministerial conferences, co-operation agreements, and mandatory consultation procedures (only being applied in very limited fields of shared competences, such as external trade policy).

In addition to formal co-operation agreements, OECD interviewees stressed the importance of co-operation via informal communication channels. These were described as "grey zones" or the Belgian "pragmatic approach", and reflect a results-based approach to collaboration and co-operation where actors meet informally and on an *ad hoc* basis.

However, the need for horizontal and vertical collaboration and co-ordination among governments is gradually – but to different extents – being recognised by Belgian governments and non-governmental stakeholders in the private and voluntary sectors. Furthermore, economies of scale are difficult to achieve without the opportunity to launch projects with different partners when appropriate. In this context, e-government is among the policy fields where co-operation has been embedded in first co-operation agreements which define formal commitments of all governments.

At the Federal Government level: Fedict was created in May 2001. It is responsible for development of the common e-government strategy at the federal level, as well as supporting implementation of the strategy throughout the Federal Government. Since 2005, Fedict has been charged with pursuing wider Information Society goals, as well as promoting Belgium as an ICT knowledge region with specific expertise that other countries may benefit from sharing. Political responsibility for the common e-government strategy of Fedict lies with

the Federal Minister of Employment and Informatisation/Computerisation, who has political responsibility for defining a common e-government strategy and ensuring consistency, coherency, and homogeneity of e-government policy.

The 2007 policy declaration of the Belgian Minister for Employment and the Computerisation of the State defines several strategic objectives:

- Define and support a common e-government strategy that is recognised by the Federal Government.
- Bring about synergies in e-government and ICT in the Federal Government's departments.
- Ensure that public data and information are collected regularly and made accessible.
- Define and support a common information security strategy recognised by the Federal Government.
- Gain recognition as a competence and expertise centre for e-government and ICT.
- Be effective and cost-efficient, and offer high-quality services.
- Encourage access to and use of ICT by the population.
- Develop Belgium as an ICT knowledge region and promote its own best practices in other countries (*e.g.* the electronic ID card – eID).

Historically, these objectives extend and clarify those in the 2000 Five Star Plan for the Development of the Information Society prepared by the former Minister of Telecommunications. Five pillars were introduced in 2000: e-government, access and skills, e-infrastructure, knowledge and innovation, adequate legislation. The 1999 federal policy declaration "The way to the 21st century" emphasised the government's commitment to modernise the public administration and become more accessible to citizens and businesses through increased and better use of ICT. This document marked the official political launch of e-government in Belgium at the federal level.

The Flemish Region: The e-government body *CORVE* (Co-ordination cell of Flemish e-government or *Coördinatiecel Vlaamse e-government*) is responsible for e-government co-ordination in the Flemish Region and the Dutch-speaking Community. The politician responsible for e-government is the Minister of Administrative Affairs, Foreign Policy, Media and Tourism.

The Policy Statement on Administrative Affairs 2004-2009 sets out the following long-term objectives:

- The right to quality.
- An efficient and effective public service (based on administrative simplification and e-government).

- Being an exemplary and modern employer.
- Respect of ethical standards as the cornerstone of better policy.

A recent resolution[4] calls the Flemish Government to adopt a clear political, legal and financial engagement to the principle of maximum data sharing between the administrations and to build a strong integrated system of authentic sources. The Magda platform, which CORVE developed and maintains, will play a crucial role. The resolution further provides CORVE with the necessary mandate to further develop their demand driven, user-focused e-government development.

The Walloon Region: EASI-WAL is the body created to implement both e-government and administrative simplification in the Walloon Region. The political responsible for e-government and administrative simplification is the Minister President.

The Action Plan for Administrative Simplification, E-Government and Readability 2005-2009 identifies the following strategic goals:

1. Citizen-focused administration.
2. The administration as the first partner for businesses.
3. The civil servant as a main factor in public administration.

In the Walloon Region, the Contract for the Future of Wallonia (Contrat d'Avenir pour la Wallonie CAW) of 1999 and its updated 2002 version already mentioned the importance of a modernised and user-focused public sector.

The Brussels-Capital Region: E-Government activities take place in *CIRB* (*Centre d'Informatique pour la Région Bruxelloise* – The Informatics Centre of the Brussels-Capital Region). The political responsible for e-government is the Minister of Finance, Budget, External Relations and ICT.

CIRB focuses on:

- Operation of the broadband network IRISnet.
- Management of the digital cartography of Brussels UrbIS.
- Development of telecommunications applications as well as Intranet solutions.
- Digitalisation of administrative documents.
- Multimedia planning for schools.
- Creation and management of public websites.

The Brussels-Capital Region currently does not have a formal e-government or public sector modernisation strategy. According to OECD interviews, the main strategic priorities and objectives are:

- Modernising the administration and public institutions by implementing specific ICT programmes.

- Creating an online administration.
- Reducing the digital divide.
- Improving the competitive advantage of Brussels-Capital Region.

The **French-speaking Community and the German-speaking Community** also have their own e-government bodies: ISA 1.0, which has e-government and administrative simplification responsibilities and is technically supported by the *ETNIC (Entreprise des Technologies Nouvelles de l'information et de la Communication)* in the French-speaking Community, and the *Informatikdienst* (Informatics Service) in the German-speaking Community.

Municipalities and e-government

The *communes* or municipalities are the level of government closest to the citizens; they existed before the creation of the Belgian State. The municipalities were already recognised in the first Belgian Constitution of 1831 and have always held widespread autonomy within their areas of responsibility.

Municipalities are under the "tutelle" of the regional governments; their areas of responsibility include social policy, public order, fire protection, traffic and bylaw enforcement, roads, and civil and electoral registration.[5] In terms of e-government, this means that local authorities have a large amount of work, for example collection and verification of personal data concerning birth, death, marriage, address changes. Each local authority is also responsible for creating the tools to collect this data.

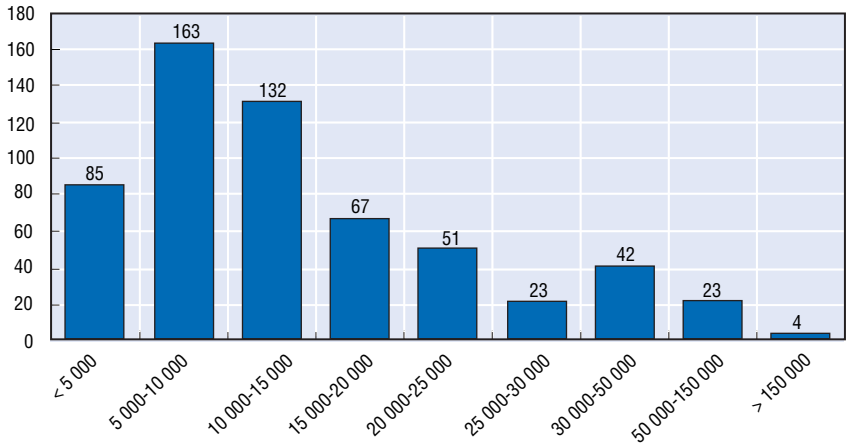
E-Government leadership at the local level is exercised individually and independently by each municipality based on local political priorities.[6]

The diversity in population varies greatly across Belgium: about 20% of the total population is concentrated in just five cities – Brussels (consisting of 19 municipalities), Antwerp, Ghent, Charleroi and Liege. Most municipalities are small, leading to challenges of scale for the development of e-government services.[7]

Size of municipalities

Local authorities in Belgium face different challenges according to their size (see Figure 1.2). Smaller municipalities lack both financial and human resources to deal with development, implementation, and delivery of e-government services. They also need pressing arguments as to why they should develop e-services when the population base is small, demand is not evident, and the digital divide might prevent some development. Although bigger authorities also face budgetary constraints, the development of e-government services is more likely to increase cost-efficiency where the intensity of service delivery is greater.

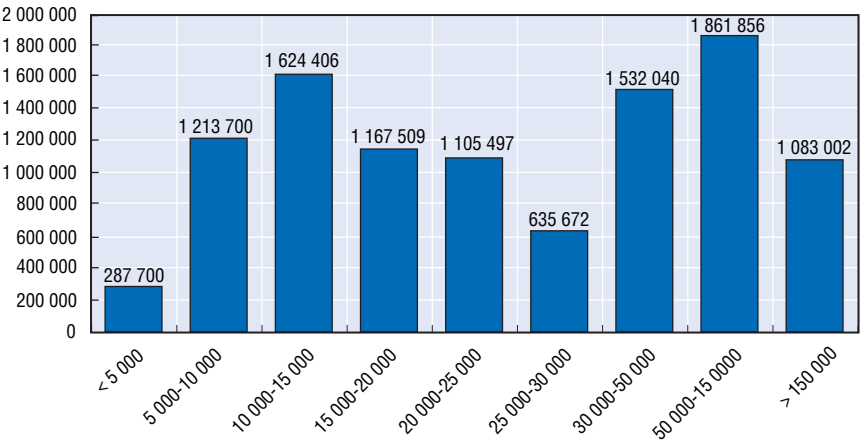
Figure 1.2. **Number of Belgian municipalities, by size of population (2007)**



Source: FPS of Economy, Survey on the Structure of the Population/Ecodata, 2007, *www.mineco.fgov.be/*, OECD Compilation.

The large divergence among municipalities necessitates different approaches to e-government. Big cities face service delivery requirements (see Figure 1.3). However, they can take advantage of large-scale and wide-scope solutions, as the services will have a significant impact on a large number of users. Smaller municipalities may not see the immediate and pressing need to develop initiatives in e-government, as the potential for take-up is naturally lower.

Figure 1.3. **Total distribution of population across Belgian municipalities (2007)**



Source: FPS of Economy, Survey on the Structure of the Population/Ecodata, 2007, *www.mineco.fgov.be/*, OECD Compilation.

Key drivers for e-government

Key points

- *E-Government has mainly been positioned as a technical aspect of government reform. ICT specialists have emphasised back-office restructuring, and the* ***link between e-government and public sector modernisation has not been clearly defined among the governments****. This has led to different approaches and hindered a more holistic view on reform efforts. E-Government can easily be positioned as a key tool for future reforms.*
- *Recognition of the potential of* ***ICT as a significant tool for public sector transformation and reform is*** *gradually gaining ground. For example, the Walloon e-government body EASI-WAL is currently being consulted in ongoing public sector modernisation efforts in the region, based on its success with the administrative burden reduction agenda.*
- *The Federal Government has taken primary strategic responsibility for fostering the Information Society with regards to citizens and businesses. However, the co-ordinated approach of all governments to the digital divide – alongside their individual actions – indicates room for further co-ordination efforts for user-focused e-government.*

Modernisation of the public sector and reform of the political system have been important in Belgium's efforts to address the question of citizens' trust in politics and challenging budgetary restrictions due to the state's high debt-to-GDP ratio.[8] However, the strategic documents supporting public sector reform across Belgian governments do not directly create any linkage to e-government policies.

OECD interviews clearly showed that the tendency in Belgium has been to put technical aspects of e-government upfront. ICT specialists have emphasised back-office restructuring, and each government has been active in creating e-government components such as building blocks, secure networks, and portals. In other words, e-government was mainly interpreted as improving the use of ICT by governmental bodies.

To provide user-focused e-government, Belgian governments have prioritised key challenges related to Belgium's low achievement of Information Society indicators (for a review of challenges to e-government, see Chapter 2). These include:

- **Low ICT take-up** of households/individuals with a persistent, hard-to-reach 30% who do not see the value in using ICT in the near future.[9]
- **Lack of citizens' awareness of the possibility of using e-government services** and/or of the benefits of e-government services.

The Federal Government has taken primary strategic responsibility for developing the Information Society for citizens and businesses.

E-Government and public sector reform

Federalisation of Belgium did not start until 1970 – as a tool to *maintain* national unity rather than a means to *movetowards* unity.[10] Hence, the federal state of Belgium is young in comparison to other federal states like Canada, Germany, Switzerland, and the United States. The main reason for federalisation in Belgium is the deep historic conflict between the two major language groups in the country (the French-speaking and the Dutch-speaking population); other factors are ideological and socio-economical conflicts dating back to the 1950s between the then-industrial, prosperous Walloon Region and a less economically developed Flemish Region. These historical roles shifted in the 1960s when the per capita GDP of the Flemish Region overtook that of the Walloon Region.[11]

A series of state reforms since the 1970s led to the Revision of the Constitution of 17 February 1994, followed by a series of amendments – the most recent from 28 December 2005 – that form the basis of the Belgian federal state of today.[12] (For further information on the political and administrative system in Belgium, please see Annex B). The Federal Government, which currently employs about one-third of government employees in Belgium, undertook a large-scale effort to reform the public sector through the *Copernicus Reform*, which was launched in 1999.[13] The *Copernicus Reform* laid the foundation to embed user focus in the administrative culture of the Federal Government by re-organising federal ministries, but e-government did not play a specific role in the *Copernicus Reform*:

- Federal Public Services ("ministries") were created: ten vertical, four horizontal (providing support functions across the federal level), and several programmatic ministries (working on cross-cutting social themes). This new structure has since been called the "virtual matrix", as it organisationally interlinks horizontal and vertical ministries.
- In addition to organisational restructuring, modifying HR and budgetary arrangements (including individual audit mechanisms for each ministry) was a focal point, as well as communication with internal and external stakeholders.

The Flemish administration engaged in a similar large-scale public sector modernisation effort by launching the *Better Administrative Policy reform* (*Beter Bestuurlijk Beleid* or "BBB reform") in 2000. The reform aimed to simplify the government's organisational structure and achieve cultural change. The former government structure was amended to draw a clear distinction between the departments in charge of policy preparation and the agencies assigned to policy

implementation.[14] E-Government did not play a distinct role in the BBB reform process, which focused essentially on the new repartition of governmental responsibilities and processes; tasks were redesigned without taking into consideration of the potential of e-government.

So far, the *Copernicus Reform* and the BBB reform have been the most prominent large-scale public sector modernisation efforts in Belgium. The Ministry for the Dutch-speaking Community, the Flemish Region and the Federal Government were influenced by New Public Management theories.

The Walloon Region and the French Community designed their own, individual approaches to public sector reform conducted on an incremental, step-by-step basis and are in the process of launching public sector reform programmes.[15] In the Walloon Region, for example, the two existent ministries (ministère de l'Équipement et des Transports and ministère de la Région wallonne) are been merged. Here, the new managers of the renewed administration are experiencing a rather strict process of selection, a similar process that was at the heart of the Copernicus reform at the federal level. This modernisation action is expected to be finished at the end of 2008. New managers are obliged to implement administrative simplification and e-government in their operational action plans and will amongst other items be evaluated by their Ministers on these two aspects.

The focal point, trajectories and time schedules of public sector reform projects – like those for e-government development – have therefore been different throughout the Belgian governments.

Following the June 2007 election, expected future reforms will have significant influence on development of e-government. Of particular concern will be:

- How the role of local governments in service delivery will be positioned.
- Whether the senior leadership will commit to the process of change and the increasing significance of ICT (decreasing the potential that other change programmes might deflect leadership and resources away from e-government).
- If e-government will be clearly positioned across all Belgian governments to be the enabler of reform and some of its outcomes – particularly whole-of-government efficiency savings.

The potential of ICT to be a significant tool for public sector transformation and reform is gradually being better understood and accepted. The Belgian governments have different views of the link between e-government and public sector modernisation, leading to different approaches to public sector modernisation and hindering a more holistic view of reform efforts.

E-Government and Information Society policy

To reduce the digital divide in Belgium and to increase take-up of Internet, all Belgian governments have been active in diffusing technology to individuals, households and businesses. For example, the Flemish Region Government has set up a global project, *eFl@nders*, to stimulate the use and acceptance of ICT both by individuals and businesses through various action projects and campaigns.

The Government of the Walloon Region has launched training programmes to improve diffusion of ICT to people over the age of 50. It also introduced the "Numerical Public Spaces" programme that enhances municipalities' efforts to provide free Internet access in public locations such as town halls. Brussels-Capital Region has put emphasis on providing computers and Internet connections in schools and is currently investing in wireless networks on university campuses. The French Community has also launched a computer and Internet equipment plan for schools for the coming five years. The federal level has wider range of actions, which aim at raising awareness and promoting access to and usage of ICT, such as the "Internet for All" initiative (financial incentives for buying, computers, access to computers and Internet in public places, and reconditioning outdated computers from the public administrations for re-use).

Since 2005, Fedict has been pursuing distinct Information Society goals:

- *Computerisation of society:* increasing access to PCs and the Internet by reducing entrance barriers, and re-inforcing users' perception of security by educating them on how to deal with security threats.
- *Belgium as an ICT knowledge region:* continuing and building upon Belgium's leadership role in the electronic ID card area (along with Austria and other EU countries).

The Federal Ministry of Economy, Small and Medium-sized Enterprises, Self-employed and Energy is responsible for enhancing innovation and research and development policies, and pursuing innovation-related goals impacting citizens and businesses set by the European Union. It is also responsible for e-commerce-related matters (such as removing legal barriers to electronic transactions) and encourages private-sector initiatives by providing relevant statistical and legal information on the use of ICT in day-to-day business transactions. So far, it has not issued a multi-year strategy but has been laying out its policy priorities in its annual general policy document, the so-called *note de politique générale* or *algemene beleidsnota*. As an illustrative example, the general policy document of October 2006 puts forward several planned actions that overlap with Fedict's activities, such as broadband promotion measures, and actions to increase users' confidence in ICT.

The Federal Ministry of Economy, Small and Medium-sized Enterprises, Self-employed and Energy has introduced several initiatives on innovation and ICT on a project-by-project basis, among them the recently launched online discussion space "Internet Rights Observatory", which has the following objectives:

- Inform and increase awareness of ICT-related matters which impact business transactions.
- Co-ordinate interventions by economic actors.
- Develop concrete suggestions on economic issues related to the use of ICT.

All Belgian governments launched a national, collaboratively agreed action plan (National Action Plan for eInclusion, 2006-2010) to address the digital divide challenge in the country (for more information, please see Case Study 1: National Digital Inclusion Framework in Belgium). This is one of the few e-government initiatives in Belgium with a national scope. Its first phase covers the years 2006-2010 and has an ambitious objective of reducing the digital divide Belgium-wide by one-third by 2010. The national action plan against the digital divide covers all governments in Belgium, and aims at creating synergies between existing and future government approaches, entirely respecting each government's competencies. The national action plan against the digital divide further aims at establishing a digital-divide-specific barometer annually assessing the digital divide in a quantitative and qualitative manner.

E-Government vision and strategies

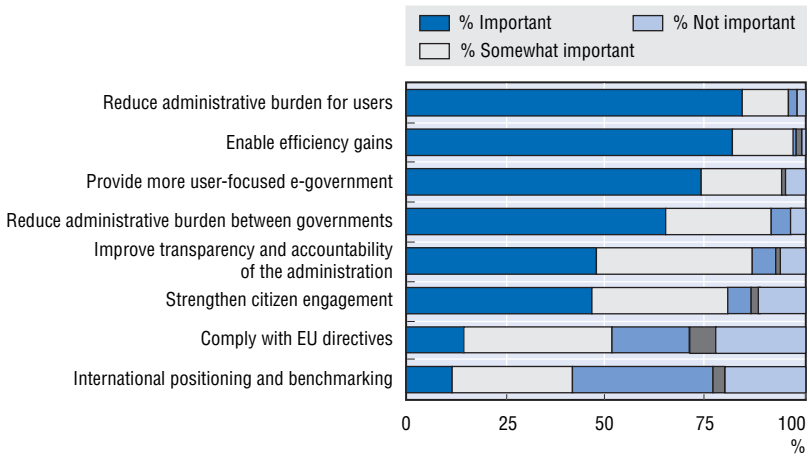
Key points

- *E-Government in Belgium is now increasingly being embedded in major policy initiatives on e-government and* ***administrative simplification*** *and the development of the* ***Information Society***.

Recent e-government strategies and action plans of all Belgian governments reflect the emerging political attention to user-focus by acknowledging the necessity to create seamless services through back-office interoperability, as laid out in the main co-ordination and collaboration efforts.

Results from the OECD survey suggest that e-government is – at least at the policy development level – increasingly focused on making the best possible public sector use of ICT in pursuit of efficiency gains, administrative burden reduction, and user-focused related goals (see Figure 1.4).

Figure 1.4. **Key objectives for implementing e-government**
All governments



Note: Survey Question: 1.1 a): Which of the following organisational goals were explicit reasons for the implementation of e-government in your organisation?
Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology)

Past focus has mainly been concrete and narrowly defined e-government deliverables to improve the internal functioning of public institutions to serve their own constituencies. Significant back-office development has taken place to ensure that processes are more efficient and effective. In some Belgian governments (for example, in the Walloon Region), administrative simplification has also been a focus (for more information on the approaches of Belgian governments towards administrative burden reduction and e-government, please see Case Study 3: Administrative Burden Reduction in the Governments of Belgium). The application of the principle "collect once, use many times" has been an important driver in simplifying administrative procedures for citizens and businesses, which will further improve services across the governments.

Table 1.1 summarises both the main e-government priorities and the wider public sector modernisation objectives. At the federal level, increasing emphasis is being put on the link between e-government and the Information Society agenda. While Fedict is mainly concerned with technological and technical aspects of business process re-engineering, the Agency for Administrative Simplification, as well as the Federal Ministry of Personnel and Organisation, have the responsibility for administrative burden reduction and business process re-organisation at the federal level.

Table 1.1. **E-Government and public sector modernisation goals in recent policy documents**

Type of government and source document	***Federal Government:*** Policy declaration of the Belgian Minister for Employment and the Computerisation of the State 2007.	***Flemish Region:*** Policy Statement on Administrative Affairs 2004-2009.	***Walloon Region:*** Action Plan on Administrative Simplification, E-Government and Readability 2005-2009.	***Brussels Capital-Region:***	***German-speaking Community:*** Development of Informatics in the Ministry of the German-speaking community (Elements of a medium-term planning framework).	***French Community:*** Strategy on Administrative Simplification and E-Government 2005-2010.
Policy priorities↓	State computerisation. Society computerisation. Foster Belgium's position as an ICT knowledge region.	Right to quality. An efficient and effective public service (based on administrative simplification and e-government). An exemplary and modern employer. Ethical standards as the cornerstone of better policy.	Citizen-focused administration. The administration as the first partner for businesses. The civil servant as a main factor in public administration.	Modernising the administration and public institutions by implementing specific ICT programmes. Creating an online administration. Reducing the digital divide. Improving the competitive advantage of Brussels-Capital Region.	Intention-based services. Authentic source. Interoperability. Re-use of components developed by other public organisations. Transformation of processes respecting the following principles: use of authentic sources, trusting the citizen, analysing feedback.	User focus. Transformation of processes. Support for civil servants. E-Government as a strategic tool for better governance.

Source: OECD, 2007.

Belgian governments have defined their own strategic e-government plans and goals which cover different timeframes. These variations in timeframes are due to differences in legislative periods across governments. Finally, each Belgian government has fixed its own action priorities, leading to different e-government outputs and outcomes per type of government.

Notes

1. Belgian Federal Public Service, Foreign Affairs, Foreign trade and development cooperation *www.diplomatie.be/en/belgium/belgiumdetail.asp?TEXTID=49019,* accessed 27 February 2008.
2. IDABC (2006), E-Government Country Factsheets. *www.epractice.eu/index.php?page=document.factsheets&cntr=2,* accessed 27 February 2008.
3. OECD (2007), *OECD Economic Surveys: Belgium*, OECD Publishing, Paris.
4. The Flemish Parliament voted on November 28th 2007: Resolutie betreffende de eenmalige opvraging van persoons – en andere gegevens door de overheid en gegevensdeling met het oog op klantvriendelijk bestuur, *http://jsp.vlaamsparlement.be/docs/stukken/2006-2007/g1277-3.pdf,* accessed 28 February 2008.
5. Davey, K. (2003), *Division of responsibility between levels of power*, UNPAN Virtual Library, Local Governance in the region of Europe, *http://unpan1.un.org/intradoc/groups/public/documents/UNTC/UNPAN017645.pdf,* accessed 28 February 2008.
6. Belgium has 589 municipalities: 308 municipalities in the Flemish Region; 262 municipalities in the Walloon Region; and 19 municipalities in the Brussels-Capital Region, *www.belgium.be/eportal/application?origin=navigationBanner.jsp&event=bea.portal.framework.internal.refresh&pageid=indexPage&navId=2698,* accessed 28 February 2008.
7. Calculations based upon official statistics figures for 2007: *www.statbel.fgov.be/downloads/pop200701com.xls*, accessed 28 February 2008.
8. Christopher, C. and B. Bouckaert (2004), *Public Management Reform. A Comparative Analysis*, Oxford: Oxford University Press, expanded 2nd edition.
9. According to the ICT Household survey 2007: Usage of Internet by 67% of the citizens aged 16-74 – in the last 3 months, 29% of the citizens have never used Internet – *www.statbel.fgov.be/downloads/ict_in_2007_fr.pdf,* accessed 28 February 2008.
10. Swenden, W. and M. Theo Jans (2006), "*Will It Stay or Will It Go?" Federalism and the Sustainability of Belgium*, West European Politics, Vol. 29, No. 5, pp. 877-894, November.
11. Swenden, W. and Maarten Theo Jans (2006), *"Will It Stay or Will It Go?" Fedralism and the Sustainability of Belgiu*m, West European Politics, Vol. 29, No. 5, pp. 877-894, November, p. 878 ff.
12. *17 Février 1994. – La Constitution coordonnée* (17 February 1994 – The Constitution). Publication: 17-02-1994. Taking effect: 27-02-1994.
13. The reform was named after the astronomer Copernicus who proposed that the Earth revolved around the sun and not the other way around, as was previously thought. The reason for naming this round of reforms after him is to suggest that the administration is there for the citizens and not the other way around.
14. OECD Reviews of Human Resource Management in Government: Belgium, 2007
15. Christopher, C. and Bouckaert, B. (2004), Public management reform. A comparative analysis, Oxford: Oxford University Press, expanded 2nd edition.

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Chapter 2

Challenges to E-Government

Given the role of data and information sharing for the development of e-government solutions that enable more efficient and user-focused government, privacy legislation and regulation are particularly sensitive from a whole-of-public-sector Belgian perspective; this is the major **legislative/regulatory challenge**. *The potential use of electronic ID cards in e-government applications is likely to further provoke and accelerate the privacy debate, and – if envisaged to support user-focused services – requires better legislative and regulatory collaboration from a holistic perspective. All Belgian governments have created legal frameworks for e-government within their jurisdictions. Furthermore, major legislative challenges to e-government have been overcome throughout sectors by introducing sector legislation, establishing sector committees within the Belgian Privacy Commission and making use of the concept of authentic sources.*

E-Government currently is financed on the basis of project-based, short-term funds rather than programme-based funds, covering multi-year perspectives. The concept of "mutualisation" to address **budgetary challenges** *both at the local level and between governments has been increasing and represents an opportunity for the development of more sustainable programme solutions in the future.*

A further challenge to seamless e-government services in Belgium is the fact that, for various reasons, Belgium governments are tackling many **public sector infrastructure challenges** *individually. They are, in parallel, developing their own e-government building blocks, which are then put at the disposal of other governments after they have been developed.*

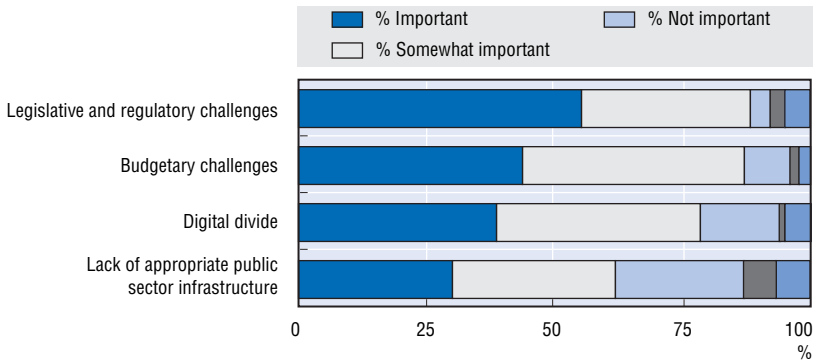
The most significant barrier to high user take-up of e-government services in the short-term is the existing **digital divide** *in Belgium. Despite considerable growth of broadband take-up, Belgium has a comparatively low total Internet penetration, ranking only 23rd out of 30 OECD countries. Also, statistics reveal significant differences in access, use and sophistication of usage across regions, age groups, and socio-economic groups. Three major findings are noteworthy for the prioritisation of future policies. Firstly, evidence suggests that Internet users rank using government information and services as one of their main (and trusted) activities. Belgian governments might therefore be in the position to motivate ICT uptake with the provision of user-focused services. Secondly, data suggests a significant willingness of elderly to use e-government services. Finally, use of ICT for training and education and job searches remains a major challenge, especially among the unemployed.*

This chapter looks at four areas of challenges to e-government development and implementation in Belgium: legislative/regulatory challenges; budgetary challenges; infrastructure challenges and digital divide challenges. Further challenges are addressed in the relevant later chapters.

As is the case in many OECD countries, Belgian governments face a number of challenges in overall e-government development. To provide integrated, user-focused e-government services in Belgium, many of these challenges will need to be addressed as a collaborative effort across governments' respective jurisdictions. According to OECD survey respondents, the most important barriers to e-government perceived by the Belgian governments are legislative and regulatory barriers, followed by budgetary challenges and the digital divide (see Figure 2.1). Infrastructural challenges are perceived by survey respondents as the least important barrier to successful e-government in Belgium, even though they remain significant – identified as important or somewhat important by 63% of respondents.

Figure 2.1. **Perceived ranking of key challenges to e-government implementation**

All governments



Survey Question: 2.1 a) Please rate the importance to your organisation of each of the following external challenges to e-government implementation.

Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

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Federal legislative frameworks can be complex and present a particular challenge to horizontal policy areas such as e-government; however, concerns about legislative complexity creating a barrier to e-government often also come from a lack of knowledge, competence, and drive for innovation on the part of civil servants or organisations interpreting laws and regulations. This phenomenon has been reported by many OECD countries.[1] In Belgium, two contextual factors seem to reinforce this situation: large-scale public administration reforms have not necessarily led to the expected outcomes in the past, and the current employment structures in certain governments tend to be dominated by progressive private sector managers and highly specialised technical experts who perceive legal frameworks as unnecessary constraints. The application of the principles of administrative burden reduction between agencies and governments, along with proactive communication of the benefits of e-government solutions within the public service, might address this perception.

OECD interviewees stressed that the most significant challenges are:

- The need for ***specific funding for shared projects – both cross-governmental and cross-institutional***. The existing budgetary mechanisms fall short in supporting collaboration and co-operation horizontally and vertically across governments, allowing the conclusion that funding for e-government projects and programmes is not systematically managed in Belgium. This is perceived as a recurrent challenge when co-financing of e-government projects is needed, both within and across governmental borders.
- There are ***concerns about local capacity to deliver and implement e-government***. Municipalities are currently supported in their e-government efforts by the regional/community governments, and to a lesser extent, the Federal Government. The concept of sharing resources ("mutualisation") is increasingly used by municipalities to achieve economies of scale for e-government investments, to maximise their joint buying power as consumers of e-government solution providers, and to strengthen their bargaining position with regard to other e-government actors.

Legislative/regulatory challenges

Belgian governments have adopted legislation to render the functioning of public administration more transparent. However, transparency attributes only a passive role to citizens and businesses instead of providing for active involvement in the process of creating and amending laws. No Belgian government has yet explicitly implemented consultative processes which may provide better policy outcomes with increased legitimacy.

Key points

- *There is a lack of co-ordination and harmonization of the legislative/regulatory framework across administrative and geographic boundaries. Differences can inhibit and block the flow of information and services through new channels of networked governance. The* ***capacity to harmonize differences between EU directives and between approaches of the different Belgian governments will be a significant challenge*** *to resolve for the development of user-focused, seamless services.*
- *Given the role of data and information sharing in the development of e-government solutions that enable more efficient and user-focused government,* ***privacy legislation and regulation is particularly sensitive****. Increasing information and data exchange across organisational boundaries has intensified debate among stakeholders on issues of privacy and the protection of sensitive data. The* ***electronic ID (eID)*** *card has increased the importance of these matters and the potential use of eID in e-government applications is likely to further provoke and accelerate the privacy debate in the near future.*

OECD interviews confirmed that Belgian governments have made a deliberate, strategic choice to pass laws to support e-government goals and intentions on an as-needed and step-by-step basis. All governments appear to have adopted a pragmatic and rather operational, project- or sector-focused attitude towards e-government legislation. In other words, Belgian governments have chosen to address potential legal challenges through the adoption of specific laws regulating targeted areas (for example, the use of electronic signatures and the protection of sensitive data) instead of introducing a single e-government law.

Table 2.1 provides an overview of major laws regulating electronic data and services in Belgium and makes references to the relevant EU directives which regulate and impact e-government. The adoption of EU directives at the federal and regional levels can be tracked via the Intranet site *Eurtransbel* of the Federal Government. *Eurtransbel* increases transparency by allowing users to monitor the process by which European directives are adopted into Belgian law.[2]

Each Belgian government updates its legislative framework according to its own priorities. OECD interviews suggest that the timeframes put in place by the European Union directives can influence these decisions. Overall, however, **all Belgian governments put their respective legal frameworks into place at the speed and in the order which they see fit, leading to asymmetric legal and regulatory framework conditions for the development and implementation of**

Table 2.1. **Major EU e-government directives and their incorporation into Belgian law**

Legal topic	EU directive	Incorporation into Belgian law
E-Procurement	EU directive on public procurement including article on e-procurement [2004/18/EC, Article 33].	Royal decree on e-procurement (18 February 2004). This royal decree contains rules applicable to communication and storage of data, but does not cover specific procedures such as e-auctions. For the time being, Belgian authorities are not authorised to use e-auctions. Reflecting the royal decree on e-procurement, the Joint Electronic Public Procurement (JEPP) portal currently enables e-notification and e-tendering for e-procurement but does not yet allow e-awarding and e-invoicing.
Re-Use of public data	EU directive on re-use of public data regulating the usage of public data [2003/98/EC]. [Note: this is not really about e-government, but commercial re-use of *e.g.* weather, maps, traffic information collected by or for governments.]	The EU directive on the re-use of public sector information has been translated by the Walloon Region, the Flemish Region, the French Community and the Federal Government.
E-Commerce	EU e-commerce directive [2000/31/EC].	Two laws published in the Belgian Official Journal on 17 March 2003 address certain legal aspects of the Information Society, in particular electronic commerce. Unlike most other EU member states, Belgium has not passed a horizontal e-commerce law, but implemented a series of amendments to existing laws and regulations.
Liberalisation of telecommunications markets in Europe	Five directives constituting the new EU regulatory framework for the liberalisation of the European telecommunications markets: the framework directive, the access directive, the universal services directive, the authorisation directive and the privacy directive.	The Telecommunications Act of 19 December 1997 led to the liberalisation of telecommunications markets in Belgium.
E-Signatures	EU directive on electronic signatures regulating the framework for recognised electronic signatures [1999/93/EC].	The Law on the Use of Electronic Signatures in Judicial and Extra Judicial Proceedings (2000) and the Law on Electronic Signatures and Certification Services (2001) comply with the EU directive. Furthermore, specific legislation was introduced to ensure that the eID card e-signature function can be optionally validated by the card owner.
Privacy	EU directive on privacy and electronic communications [2002/58/EC].	The new e-communications law was adopted on 13 June 2005. Further, a draft law was approved by the Belgian Council of Ministers on 14 July 2006 to correct its apparent deficiencies. Also, a specific law relating to spamming was adopted on 24 August 2005 to comply with the EU directive [2002/58/EC].
Data protection	EU directive on data protection regulating protection of personal data [95/46/EC].	The Law on the Protection of Private Life of 1992 was amended by the Law of 11 December 1998, translating the European Directive [95/46/EC]. The law is now available in its "co-ordinated version" dated January 2006.

end-to-end e-services. This fragmented environment poses a challenge to user-focused, integrated e-government and seems to hinder the development of e-government front-office applications that effectively convey an image of integrated e-services to Belgian users. Also, there is a risk of marginalising governments which are implementing laws slowly.

The current incremental approach each government chooses reflects the *ad hoc* nature of the publishing of EU directives. The international directives are seen as a major driver to achieve consensus among the governments. This suggests limitations to the development of a coherent legal framework to support end-to-end, user-focused services.

Another important question to ask is whether it is the design and formulation of laws and regulations that drives public sector transformation, or their successful implementation and enforcement? OECD interviews stressed the lack of coherence among practices within the Belgian jurisdictions as a major challenge to end-user focused e-government development.

Authentication sources, registers and other e-government building blocks (*e.g.* the unique identifier for citizens and businesses) have been an important policy focus of Belgian e-government throughout recent years:

- The unique identifier for businesses has been adopted by the Federal Parliament via the Law of 16 January 2003 on the Crossroads Bank for Enterprises.
- The unique identifier for citizens is based on the Law of 8 August 1983, modified by the Law of 25 March 2003 on unique citizen identifiers. By introducing new legislation, Belgium has created a unique, Belgium-wide identification number based on each citizen's birth date. Even though this unique identifier could replace all other citizen identification numbers, different identifiers are still being used in some sectors such as health and judicial affairs.

The extension of authentic sources to different sectors was made possible by introducing sector legislation, making use of the concept of authentic sources, and establishing sector committees within the Belgian Privacy Commission.

Privacy and data protection

Governments are increasingly seeking a trust-based relationship with users by assuming users' good intent in interacting with governments (after previously focusing on preventing fraud). Given the role of information and data sharing for the development of integrated e-government solutions, privacy legislation and regulation is particularly sensitive throughout the Belgian governments. OECD interviews revealed that governments need to find solutions that strike a balance between privacy legislation, and

information and data sharing. Increasing information and data exchange across organisational boundaries has intensified debate among stakeholders on issues of privacy and the protection of sensitive data.

The recent Fed e-View/Citizen (2006) study found that citizens in Belgium are hesitant to use e-government services without necessary and sufficient protection of privacy, and personal and sensitive information and data.[3] As Table 2.2 shows, Internet users trust public institutions to secure personal data more than they trust the private sector. Fears about malicious use are about the same for both sectors, suggesting a general fear among Internet users.

Table 2.2. **Privacy and trust in data/information transfer of Belgian citizens**

	Internet users (1st wave, N = 3 324)	Non-Internet users (1st wave, N = 1 421)
	% (totally) agree	% (totally) agree
Transfer of personal data/information on the Internet constitutes a threat to my private life.	41.6	65.1
I trust public institutions' websites to secure my personal data/ information electronically.	63.8	
I fear that personal data/information I provide on public institutions' websites will be used in a malicious way.	43.6	
I trust websites within the private domain to secure my personal data/information electronically.	40.3	
I fear that personal data/information I provide on websites within the private domain will be used in a malicious way.	47.0	

Source: Fed e-View/Citizen (2006).

Several privacy and data protection matters are of particular relevance in the short term, as governments prepare to develop more transactional and personalised services, and subsequently integrate back- and front-office delivery processes.

- **Principles of data sharing and data exchange.** The extension of key registers to new sectors is likely to draw political attention to the basic principles of data sharing and data exchange across sectors and types of government. The Be-Health project (aiming at electronic exchange of health data), whose implementation has been accelerated and decelerated due to political debates, is just one example of the necessity to agree on common principles. The discussion on the use of the electronic identity infrastructure for more frequent and even day-to-day applications will further affect the protection of personal data.

- **Consumer protection/access to data and information.** Another key challenge will be the issue of citizens' control of their own personal data, given that major concerns have already been expressed with regards to innovative e-government evolutions such as the eID and the CBSS. These ICT-enabled solutions will have to gain public trust, and transparency of data handling processes will remain a concern.
- **Leadership and co-ordination of privacy protection.** OECD interviewees stressed that citizens and businesses need to be ensured that their privacy is being guaranteed by an adequate legal framework that controls data flows of their personal information. The development of regional privacy protection regimes may lack a common "data protection culture" and shared guidelines, and could create disruptive tensions for shared services. A side effect could be increased implementation costs of e-government services. This should be carefully considered.

OECD interviews indicated that the federal Belgian Privacy Commission allows for significant flexibility in applying privacy regulation. It currently consists of a general commission and five sector committees dealing with: social security, the national register, federal authorities, the Crossroads Bank for Enterprises, and the former judicial project Phoenix.[4] In order to ensure the necessary co-ordination, all sector committees are part of the general commission and are chaired by a member of the general commission. In addition, each sector committee includes independent experts, appointed by the Parliament, in the relevant fields.

Legal framework for the eID card solution

Belgium has created a mandatory electronic ID card, which is gradually being distributed to all Belgian citizens. Specific legal concerns have been expressed around the multiple functions of the card, which can be used for governmental and non-governmental services. Public and private sector organisations currently have varying access rights to the information stored on eID cards.

The legal recognition of e-identification and authentication is necessary if smart cards are to be used in e-government for the submission of electronic forms containing sensitive personal data or financial information. This is crucial, as the large majority of eID holders immediately voluntarily validated the e-signature function of the eID card. The legal framework for the use of electronic ID cards in Belgium is set in a series of Royal and Ministerial Decrees, among them:

- The Royal Decree of 25 March 2003 on the legal framework of electronic identity cards, restricting the type of data stored on the card to information for identification purposes.

- The Royal Decree of 1 September 2004 on the generalisation of electronic ID cards country-wide.
- The Royal Decree of 18 October 2006 on the children's ID cards for people under 12 years of age.

eID pilot applications and their respective legal requirements are currently being developed in parallel. Foresight mechanisms which cover the legal consequences of potential failures in the long-run must be put in place along with tools that assess the legal benefits of smart-card-enabled services (such as reduced administrative burden due to simplified case handling). Also, Belgium must make a decision about the legal framework for eID applications as soon as possible in order to fully integrate e-government. The involvement of all partners is necessary.

Through its link with the Crossoads Bank for Social Security, the eID will provide secure identification and authentication for e-enabled social security applications. In order to ensure privacy protection, the Crossroads Bank for Social Security has developed principles:

- It does not store any data itself, but only saves information in the form of a reference register.
- Every electronic transaction goes through an *ex ante* control of legitimacy (*régime d'autorisation*) which implies that all transactions via the crossroads are exclusionary.
- Through data sharing, the Crossroads Bank for Social Security enables users to receive automated benefits. For example, citizens who meet predefined conditions automatically receive tariff reductions from their energy supplier, without having to actually apply for them. Telephone companies also grant such special tariffs, and the Crossroads Bank for Social Security plays a role in verifying the appropriateness of customers' demands."

Legislation mandating "**active transparency**", demanding that information be made publicly available by government authorities, plays an important role in the development of e-government. Article 32 of the Belgian Constitution ensures the right of access to documents held by the public sector; it was amended in 1993 to afford citizens the right to consult any administrative document and to have a copy made, except in specific cases and conditions stipulated by other decrees and laws. Citizens can access any documents, including those in judicial files; government organisations must respond to all written requests within 30 days. All responses must include information on the appeals process and name the civil servant handling the dossier. A 1997 law stipulates the same kind of transparency obligations for provinces and municipalities. The Flemish Region, the Brussels-Capital Region, and the French Community have also adopted their own legislation on access to administrative documents.[5]

Box 2.1. **Legal key success factors for the Crossroads Bank for Social Security**

Two legal factors seem to have supported the Crossroads Bank for Social Security in becoming an internationally recognised sectoral e-government best practice.

Strong legal mandate: The Crossroads Bank for Social Security received a very strong legal mandate at an early stage of Belgian e-government development and was itself created as an institution by law in 1991. The same 1991 law mandated electronic data transactions. The principle of "deliver once, use multiple times" and the use of authentic sources were also set out by law.

Board of stakeholders: The Crossroads Bank for Social Security is steered by its own users, the federal social security institutions. The board-like governance structure of the Crossroads Bank for Social Security was defined in the law on the creation of the Crossroads Bank for Social Security in 1991. The board of stakeholders has been successful in ensuring user focus throughout the Belgian social security landscape by promoting BPR, administrative burden reduction, and service development as parallel processes.

It is crucial to put the CBSS success story into perspective: due to the law of 1991, the Crossroads Bank for Social Security benefited from a solid legal basis to pursue its activities at a very early stage. The Belgian e-government landscape has already produced significant e-government components, but legal frameworks are still fragmented and do not provide for wide-ranging actions and mandates.

Source: Further information can be found in Case Study 2: The Crossroads Bank for Social Security.

OECD interviews indicated that increasing public sector transparency is a lesser priority to e-government decision makers in Belgium than other areas such as efficiency and effectiveness increases, and user-focused e-government development. Furthermore, OECD interviews indicated that citizens are not always aware of existing legislation because of the complexity of the multiple legal systems in place in Belgium. In this context, there is room for future actions using e-government to render Belgian governments more open and transparent and essentially more user-focused.

Budgetary challenges

Key points

- *The minister responsible for finances also holds an important oversight function for ministries' expenditure programmes, including the power to intervene if they do not respect established spending ceilings. Despite these oversight powers,* ***ICT expenditures are not systematically monitored****; as a result, there is no government-wide evaluation of ICT spending available for purposes such as strategy development, or e-government benchmarking or performance assessment.*
- ***E-Government is currently financed through project-based, short-term approaches rather than programme-based approaches covering multi-year perspectives***. This is mainly due to constraints in medium- and longer-term planning due to the formal budget cycles of public administration – and the fact that regions have four-year budgetary cycles and communities five-year budgetary cycles as a result of differing election periods. Investment in e-government is therefore reliant on political prioritisation.
- *Efficiency is a priority for all governments, but there is no direct link between e-government and efficiency programmes. E-Government is regarded as a cost rather than a savings centre. All governments are currently struggling with the development of economic analysis underlying their e-government investments.*

To date, special funds for development of e-services have been limited, and each government and each public institution has basically been left alone to evaluate its own needs and requirements – politically or administratively – against the return on investment and efficiency gains in their own organisation. This situation is gradually changing as governments recognise the necessity of wider collaboration across organisational and government-level boundaries to develop integrated e-services involving public institutions from all levels and types of government.

For example, the social security sector uses its own budgetary envelope, which contains membership fees within its sector of activities. The financing mechanism of the Crossroads Bank for Social Security differs from traditional governmental funding by benefitting from significant budgetary autonomy within the limits of pre-defined policy priorities. These priorities are jointly defined in a contractual agreement by the Crossroads Bank for Social Security's board[6] and the Federal Government.

E-Government funding in Belgian governments

A defining characteristic of Belgium's budget system is that each government enjoys decentralised authority for budget execution (as is the case in other federal countries). In each Belgian government, ministers (and

thus ministries) are responsible for all expenditure decisions within their areas of responsibility, including ICT spending. Each ministry is responsible for final allocation of funds in its main portfolio, within the expenditure limits set for each "spending ministry" by the ministers responsible for finances.

There are significant differences among the Belgian governments' budgetary mechanisms, posing a challenge for e-government development. As future fiscal consolidation will require all government levels to participate by reining in spending and indeed generate surpluses in order to participate in the pre-funding process – according to the recommendations of the OECD Economic Survey (2007), common challenges are addressed in the second part of this section:

At the ***Federal Government*** level, each ministry must find funding within its own existing operational budget – and each ministry can choose to implement e-government projects at its own discretion. Improved budgetary mechanisms to ensure fiscal discipline are especially important at the federal level; since the beginning of the federalisation process, it has been under pressure to consolidate.

The anchor principle, being applied throughout the Federal Government, introduces monthly monitoring of expenditures in each federal institution to make sure that each institution respects the historical under-utilisation rate of the budgetary credits allocated to finance spending programmes excluding personnel expenditure.[7] The anchor principle seems to be effective in preventing budgetary windfalls being spent in the year in which they occur and in ensuring compliance with growth ceilings. However, the anchor principle does not stop spending pressures from piling up (especially in the face of windfalls), which may cause the breakdown of spending constraints.

Since the Copernicus Reform, each federal ministry's budget is controlled by an internal audit body, responsible for monitoring budgetary principles and rules. Even though this aspect of the Copernicus Reform has been decreed by law, OECD interviewees stressed that actual implementation of financial controls is still rare. Nevertheless, the existing budget structure still focuses on inputs and does not seem to be sufficiently performance oriented. Like in other OECD countries, separate audit mechanisms (that could take into account the particularities of e-government projects and could provide for their special treatment) have not been put in place for ICT investments. The 2005 OECD Economic Review[8] of Belgium found that the focus on policy priorities could be strengthened further by systematically putting into practice the existing clause that any proposition for new initiatives must be accompanied by budgetary compensation measures; instead, under current practice, departments prepare proposals for new initiatives using cost estimates, and then bargain for additional budgetary resources (bottom-up

budgeting). Choices are made in accordance with the general policy priorities of the Federal Government. The low emphasis on compensatory measures can be partly attributed to the absence of a systematic review of all spending programmes, which would more clearly indicate the areas in which e-government can generate savings.

In 2004, the ***Flemish Parliament*** enacted a financial reform decree (*Comptabiliteitsdecreet*), which in theory imposes new budgeting, accounting, internal control, and internal audit systems. The Flemish Region has since then been aiming at adopting performance budgeting which builds on: a new budgetary structure linking objectives and actions of departments and agencies with financial means; reports on policy effectiveness linked to annual budgets; and an accounting system with a cost-analytical component. This new, ambitious system underpins the importance the Flemish Region attributes to performance-based budgeting systems.[9] It is, however, questionable whether the mechanisms of the *Comptabiliteitsdecree* can effectively respond to the very specific needs of e-government funding that the OECD survey clearly shows: lack of funding mechanisms for building blocks, lack of funds in general, and lack of cross-governmental funding.

The ***Walloon Region*** and the ***French Community***, in turn, have recently ventured into limited public sector reforms that have only marginally influenced budgeting procedures. The use of performance-based budgeting mechanisms is not envisioned in the Walloon Region government's budgeting. Existing fragmentation is reinforced by the bipolar administrative structure of separate regional and community governments. Recent reform efforts in the Walloon Region and the French Community include some experiments with joint projects, such as the *Walcomfin* financial management project involving both the regional and community administrations; its implementation clearly risks suffering from co-ordination deficits:[10] Very few concrete results have been achieved since the official launch of the *Walcomfin* initiative in 1998.

The ***Brussels-Capital Region*** doesn't have a separate funding chapter for e-Government as such. However, since 2004 there is a separate division for ICT funding in the regional budget. One single minister is in charge of that division. That peculiar situation guarantees coherence in the e-Government and ICT strategies across all regional institutions and also to support the development of some electronic services to the benefit of the 19 Brussels municipalities, like Irisbox. Since 2008, all ICT-related funding within the Ministry has been regrouped in one budget line "new technologies". Other public bodies in Brussels (which are autonomous), such as the Institutions of Public Service (STIB, Firefighters, ...), the municipalities and local authorities, educational institutions, health institutions, fund e-government project through "impulse programmes". Recently developed policy guidelines clearly state the objective to encourage co-funding.

Common budgetary challenges for e-government implementation and development

To put public finances on a sustainable path, Belgium, like many other OECD countries, must deal with the pressure an ageing population puts on public finances. Additionally, Belgium has historically amounted large public sector debt (see Chapter 1). Consequently, the Federal Government, the regions and the communities concluded a multi-annual co-operative agreement for 2006-2009 – the Stability Programmes[11] – in which each government committed to respecting a pre-determined path to balance the budget. Unlike other OECD countries, Belgium did not include e-government as a tool for transformation of government and the public sector as a whole in this multi-annual agreement. As all Belgian governments are facing significant budgetary pressures, the case for e-government as a driver for public sector efficiency savings is potentially strong.

The OECD survey and interviews highlighted three main budgetary challenges: 1) lack of good business case methodologies for ICT investments; 2) lack of funding for e-government in local government; and 3) lack of funding for shared and long-term e-government programmes.

1. *Lack of good business case methodologies for ICT investments*

It is not easy to quantify costs and potential benefits of e-government projects; this makes it difficult for governments to develop useful business cases for e-government projects and to compare alternatives in a budget-setting context. This is particularly relevant for ICT projects. The costs of developing, implementing, and maintaining ICT systems often dominate e-government financial impact assessments – they arise before the benefits and are easier to measure, particularly when benefits are more qualitative, intangible or unpredictably set in the future. When competing with other critical demands on public resources, difficulties in calculating substantive tangible benefits to offset clear, often apparently high costs can lead to short-sighted decisions hampering e-government progress.

Using **economic analysis methodologies**[12] for e-government projects and following up with evidence-based decision making and tracking of the subsequent implementation process can help reduce the potential risks of failures of ICT investments and making the issue more relevant to the political level in charge. This is crucial, as ICT investments are often significant and failures are likely to create negative headlines in the media. Due to Belgian voters' perception that e-government is not a major policy issue, a vicious cycle of negative headlines and disinterest of Belgian citizens could result.

Given the difficulties governments face when developing adequate methodologies for cost- benefit analysis and benefits realisation studies, sharing the burden of developing indicators and exchanging past experiences

can help governments drive their development of e-government assessments forward. In the Belgian context, it seems to be important that sharing such burdens does not imply diffuse roles and responsibilities.

OECD interviews revealed the following common challenges:

- ***Limited knowledge within Belgian governments about the actual benefits of e-government, including non-financial benefits.*** OECD interviews clearly indicated that all governments share the common goal of better understanding the benefits and impacts of their e-government projects. All governments are increasingly investigating e-government benefits to users, as the few figures available on take-up and user satisfaction reveal significant room for improvement.
- ***The limited existence of performance indicators for political decision makers.*** The dominance of other key issues on the Belgian political agenda must be counterbalanced by showing e-government measures as attractive tools for policy makers. In this sense, indicators can focus political attention towards a set of higher-level goals or purposes that would be universally accepted and that might be an incentive for the public sector to strive harder to reach political goals. Also, further e-government investments can be justified politically if adequate indicators underpin the benefits of a project.

2. Lack of funding for e-government in local government

Municipalities are currently supported by the federal and regional levels, and regional budgetary allocations are the major source of funding for projects in municipalities. However, there are concerns about local capacity to deliver and implement increasing e-government demand.

The OECD survey results show that sustainable lon3g-term funding of e-government at the local level is scarce and is perceived as the main barrier for e-government development; 82% and 79% of respondents, respectively, state that the lack of multi-year funding and the general lack of funding for e-government projects are challenges for e-government implementation. Due to the limited financial means available to municipalities (especially smaller municipalities), they are generally dependent on the support from the regional level.

The concept of mutualisation (and co-financing) is gaining popularity among certain municipalities, which jointly organise their e-government efforts to benefit from economies of scale, to better pressure e-government solution providers, and to strengthen their bargaining position with other e-government actors. The concept of mutualisation is increasingly being applied across types and levels of government in Belgium, *e.g.* to support the implementation of the Belgian co-operation agreements on e-government (see Chapter 1). OECD interviews show that the Federal Government, through Fedict, has engaged in informal technical dialogues with the municipalities on the use of the e-

government building blocks developed and provided for free by Fedict to all types and levels of government. Another example is that the Flemish Region has started to offer the basic services of its MAGDA platform for free to interested municipalities. At the End of 2007 the Flemish Minister responsible for E-government invited all local communities to send in ideas how the Flemish administration could better support their e-government activities.

3. *Lack of funding for shared and long-term e-government programmes*

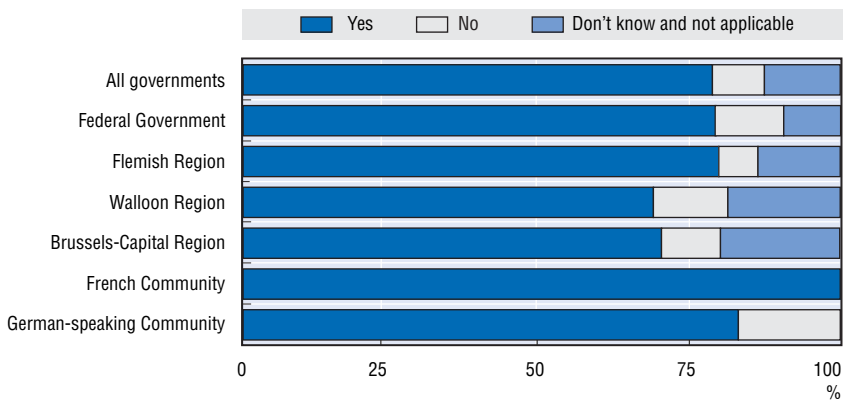
The perceptions of both a significant lack of funding (63%) and a serious lack of long-term funding for multi-year projects (65% of all Belgian respondents), suggests that major e-government projects are currently not considered as long-term investments; instead, they compete with short-term priorities of the different governments in Belgium.

Budget-time horizons are linked to the overall budgetary procedures and legislative periods of each of the governments, placing constraints on mid-term to longer-term budgetary planning for investments in e-government. This is of particular significance to the support of co-produced, long-term e-government programmes.

The results of the OECD survey furthermore reveal the need for specific funding for cross-governmental projects and the development of shared building blocks, as well as mechanisms for shared funding across governments and between agencies; this exposes limits of the current budgetary mechanisms for funding horizontal projects within jurisdictions as well as between governments (see Figure 2.2).

Figure 2.2. **Potential for cross-governmental funding of e-government**

All governments



Note: Survey Question 2.4: Is cross-governmental funding a solution?

Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

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Today, shared funding for e-government development and implementation takes place on a case-by-case basis. Examples include:

- ***"Au travail"/ "Aan de Slag"***: The Federal Government is currently developing a shared application with the Flemish Region that provides information and data around the theme of employment to both employers and those seeking employment. The other regions have been invited to use the application as well, and to complete the information with their own employment rules. Co-financing models to extend this application to other Belgian governments are also under development.
- ***Impulse programmes:*** Brussels-Capital Region works with municipalities and other public bodies (including hospitals, schools, etc.) to quickly develop e-government applications, among them: the project *télémammographie* (allowing for the electronic transfer of mammography results), the development of m-government solutions, and the placement of electronic counters on the territory of Brussels-Capital Region. The Brussels-Capital Region finances 50% of the costs of impulse programmes.

Currently, budgetary rigidities can prevent shared funding arrangements, and there are no budgetary concepts for profit sharing. Appropriate accountability mechanisms which would take into account the complex Belgian state structure when vetting e-government projects across organisational and governmental boundaries have not been put in place. Costs required for e-government development are mainly shared among those governments participating in each project.

Public sector infrastructure challenges

More user-focused e-government development will require the creation of one networked public sector infrastructure; this will ensure interoperability within and across types of government. Today, the only existing e-government infrastructure element is the ICT security infrastructure supporting the Belgian electronic ID card solution. An intergovernmental resolution[13] signed by all Ministers in charge of e-government in November 2006 is expected to have only limited impact on operational tasks, according to OECD interviews.

OECD interviews support the perception that the key challenge to move towards integrated coherent services is the fragmentation of the electronic infrastructure: the different governments have pursued different paths of development with limited co-ordination. This has led to limited coherency and interoperability across the public sector in general.

Key points

- *Despite the international recognition that some Belgian co-operative actions receive,* ***Belgian governments are tackling many public sector infrastructure challenges individually****. As a result, a whole-of-public-sector view on public sector infrastructure is difficult to achieve.*
- *All Belgian governments are developing their* ***own e-government building blocks in parallel****; many of these solutions are put at the disposal of other governments after they have been developed. This does not support a coherent electronic infrastructure for the delivery of seamless services to citizens and businesses.*
- *The Federal Government – in close co-operation with regions and communities – created an interoperability framework, BELGIF, and developed an ICT security infrastructure supporting the Belgian electronic ID card solution. Public institutions can use the* ***BELGIF*** *recommendations when implementing e-government services, but they are not obliged to do so. The lack of mechanisms to ensure the implementation and use of the Belgian Interoperability Framework – BELGIF – can be seen as a strategic and practical weakness, which hinders development and implementation of seamless e-government services.*

This challenge has been recognised politically through the co-operation agreement; however, OECD interviews show that the co-operation agreement has set up a framework for political dialogue rather than an operational co-operation framework for e-government implementation. (The co-operation framework nevertheless specifies concrete areas for improving public sector e-government infrastructure coherency.)

The different governments have historically developed their own back-office applications, building blocks and network infrastructures (see Table 2.3) with limited consideration of national interconnectivity.

Building an e-government infrastructure ensuring whole-of-public-sector coherency is a political and strategic choice that must be made by each government. The consequences of the federal structure are shown in the choices made by the different governments – choices which are political and tactical rather than purely logical and technical, as stated in the two co-operation agreements from 2001 and 2005 (for further information and analysis please see Chapter 3).

Creating interoperable and seamless e-government services was the main focus of the second Inter-Governmental Co-Operation Agreement on E-Government issues (2005) between the different types of Belgian governments. Its aim is to develop user-focused e-services, and the pre-requisites are interoperable service provision across the different types of governments.

Table 2.3. **Overview of infrastructure initiatives**

Type of government infrastructure component	Federal Government	Flemish Region	Walloon Region	Brussels-Capital Region	French Community	German-speaking Community
Enterprise architecture		None	No specific EA		Internet compliance	Study in progress – final decision
Interoperability of work processes and information flows		None	Nothing specific	Re-use of the Flemish MAGDA platform	ESB (enterprise service bus)	Study in progress – final decision
ICT security infrastructure (PKI)	PKI supporting the use of digital signatures in the electronic ID card solution.	ACM/IDM (Access Control Management /Identity Management)	Use of the federal PKI. Development of specific tools like the eSignbox	Development of a regional cross-applications Identification Management System		Use of ACM solution of the Flemish Region
Data structures and interface definitions	UME (Universal Messaging Engine)	MAGDA platform	Use of the federal UME. Development of a walloon UME for specific usages	UME	ESB (enterprise service bus)	N.A.
Technical standards and platforms	BELGIF – Belgian Interoperability Platform. Open standards recommendation[1]	BELGIF	CINAPS, base of BELGIF. Creation of a platform for mutualisation and interoperability (PGI) with all the IT responsibles from the different Walloon Administrations	BELGIF	BELGIF – Belgian Interoperability Platform. Open standards recommendation[1]	BELGIF
Electronic networks	FEDMAN (Federal Metropolitan Area Network)	VO net (Vlaamse Overheid netwerk)	N.A.	Broadband network IRISnet	Leased fiber with gigabit backbone	N.A.

1. Jochmans, J. & P. Strickx (2004), "Directives et recommandations pour l'usage de standards ouverts et/ou spécifications ouvertes dans les administration fédérales", Fedict, October.

Although a common public sector enterprise architecture has not been developed and agreed upon across the different types of government, there are a number of good examples of collaboration and co-operation:

- Belgium was the first European Union member to formally adopt open standards in the Federal Government. The main objectives of this decision were to improve interoperability and integration of e-government services.[14] OECD interviews did not indicate whether open standards were also adopted and implemented in the regional/community governments.
- In 2003, the Federal Government implemented a common non-technical approach to e-government development including managerial and governance issues (*e.g.* structural reform processes, strategic resources for e-government activities, business process re-engineering, service delivery processes), as well as more systemic issues (*e.g.* an interoperability framework including standards and shared resources, an ICT security framework, etc.).[15] Implementation in the social security area proved the worth of concept, also serving as a basis for the co-operation agreement of 2005.
- The Federal Government – in close co-operation with regions and communities – presented an interoperability framework, BELGIF,[16] and developed an ICT security infrastructure supporting the Belgian electronic ID card solution.[17] BELGIF – the Belgian Interoperability Framework – closely tracks the systems in a number of European Union member states and follows the recommended direction of development as stated in the "European Interoperability Framework for Pan-European E-Government Services".[18] Public institutions can use the BELGIF recommendations when implementing e-government services, but they are not obliged to do so. The success of these efforts relies on whether the co-operation partners implement their part of the co-operation agreements.
- Regional governments implemented their own electronic networks in parallel. Flanders significantly invested in its MAGDA platform[19] and Brussels Capital-Region successfully put the broadband network IRISnet into place. Both networks are increasing linkages among the regional and local levels of government in Belgium.

Digital divide challenges

The digital divide is the systematic exclusion or significantly lower use of ICT by certain groups within the population. More recently, OECD countries have been including indicators of type and sophistication of use. In addition to analysing use of e-government services, assessing usage patterns of non-governmental e-services can potentially help governments to add value and reach high take-up figures for their own service delivery mechanisms.

Key points

- *Despite its apparent ICT readiness, Belgium still has* ***low Internet and computer penetration*** *compared to countries such as Denmark or the neighboring Netherlands. There are regional differences in ICT take-up.*
- *One of the smaller and more densely populated countries in Europe, Belgium was initially slow to adopt the Internet and related data and broadband. Statistics suggest a more* ***recent development towards "Broadband Belgium"****, leapfrogging the fixed line Internet era to create an Information Society fit for the digital era. Thus the future potentially sees higher demand for e-government services and related pressure by users to transform government to serve the emerging digitally literate citizenship.*
- *Differences in access, use and sophistication across regions, age groups and socio-economic groups exist in Belgium. Three major findings are noteworthy for the potential of more user-focused e-government services: Firstly, evidence suggests that Internet users consider using government information and services as one of their main (and trusted) activities. Secondly, data suggests a significant willingness of elderly to use e-services, but very low take-up of ICT for this segment of the population. Finally, use of ICT for training and education and job search remains a major challenge, especially among the unemployed, who also display low take-up of ICTs.*
- *Belgium's high Internet and broadband connection prices are a main contextual factor hindering take-up of e-government services. This reveals that, despite the liberalisation of the Belgian telecommunications market, market mechanisms do not necessarily trigger the desired increases in competition.*

Belgium has low Internet and computer penetration in households and for individuals, compared to countries such as Denmark or The Netherlands. It further has significant digital divides: regional disparities, and differences among socio-economic groups. Recent development is moving towards "Broadband Belgium", with businesses now showing above average Internet take-up and households increasingly adopting broadband as their preferred Internet connection. The future shows potentially higher demand for e-government services, supporting Belgium's aim to achieve integrated user-focused services.

The digital divide decreases Belgium's potential to achieve higher take-up of e-government services. Many studies and models in recent years have addressed readiness for e-government and the ability to reap benefits from e-government; this should allow for the development of indicators policy for

quantitative assessments. So far, a single, shared and agreed model has not been developed, but most advanced OECD countries assume that high take-up is positively supported by:

- High access to ICT in households and businesses.
- High frequency and sophistication of Internet use by citizens and businesses (*e.g.* e-commerce), combined with high motivation and trust in the virtual marketplace.
- High levels of computer and Internet skills to bring the knowledge society across generations and socio-economic groups, supported by high confidence in online services.

The Belgian governments have recently launched a national collaboratively agreed action plan[20] to address the digital divide challenge. This 2005-2010 National Action Plan against the digital divide defines 28 actions corresponding to three action lines (awareness, training, and access). The underlying policy goal is the reduction of the digital divide by one-third by 2010. A more thorough discussion of Belgium's e-inclusion policies can be found in Case Study 1.

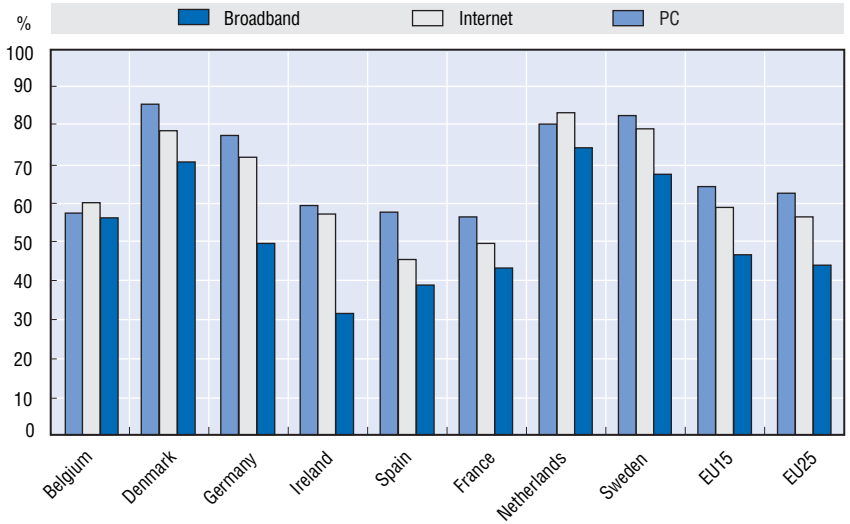
ICT access – a comparative overview

Belgian citizens were initially slow to adopt the Internet. Recent years have seen significant increases in the total number of Internet connections, and a high ratio of broadband users as a percentage of the total Internet penetration. This allows a prediction that Belgium is about to leapfrog the dial-up era. Between 2006 and 2007 Belgium saw the growth of internet uptake by 10% points – from 50% to 60%. Despite this growth however, Belgium remains total access remains about equal to the EU-15 ratio (59%) but much lower than *e.g.* the Netherlands (83% internet penetration) or Denmark (85% of households with computers). Figure 2.3 further shows that Belgium has a relatively high level of broadband penetration in relation to Internet penetration: 89% of households with Internet access have broadband, as opposed to 63% in the EU15 and 83% in the Netherlands.

The 2007 OECD Communications Outlook confirms that Belgium has one of the highest broadband penetration rates compared to the total number of fixed-line Internet subscribers among OECD countries, ranking behind only Nordic countries and slightly above the levels of the United States and the United Kingdom. The high proportion of broadband can mainly be attributed to growth in the number of broadband connections (cable and DSL), while the number of dial-up connections continues to drop.[21] (See Figure 2.4) This suggests a favourable environment for mature e-government services and more user focus.

Figure 2.3. **Comparison of access to computers, Internet and broadband by households (2007)**

Belgium, OECD benchmark countries, EU15, EU25

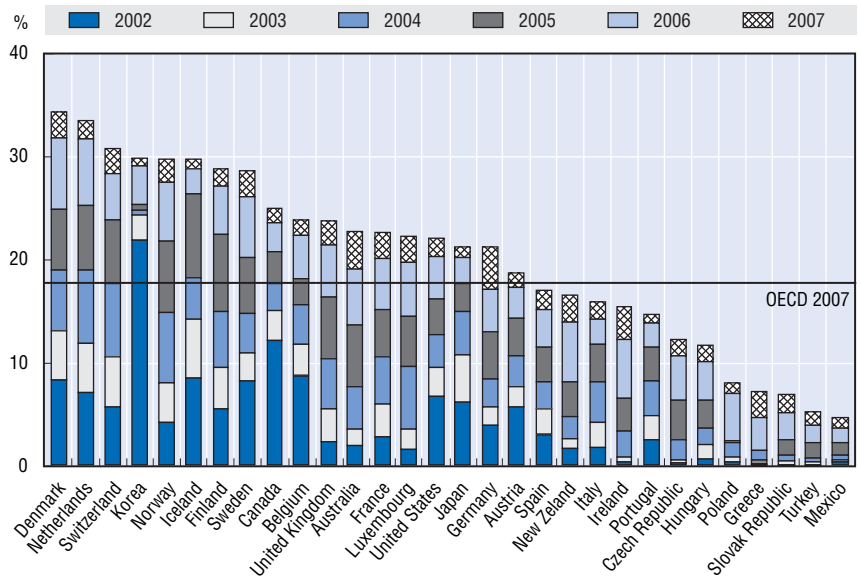


Note: Percentage of access to computers is data from 2006.

Source: Eurostat, Information Society Statistics, 2007, *http://epp.eurostat.ec.europa.eu*, OECD Compilation.

Figure 2.4. **Comparison of broadband penetration in OECD countries (2007)**

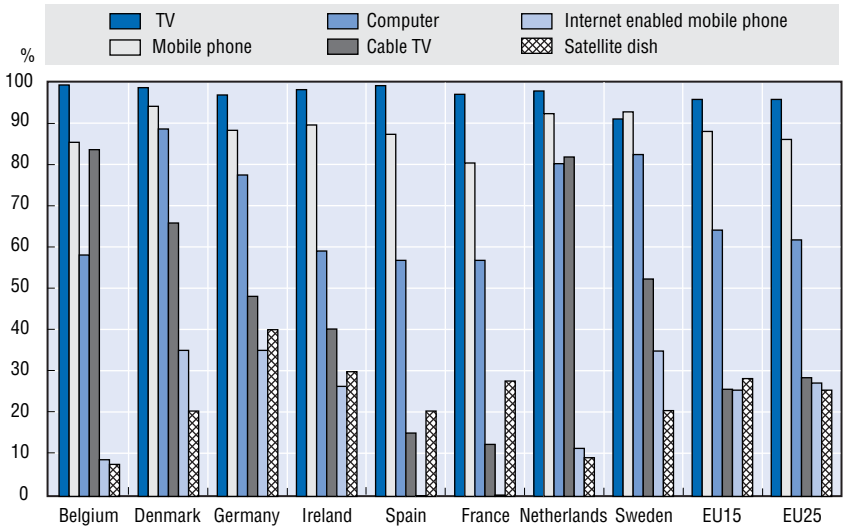
Subscribers per 100 inhabitants



Source: OECD Broadband Portal, *www.oecd.org/sti/ict/broadband*.

Figure 2.5. **Comparison of access to communication devices by households (2007)**

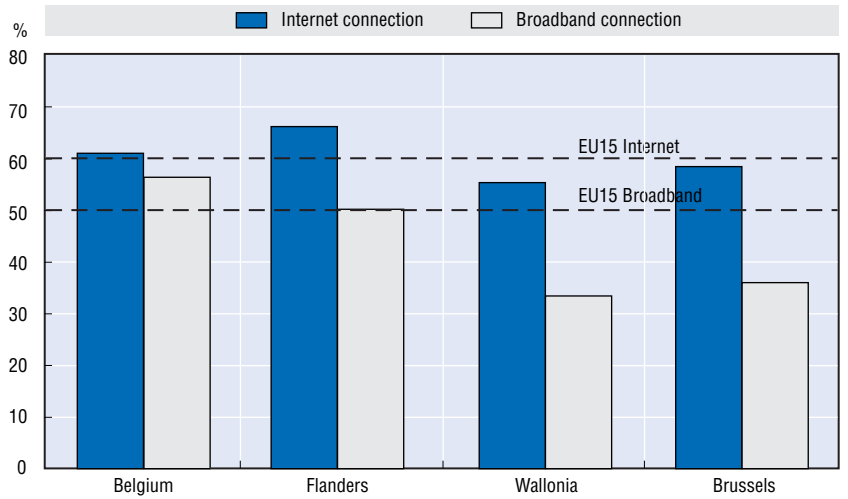
Belgium, OECD benchmark countries, EU15, EU25



Source: Eurostat, Information Society Statistics, 2007, *http://epp.eurostat.ec.europa.eu*, OECD Compilation.

Figure 2.6. **Comparison of access to Internet and broadband by households across Belgian regions (2007)**

Belgium, Flemish Region, Walloon Region, Brussels-Capital Region Region, EU15



Source: National Belgian Statistics Institute, ICT Households Survey, 2007, *www.statbel.fgov.be*,OECD Compilation.

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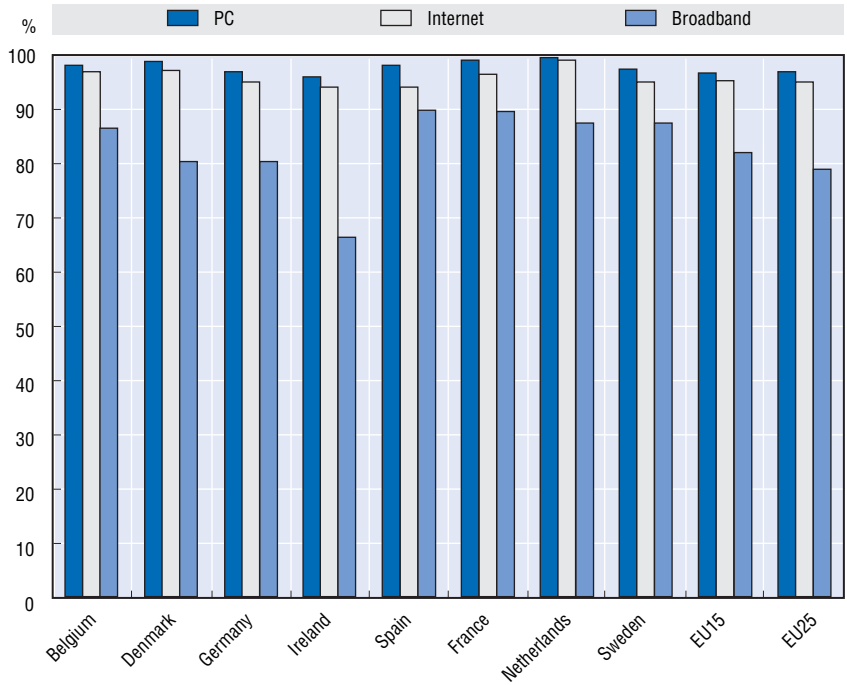
Figure 2.7. **Comparison of access to a computer, Internet and broadband by businesses (2007)**

Belgium, OECD benchmark countries, EU15, EU25



Source: Eurostat, Information Society Statistics, 2007, *http://epp.eurostat.ec.europa.eu*, OECD Compilation.

Since 2005, there has been strong growth in the ownership and use of ICT tools in Belgium. Above all, interactive digital television (IDTV) is showing impressive adoption rates, and currently has attained a penetration rate of 15% of Internet users and 9% of Internet non-users (see Figure 2.5).

Based on a strong correlation between GDP and household take-up of ICT, Belgium's regions are facing different usage situations: the Flemish Region had the highest level of Internet penetration in 2007, with 65% of households with Internet access and 46% with a broadband connection. Comparatively, 58% of households had Internet access and 38% had a broadband connection in the Brussels-Capital Region. The Walloon Region is the region with the lowest Internet penetration, with 53% of households with Internet access and only 32% with broadband access (see Figure 2.6).

Figure 2.7 indicates that the broadband penetration rate for Belgian businesses is well above the EU15 and EU25 averages. The computer and

Internet penetration rates for businesses for 2006 are either slightly above or equal to the EU15 and EU25 averages. This illustrates the readiness of businesses to use online services – and shows that there is, in principle, significant potential for online service delivery by governments to businesses.

In spite of this wide availability of Internet connections, in 2007, 3.3 million people in Belgium have never used the Internet at all or last used it more than a year ago.[22] Many Belgian households remain unconnected, most because they are not interested in Internet activities. Non-users remain very persistent in Belgium, with 80% of non-users not wishing to use the Internet in the near future. The *Fed-e-View Citizen* study (2006) includes substantial research on this group. The main findings are:

- The non-user group consists mainly of the elderly and/or retired (50% are over 55) and the unemployed.
- Many non-users of the Internet lack a motive to use the Internet and cannot see the added value in buying a computer or having an Internet connection in the near future.

The digital divide in facts and figures

Differences in access, use and sophistication across regions, age groups and socio-economic groups persist in Belgium.

The *Fed-e-View/Citizen* study (commissioned by the Minister for Employment and Computerisation of the State), Eurostat data, and data from the Belgian national statistical office allow for the conclusion that there are large differences in the extent to which various population groups use the Internet:

- Individuals over the age of 55, and retired/inactive people display lower and less sophisticated Internet activities. This raises questions about the potential for e-government services and the relevance of life-long learning strategies, which do not seem to have had a high impact in Belgium.
- Usage rates among the unemployed are significantly lower in activities related to employment such as job search, and training and educational activities.
- The next generation of e-government service users – children and students – are displaying low adoption of ICT. Further research into the significance of ICT in schools and skills levels in Belgium should be conducted to ensure skill levels for the future.

Table 2.4. **Internet use in Belgium**

Internet use (percentage of individuals regularly using the Internet)

	Belgium 2005	EU25 2005	Belgium 2006	EU25 2006
General				
Proportion of all individuals using the Internet (ages 16-74)	58	51	62	54
Regional differences				
Proportion of urban individuals using the Internet (ages 16-74)	59	57	63	59
Proportion of rural individuals using the Internet (ages 16-74)	45	42	52	45
Gender				
Proportion of male individuals using the Internet (ages 16-74)	62	55	66	58
Proportion of female individuals using the Internet (ages 16-74)	53	47	58	50
Age				
Proportion of male individuals aged 16-24 using the Internet	83	80	86	83
Proportion of male individuals aged 25-54 using the Internet	69	61	74	65
Proportion of male individuals aged 55-74 using the Internet	32	29	36	30
Proportion of female individuals aged 16-24 using the Internet	83	79	87	83
Proportion of female individuals aged 25-54 using the Internet	63	55	69	59
Proportion of female individuals aged 55-74 using the Internet	19	18	21	19
Employment				
Proportion of employees using the Internet	71	65	75	68
Proportion of self employed or family workers using the Internet	73	54	78	57
Proportion of students using the Internet	93	89	92	92
Proportion of unemployed individuals using the Internet	45	41	51	47
Education				
Proportion of individuals using the Internet with no or low formal	38	29	40	32
Proportion of individuals using the Internet with medium education	62	57	68	61
Proportion of individuals using the Internet with high formal education	84	81	86	84

Percentage of individuals who used the Internet in the last three months.

Source: Eurostat 2006.

Internet usage and sophistication of use

The 2007 ICT household survey by the Belgian national statistical department on the digital divide shows a positive trend for Internet usage, as well as frequency of use of the Internet. Interestingly, online interaction with public authorities is also on the rise (49%, at the same level as using services related to travel and accommodation), indicating both the relevance of and the potential for user-centric e-government services. However, the *Fed-e-View Citizen* report stresses that differences among population groups remain substantial, and all groups of users do not contribute equally to this volume of Internet use.

- ***Usage frequency/Time spent online:*** Eurostat allows overtime analysis for the percentage of Belgian citizens having used the internet in the last 3 months: 58% in 2005, 62% in 2006, 67% in 2007. Thus Belgium as a country displays a positive trend of usage of the internet. However, 2005 data of the ICT survey show differences amongst the regions: 60% in the Flemish Region, 65% in Brussels-Capital Region and 51% in the Walloon Region used the internet in the last 3 months. For accessing the internet on a daily basis the 2005 ICT survey must be used also displayed differences between the regions: 40% in the Flemish Region, 44% in Brussels-Capital Region, and 32% in the Walloon Region.
- ***Sophistication of online activities:*** Most Belgian citizens who accessed the internet in the last 3 months use the Internet for communicative activities such as sending e-mails or chatting, according to 2007 Eurostat data. The second major online activity was searching for information on goods and services (82%). An increasing proportion of the Belgian population is using more advanced, transactional services such as online banking (52%) or online gaming, downloading music (34%).

Independent reviews[23] indicate that Belgians visit far more websites addressing family, children, and health than other Europeans. Further trends can be summarised as follows:

- Social networking websites are used by 23% of Europeans at least once per month; in Belgium, one-quarter of all Internet users visit social networking websites. Additionally, local information, news and film sites have seen a particularly significant increase in use since 2005.
- In Belgium, 35% of online users have used the Internet to download music, compared to the European average of 31%.
- The percentage of Belgian Internet users who make telephone calls via the Internet has significantly increased by 60% since 2005.
- 37% of online Europeans use instant messenger at least once a month; in Spain, France and Belgium using instant messenger is particularly popular with 64%, 52%, and 51%, respectively, taking part in this Web activity.

ICT customer market analysis: availability and pricing

Availability, reliability and pricing of ICT are significant drivers for the wide adoption of ICT across OECD countries. According to statistics from the International Telecommunication Union,[24] Belgian Internet prices are strikingly high when compared with prices in other countries; in an assessment of the 20 best-ranked economies in terms of total fixed broadband Internet subscriber numbers, Belgium ranked 16th in the comparison of broadband prices on 31 December 2005.

A May 2007 article on the Belgian Internet market published by the Belgian consumer organisation *Test-Ankoop/Test Achat* potentially explains the prevalent high prices. The Belgian Internet market is currently divided between two large Internet service providers, which operate in distinct market segments: the former monopolist and ADSL provider Belgacom and the cable provider Telenet. This situation seems to favour duopoly-like conditions, even though the Belgian telecommunications market has been liberalised by law. The liberalisation was achieved on the basis of several laws passed in the 1990s, and Belgacom has been partly owned by different non-governmental stakeholders since 1994.[25] It is noteworthy that the Belgian government still owns half of the shares of Belgacom and has participation in Telenet.

According to the Belgian Consumer Organisation study, the Belgian Internet market is characterised by decelerating growth in down- and upload speed in comparison to other countries.[26] In addition, the compared Internet packages clearly indicate that prices in Belgium are likely to be between 68% and 118% higher than the cheapest comparable packages in other European countries. Further, Belgium is among countries (along with Austria, Portugal and the United Kingdom) where telecommunications providers have relatively low limits on monthly data transfer volumes to users (so-called "bit caps").

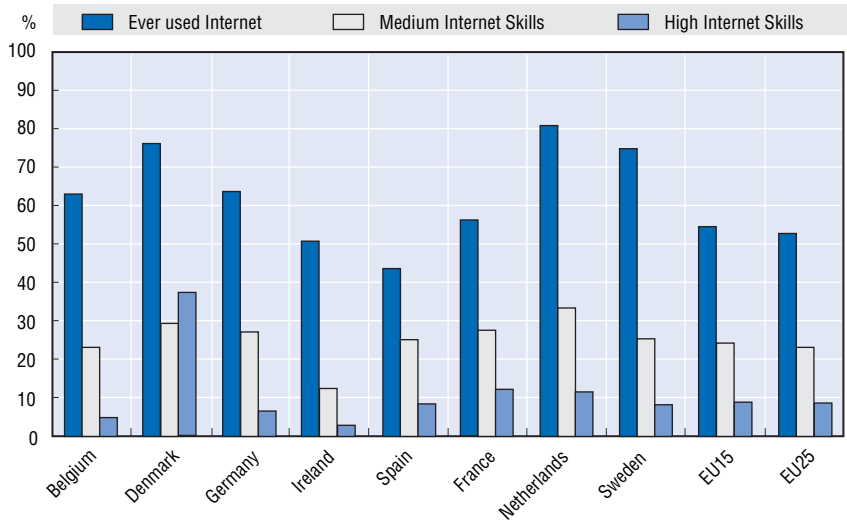
ICT skills and competencies

ICT skills and competencies are a prerequisite for the adoption of e-government services Belgium-wide. They are also increasingly important to the successful adoption of e-government services and the use of e-democracy tools to invigorate political participation. In addition, all Belgian governments have recognised that ICT skills are vital for employment, for education, and increasingly for everyday life – impacting innovation and competition capacity of the country. Consequently, there is continuing concern among governments about basic computer literacy and advanced ICT skills among the Belgian population.

The evaluation of medium and advanced Internet skills is illustrated in Figure 2.8 Belgium's levels are approximately average for medium Internet skills of the online population, but below average on high Internet skills. This corresponds with findings that Belgium is facing a mismatch between ICT-skilled labour demand and supply. OECD interviews clearly indicated that a significant number of ICT-skilled people are already missing on the Belgian labour market, and that this disparity will increase, like in many OECD countries.

Figure 2.8. **Correlation of Internet skills compared to General Internet Usage (2007)**

Belgium, OECD benchmark countries, EU15, EU25



Source: Eurostat, Information Society Statistics, 2007, *http://epp.eurostat.ec.europa.eu*, OECD Compilation.

A review of interest in seeking ICT courses shows that particularly unemployed individuals (13%) have little interest in building their ICT skills and less interest than the average in EU25 countries (21%) (see Figure 2.9).

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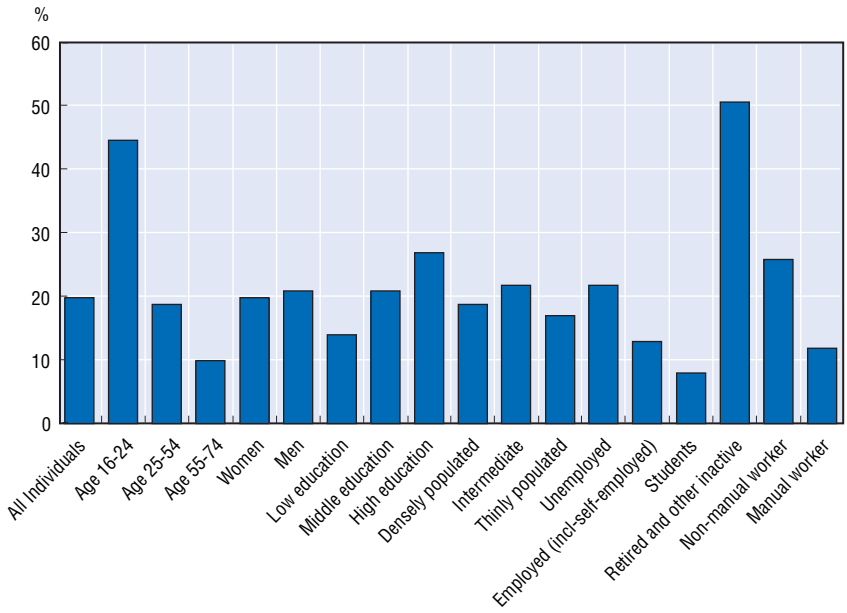
Figure 2.9. **Uptake of computer training courses during the last three years (2007)**

Belgium, 2007



Source: Eurostat, Information Society Statistics, 2007, *http://epp.eurostat.ec.europa.eu*, OECD Compilation.

Challenges to E-Government – Proposals for Action

- A broad, common understanding of the legal and regulatory framework for e-government development, implementation and usage needs to be established across the governments to support end-to-end services. This can be achieved in many ways – but should begin with proactive and service-oriented engagement and dialogue among the relevant governmental and non-governmental stakeholders.
- The capacity to harmonize approaches of the different Belgian governments when each government separately is trying to transpose and implement European Union directives should be reviewed. The directives have proven to be a useful tool to create a binding legal framework for e-government, but differences in transposition and implementation of these directives by the different governments might create barriers for a seamless user-experience.
- The social security sector in Belgium managed to create a concept which both respects the need for privacy protection and creates an operational system providing efficient and effective information and data sharing between public authorities Belgium-wide. The experience of the Crossroads

Bank for Social Security is transferable; however, stakeholders need to be convinced about the benefits of the basic principles of data management, ownership and exchange as institutions like the Crossroads Bank for Social Security can exercise significant legal power over their own operations.

- Joint funding mechanisms and operational practices need to be further developed, both within and among Belgian governments. These mechanisms could be of particular use for collective e-government services and applications using common public sector e-government building blocks, as well as joint e-government programmes and future shared seamless services.
- The business case for closer collaboration and co-operation has to clearly map out financial and non-financial benefits; the governments could streamline their efforts in developing and implementing such methodologies to coherently assess financial and non-financial indicators of e-government. E-Government activities should be regularly evaluated to allow for re-alignment of projects and activities.
- Belgian governments could strengthen their activities to reduce the digital divide by ensuring an efficient Belgian telecommunications market, motivating citizens to participate actively in the Belgian Information Society, and promoting an appropriate level and confidence in ICT skills and competencies.
- If citizens' basic ICT skills and competencies are to be improved in the mid- to long-term, a comprehensive and co-ordinated approach needs to be implemented across governmental boundaries.

Notes

1. See previous *OECD e-Government Studies: The Netherlands, Denmark,* etc.
2. Fedict (2006), Activity Report 2001-1006 *www.belgium.be/eportal/ShowDoc/fed_ict/imported_content/pdf/FED13486-jaar2005_EN-LR.pdf?contentHome=entapp.BEA_personalization.eGovWebCacheDocumentManager.en,* accessed 28 February 2008.
3. IDABC (2006), E-Government Country Factsheets *www.epractice.eu/index.php?page=document.factsheets&cntr=2,* accessed 27 February 2008.
4. Belgian Privacy Commission *www.privacycommission.be/la_commission.htm,* accessed on 28 February 2008.
5. IDABC (2006), E-Government Country Factsheets *www.epractice.eu/index.php?page=document.factsheets&cntr=2,* accessed 27 February 2008.
6. The Crossroads Bank for Social Security is run by a Board of Stakeholders representing all federal social security institutions.
7. Personnel expenditure is part of a separate, global envelope for increases in the wage bill throughout federal government.

8. OECD (2005) *Economic Review of Belgium*, Paris.
9. Brans, M. *et. al*. (2006), "Administrative Reform in Belgium: Maintenance or Modernisation?", *West European Politics*, Vol. 29, No. 5, November, page 987ff.
10. Brans, M. *et al*., (2006) "Administrative Reform in Belgium: Maintenance or Modernisation?", *West European Politics*, Vol. 29, No. 5, Nov. page 991ff.
11. The Belgian Stability Programme 2006-2009 -*http://stabilityprogramme.belgium.be/en/Stability_programme_2006_2009_Belgium_Cabinet_Finance_20051219_EN.pdf,* accessed 28 February 2008. This stability programme confirms the path agreed on in the 2001-2005 Stability Programme.
12. For example, the ROAME approach to policy design and assessment: Rationale, Objectives, Analysis, Measurement, Evaluation.
13. "*Résolution sur l'égovernment intégré en exécution du 2e accord de coopération intergouvernemental en matière d'e-government*", Ministerial declaration of the ministers responsible for e-government in the different types of Belgian governments at the Conference on E-Government in Brussels, 6-7 November 2006.
14. Jochmans, J. & P. Strickx (2004): "Directives et recommendations pour l'usage de standards ouverts et/ou spécifications ouvertes dans les administration fédérales", Fedict, October.
15. Deprest, J., F. Robben: "E-government: the approach of the Belgian federal administration", Fedict and CBSS, Brussels, June 2003.
16. BELGIF is the Belgian (federal) government's interoperability framework, *www.belgif.be,* accessed 28 February 2008.
17. Information on the Belgian eID card, *http://eid.belgium.be,* accessed 28 February 2008.
18. European Interoperability Framework for Pan-European E-Government Services *http://ec.europa.eu/idabc/servlets/Doc?id=19528,* accessed 28 February 2008.
19. The acronym MAGDA stands for Maximale GegevensDeling tussen Administraties (Maximal sharing of data between administrations).
20. National action plan for eInclusion (2005-2010), *www.belgium.be/eportal/application?origin=navigationBanner.jsp&event=bea.portal.framework.internal.refresh&pageid=indexPage&navId=41543*, accessed 28 Feburary 2008. This national action plan federates the action plans of all authority levels (e.g. Walloon regional action plan for eInclusion), *http://easi.wallonie.be/xml/page.html?IDC=&IDD=19072&LANG=f*, accessed 28 February 2008.
21. ISPA Belgium – the Belgian Internet Services Providers Association need more info
22. ICT Household survey of SPF Economy, DG Statistiek: *www.statbel.fgov.be/ict/*, accessed 25. February 2008.
23. EIAA Mediascope Europe & the Marketers' Internet Ad Barometer *www.eiaa.net/Ftp/casestudiesppt/EIAA%20Belgium%20Mediascope%202006.pdf,* 28 February 2008.
24. ITU Internet Reports (2006), *www.itu.int/osg/spu/publications/digitalife/statisticalhighlights.html,* accessed 28 February 2008.
25. Information about regulatory developments in Belgium, last updated 1-1-1999, *www.eu-esis.org/Regulation/BEregQ8.htm,* accessed 28 February 2008.
26. The study assessed eight countries: Belgium, The Netherlands, France, Germany, Italy, Portugal, Spain and the United Kingdom.

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Chapter 3

E-Government Leadership

In order to increase user take-up and deliver on promises of increased efficiency and effectiveness, OECD governments are using e-government to overcome rigidities in institutional set-ups and deliver ***seamless or integrated services****. This includes integration of processes across organisational boundaries. Belgium has moved towards building seamless electronic services by enhancing* ***operational collaboration and co-operation****. This initiative has resulted in a common prioritised goal across and within governments: delivering integrated services.*

Belgian e-government leadership and co-ordination is formally exercised through the ***inter-governmental co-operation agreements*** *which define the framework for co-ordination and collaboration among Belgian governments:*

- Co-ordination within types of government. *Ensured by the individual e-government bodies set up by the federal, regional, and community governments.*
- Two intergovernmental e-government co-operation agreements *(2001 and 2005). Signed by all governments, committing to formal e-government co-ordination efforts. A similar co-operation agreement on administrative simplification was signed in 2003.*

The collaboration agreements establish a common national accord on the necessity to fully integrate back offices across all Belgian governments to enable each government to provide seamless e-government services to users (citizens and businesses).

The co-operation agreement is narrow and mainly focused on technical co-operation and collaboration in back-office integration; broader public sector development has been left to individual activities within each government and its respective parts of the Belgian public sector.

Belgium's federal governance structure demands careful ***planning for co-ordination within and between governments*** *to avoid duplication of work and ensure coherence of e-government activities. Sharing good practices and concrete pilot programmes to identify "lessons learned" provides informed background for consensus and a coherent view of e-government development and its impact.*

Operational weaknesses of the inter-governmental co-operation agreements have caused e-government actors to find more effective ways to circumvent the formal institutional frameworks of silo-based competences. This includes apparently effective operational leadership through the so-called ***"grey zones"****, which allow for informal consultations and negotiation among actors, and which are essential in the process of reaching consensus on joint projects and programmes.*

The ***municipalities*** *are currently supported in their e-government efforts by the regional/community governments and, to a lesser extent, the Federal Government. However, there are concerns about local capacity to deliver and implement e-government. The concept of sharing resources ("mutualisation") is increasingly used by municipalities to achieve economies of scale of e-government investments, to maximise their joint buying power as consumers towards e-government solution providers, and to strengthen their bargaining position with other e-government actors.*

This chapter addresses leadership approaches to e-government development and implementation in the Belgian governments. It also analyses and discusses the adequacy and strengths of existing e-government co-ordination arrangements for the development of more user-focused e-government services.

Delivering user-focused e-government requires a coherent system of tailored public services to meet user needs – for citizens, businesses, and civil servants in government administrations. Strong e-government leadership creates a unified vision of how e-government can benefit the whole public sector by making it user focused, and improving back-office functions and coherency through ICT. Influencing and changing people, environments, structures, and habits are often required.

- OECD countries use a variety of institutional frameworks (*e.g.* formal organisational structures or informal networking) and leadership tools (*e.g.* formal decisions within an organisation, formal or *ad hoc* conclusions in co-ordination bodies within or between organisational units, or informal networking and dialogue between parties).[1]
- Formal agreements and informal leadership mechanisms in Belgium (reviewed and assessed in this section) encourage collaboration and co-operation. Two formal agreements – intergovernmental e-government co-operation agreements (2001 and 2005) have been signed by federal, regional and community governments. They committed to e-government co-ordination across governments. A co-operation agreement on administrative simplification was signed in 2003.

Collaboration and co-ordination

Key points

- *The main focus of the agreement is technical co-operation and collaboration in back-office integration; broader public sector development has been left to each government.* ***The renewed co-operation framework runs the risk of becoming a rhetorical vision document*** *rather than a transformation tool unless appropriate monitoring and evaluation concepts (that could in turn trigger accountability mechanisms) are put into place.*

Key points *(cont.)*

- *Little information is available on the concrete outputs of the co-operation agreements, and e-government stakeholders are not aware of the methodological improvement the new co-operation framework has brought.* ***The inter-governmental co-operation agreement could become a focus point to align management approaches and introduce commonly agreed monitoring and evaluation concepts*** *to be used in implementing the commonly agreed action plans.*
- *Belgian governments have in general kept co-operation and collaboration within the limits of formal competences and politically agreed co-operation agreements. This has kept Belgian e-government fragmented, uncoordinated and within an environment of constant politicised discussions with limited impact on establishing a joint operational leadership and implementation affecting the efficiency and effectiveness of e-government development across the public sector.*

In recent years, the priorities of Belgian governments have shifted towards a common goal: offering integrated electronic services to citizens and businesses. The Belgian Constitution puts in place three procedures to support collaboration and co-operation among governments: inter-ministerial conferences, co-operation agreements, and mandatory consultation procedures.

Current co-ordination and collaboration efforts in Belgium are twofold: co-ordination *within* governments is ensured by either Fedict or e-government bodies set up by the regional and community administrations (*EASI-WAL, CORVE, ISA* and *ETNIC* and the *Informatikdienst der deutschsprachigen Gemeinschaft*); formal co-ordination *across* governments is governed by two inter-governmental co-operation agreements signed by the governments.

E-Government co-operation agreements

The federal state structure of Belgium contrasts the cross-cutting character of e-government. However, the Belgian governments have formalised their intention to co-operate in two major inter-governmental agreements. The federal State; the Flemish, French and German-speaking Communities; the Flemish Region, the Walloon Region, and the Brussels-Capital Region; along with the Flemish Community Commission, the French Community Commission and the Common Community Commission signed two four-year agreements:

- A first intergovernmental co-operation agreement on e-government in 2001.[2]

- A second intergovernmental co-operation agreement on e-government in 2005.[3]

The governments also signed a co-operation agreement on administrative simplification in 2003.[4] Its overall aim was to achieve fast, simple and efficient public services independently from the repartition of competences from the institutional viewpoint. Major pillars included:

- Increased consultation among governments.
- Further agreements on administrative simplification.
- Facilitated and simplified administrative procedures for citizens and enterprises, and optimised internal administrative processes.
- Full respect for existing competences: Organisation of procedures so each institution can fulfil its mission, with limited burden on businesses and citizens.

First intergovernmental co-operation agreement on e-government: 2001

When the first intergovernmental co-operation agreement on e-government was signed in March 2001, e-government was in its start-up phase in Belgium and other OECD countries. Today, the goals of the first co-operation agreement have proven too ambitious. Stated goals were:

- **Portal strategy:** Development of governmental portals with minimum functionalities, such as a search engine, a dynamic content management tool and a multi-channel interface.[5]
- **Service provision for all:** Serving all citizens, businesses, governments and other organisations in a user-friendly way.
- **Multi-channel strategies:** Providing services to users via multiple channels.
- **Full online availability:** Allowing for electronic transactions that adequately address confidentiality and security challenges.

The first agreement also aimed at enhancing the progressive use of unique identification keys, such as the national register number for citizens, the commercial register number for businesses, and electronic signatures. In this context, the principle of unique data collection ("collect once, use multiple times") was encouraged.

It effectively laid the foundation stones for more structured data storage and more efficient data handling, creating data categories and attributing quality control of data to specific government authorities. It allowed all governments to find and retrieve data more easily. The first co-operation agreement also envisioned common policies for e-authentication, confidentiality, privacy, and security.

Second intergovernmental co-operation agreement on e-government: 2005

The second intergovernmental co-operation agreement on e-government was signed in 2005. It re-emphasised the importance of unique data collection by renewing the first co-operation agreement. The progressive introduction of unique identification keys and use of authentic sources were also reconfirmed.

The second agreement specified:

- The basic principles of e-government: client-centric services, unique collection and maximum re-use of data by using authentic sources, maximised interoperability, optimal sharing of e-government developments, crucial integration of local e-government efforts.
- A new organisational structure underlies the agreement: a strategic committee with a maximum of 21 members[6] that meets at least quarterly, and five technical working parties. The five technical groups cover unique identifiers, authentic sources, data protection, privacy and security, interoperability and common approaches, and information content and navigation structures for portal standartisation.
- The possibility of exchanging e-government components.
- The exchange of good practices.
- The importance of dialogue with local governments (based on meetings with representatives of local governments).

The second agreement stated that all signatories would collaborate, if possible, to conceptualise and apply the principles of integrated e-government – and would seek common actions.

Additionally, the Belgium-wide 2006 E-Government Awards Congress resulted in a cross-governmental, inter-ministerial resolution on seamless e-government that aimed to implement the second e-government co-operation agreement more effectively.[7]

Belgium has been able to achieve a somewhat formalised co-operation structure across its governments; it is conceptually similar to arrangements in Denmark,[8] Finland,[9] The Netherlands,[10] and Norway.[11]

Impact of the collaboration agreements to date

Little information is available on the concrete outputs of the co-operation agreements, and e-government stakeholders are not always aware of the methodological improvement the new co-operation framework has brought. Some achievements include:

- Consensus was reached on the major categories of life-cycle-based content throughout portals and websites.

- First interoperability specifications have been published on the website: *www.belgif.be*.[12]
- First co-ordination efforts have been undertaken for e-procurement and, more particularly, e-notification and e-tendering (publication and submission of offers).
- First building blocks have been shared (such as the network connecting the regions to the Crossroads Bank for Enterprises via the middleware UME[13]), and government officials of regions have the option to use tokens for authentification and validation purposes.
- Pilot for exchanging information between the federal portal and regional ones: the pilot concerns the federal portal and the portal of the Brussels-Capital Region
- Collaboration on the publication of the lists and results of the regional elections of 2004: all regional portals referred to the information published on the federal portal.
- A better exchange of information has been initiated for sharing studies, e-government strategies, and good practices.
- Common discussions about European issues (namely IDABC and the eEurope-I2010 strategy) have been launched.
- New e-government components developed by Fedict or other actors are presented regularly to interested parties.

OECD interviewees mentioned that the co-operation agreement has mainly been used for political dialogue and not for operational co-operation on e-government implementation. This shows a perception that the political level in Belgium will not be able to provide strong e-government leadership and drive development forward, despite official good intentions behind the co-operation agreements since 2001.

The inter-governmental co-operation agreement could become a focus point to align management approaches and introduce monitoring and evaluation concepts to be used in implementing the commonly agreed action plans. The renewed co-operation framework runs the risk of becoming a rhetorical vision document rather than a transformation tool unless appropriate monitoring and evaluation concepts (that could, in turn, trigger accountability mechanisms) are put into place.

The focus of the second co-operation agreement is technical co-operation and collaboration in back-office integration; broader public sector development has been left to each individual government. Several OECD interviewees implied a lack of trust in the capability of the co-operation framework to effectively create joint e-government leadership. Experiences

from the 2001 co-operation agreement also show limited success in moving the development of an "e-platform" forward.

The following areas should be prioritised in future co-operation agreements to support user-focused e-government service delivery:

- eID services and applications.
- A common public sector ICT security policy framework.
- A shared governance model for authentic databases.
- Shared applications and components.
- A common practical approach to information and data sharing respecting European legal frameworks.

Co-ordination mechanisms

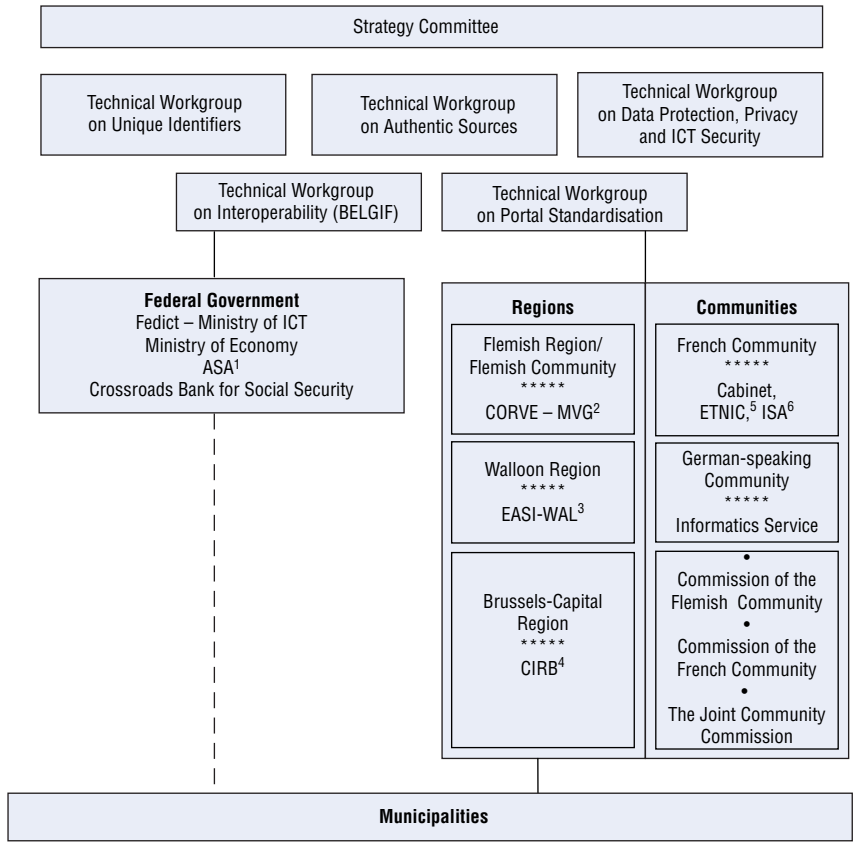
The e-government organisation shown in Figure 3.1 is the formal framework for e-government co-operation to achieve the common vision and objective of joint/shared development, use and management of integrated e-government services. The framework for co-operation is also the basis for e-government leadership through political dialogues, mainly in the Strategy Committee created to manage the implementation of the agreement.

The agreement creates co-operation bodies comprised of representatives from all governments, organised on a task basis:

- ***Strategic Committee:*** The Strategic Committee follows the implementation of the co-operation agreement and takes initiative to adapt the agreement if needed. It consists of a maximum of 21 members with representatives of authorities responsible for e-government in each of the governments.
- ***Technical workgroups:*** The co-ordination agreement creates five workgroups (each charged with developing an implementation plan including action lines with clear competences) for the following areas:
  - A technical workgroup on **unique identifiers** is to develop an approach to how to enhance the exchange of information within the public sector, and between the public sector and citizens and/or businesses.
  - A technical workgroup on **authentic sources**[14] is to develop a plan on how to gradually introduce the principle of authentic sources within the different governments, collect information and data, and access and utilise it.
  - A technical workgroup on **data protection, privacy and ICT security** is to develop a plan for data and privacy protection. The group should suggest common minimum standards, methods, and possible solutions for

Figure 3.1. **Belgian e-government organisation**

Co-operation agreement on e-government



1. ASA – Agence pour la Simplification administrative (Agency of Administrative Simplification).
2. CORVE – Coördinatiecel Vlaams eGovernment (Co-ordination cell of Flemish e-government).
3. EASI-WAL – Le Commissariat EASI-WAL ("E-Administration, SImplification, WALlonie) (The Commission for EASI-WAL).
4. CIRB – Centre d'Informatique pour la Région Bruxelloise (ICT Centre of the Brussels-Capital Region).
5. ETNIC – Entreprise des Technologies Nouvelles de l'Information et de la Communication (Enterprise for new information technologies and communication).
6. ISA – Internet et Simplification administrative (Internet and administrative simplification).

Source: OECD, 2007.

information and data exchange between the governments and with citizens and businesses.

- A technical workgroup on **interoperability** is to develop a plan for the development and maintenance of an interoperability framework.
- A technical workgroup on **portal standardisation** is to develop a plan for the standardisation of the navigation structure and the provision of information and services on the different government portals.

A special area of attention is how the formal e-government organisation handles e-government leadership towards local governments, which are closest to citizens. The importance of a dialogue with local governments is specifically mentioned in Art. 5 of the agreement, but the OECD interviews did not reveal strong engagement by local governments in e-government development according to the agreement.

Informal leadership practices and political support

Key points

- The operational weaknesses of the inter-governmental co-operation agreements have caused Belgian e-government actors to circumvent the formal institutional frameworks of silo-based competences. This includes apparently effective operational leadership through the so-called "***grey zones***", which allow informal consultation and negotiations among the actors, and which are essential in the process of reaching consensus on joint projects and programmes.
- *Many OECD countries are developing user-focused e-government services by creating shared services – which, at the same time, reap efficiency savings. This possible collaboration is being resisted by the political leadership. To build* ***integrated***, ***seamless services***, *the Belgian administrative leadership must improve its internal and external communication about the benefits of user-focused e-government services to ensure political support.*

In addition to the formalised co-operation frameworks, informal communication has been extensively used to provide more efficient and co-ordinated e-government leadership that ensures consistency and coherency of policy development and implementation. Informal communication channels bring a major advantage – decisions that need to be taken can be negotiated and agreed upon quickly without regard to prescribed procedures of the formal government decision-making process. An example of such a "pragmatic" informal channel is the regular meeting of "e-government leaders" – the ICEG – from all governments.

OECD interviews indicate that these informal e-government organisations successfully convince ministries to prioritise e-government implementation; discussions concerning major cross-cutting e-government projects (eID and the Crossroads Bank for Social Security) have paved the way for final decisions on e-government organisation. Additionally, preparations in the informal e-government organisation often smooth the formal procedure significantly.

At least on the personal and informal levels, e-government leaders seem to have reached consensus on the need for better collaboration and co-operation efforts; this consensus, however, risks being theoretical rather than operational and remains at the technical level. The informal collaboration and co-ordination mechanisms have also created an atmosphere of "positive competition" among governments, and there are several examples in Belgium where different constellations of Belgian governments have partnered on e-government projects. Furthermore, the personal relationships among e-government players are important to collaboration and co-operation.

OECD interviews showed that politics often interferes with political e-government leadership. This implies that e-government is lacking a strong political driver and political ownership in Belgium, due both to possibly disinterested politicians and to a lack of support from Parliaments. Collaboration and co-operation across governments is a particularly low political priority, as political agendas can be narrow and competence-based. Political issues can become a barrier to co-operation because politicians tend to act within their own silos of competences, which must be respected by any joint efforts. Interviewees cited a lack of common medium- to long-term objectives for e-government development across governments, which further limit prioritisation of overall concrete, operational e-government projects and programmes.

Political support for and attention to e-government in Belgium has often been personality-driven and therefore inconsistent. Today, e-government seems to have lost its momentum as a high-profile policy area (with the exception of the Walloon Region) – it will have to be clearly repositioned as a key element of policies aimed at developing the Belgian Information Society, transforming and increasing the efficiency and effectiveness of the public sector, and improving the performance of the Belgian economy in the long run. OECD interviews further indicated that e-government development and implementation depend heavily on the political climate and on willingness to invest resources in e-government. Discussions at the political level seem to be connected to the immediate harvesting of financial gains instead of prioritising long-term outcomes and impacts.

OECD interviews also revealed e-government decision makers' difficulties in co-operating with the political level and each other due to differing electoral cycles. Finally, the Belgian political-administrative dialogue interface is strongly influenced by the large and politically influential cabinets; lack of coherence between short-term political considerations and medium- to long-term organisational goals of public sector transformation, as well as weak political and/or administrative ownership of e-government projects, are potential consequences.

Approaches to e-government leadership

Key points

- *There are **varying degrees of political and administrative leadership and support of e-government in Belgian governments**, and only limited incentives for public sector institutions to work together on exploiting the benefits of e-government. All governments face similar challenges to improve collaboration and co-ordination within their jurisdictions. Mechanisms are required to ensure medium- to long-term commitment for the development of integrated services.*
- *At the **Federal Government level** overall responsibility for broader public policy goals – such as the transformation of the public sector and the Information Society goals – are spread across three key institutions: Fedict – the Federal ICT Ministry, the Federal Agency for Administrative Simplification, and the Federal Ministry of Personnel and Organisation. Synergies among the three institutions could be improved to allow for clearer ownership of end-to-end business processes. The Copernicus Reform has not led to a complete centralisation of e-government competences in a single federal body, as e-government responsibility is still a part of each federal ministry's portfolio. Each ministry has its own budgets and manages its own e-government strategies. Fedict is still perceived as a support institution; it cannot impose the use of its e-government applications but rather must convince potential customers with the features of its services such as reliability, cost-efficiency and high security.*
- *In the **Flemish Region**, e-government and administrative burden reduction were combined as one policy area but the Better Administrative Policy reform (Beter Bestuurlijk Beleid or "BBB reform") has resulted in a fragmentation of the public sector and has made it considerably more difficult to achieve the goal of integrated e-government. Capacity to support user-focused e-government development and implementation may be lacking, especially when it comes to supporting the wide range of public administrations at the regional and local levels Flanders-wide.*
- *The **Walloon Region** displays strong leadership for user-focused e-government development and implementation. Direct supervision by the Minister President ensures strong political leadership; the current action plan lays out ambitious, user-centric objectives, by defining a holistic vision of future e-government administration and taking into account a wide range of related matters such as costs/benefits of e-government for administrative burden reduction, e-inclusion, and the efficient transformation of the administrations.*
- *The **Brussels-Capital Region** faces the challenge of reconciling different viewpoints on e-government and related matters within its multiple governance structure: political actors tend to pursue their own objectives and budgetary choices. As a result, apparent divergences slow down and risk lowering the potential impact of e-government projects. There is a need to increase awareness*

Key points *(cont.)*

about e-government, especially as the region could – because of its high population density and the widespread presence of businesses on its territory – benefit from geographic advantages typical for urban agglomerations.

- *The French- and German-speaking communities* **benefit from adopting and re-using e-government solutions of other types of government.**

Management of user-focused, integrated e-government services requires a whole-of-public-sector perspective. The federal structure of the Belgian public sector sets the institutional context for implementation of e-government. Generally, development and implementation of e-government has been exercised by governments independently, favoring individual service delivery instead of holistic approaches.

The Belgian federal state structure as defined in its Constitution does not permit one government to dominate other governments. Hence, autonomous development of e-government solutions is a prevalent approach throughout Belgian governments. While offering free tools to other governments could reduce costs, it is often perceived by other governments as creating dependency on the initiating government; this could disturb the careful equilibrium of power among the different governments.

Leadership in the Federal Government

At the federal level, e-government responsibilities are mainly held by Fedict, the horizontal federal ministry for ICT, supporting all federal ministries. However, other activities – such as those ofof the Federal Agency for Administrative Simplification, the Federal Ministry for Personnel and Organisation and the Federal Ministry for Economy, SMEs, Self-employed and Energy – also impact e-government development and implementation. **No actor holds overall responsibility for broader ICT policy goals, such as public sector transformation or the Information Society.**

Fedict is responsible for development of the common e-government strategy at the federal level, as well as supporting the implementation of the strategy throughout the Federal Government. As one of the four horizontal federal ministries, Fedict focuses mainly on government-to-government e-government service provision to interested public institutions in Belgium. At the federal level, Fedict reflects an important aspect of the *Copernicus Reform* (see Chapter 1), by centralising the strategic and operational development of main e-government services in one federal ministry. Before the Copernicus Reform, each federal ministry had its own ICT department. Today, ICT departments still exist in each ministry but they

are mainly focused on day-to-day operational aspects of e-government. Fedict has become a main player regarding e-government applications. Rapid service delivery, efficient applications, innovation, and a proactive approach are goals of Fedict.[15] ICT managers in each federal ministry report to the Chairman of the Board of their own ministry and not to Fedict. These ICT managers have their own budgets and manage their own e-government strategies.

OECD interviews indicated that Fedict is still perceived as a support institution providing applications to other federal administrations, even though the rapid growth of Fedict (*e.g.* in terms of human resources from the original eight employees in 2001 to about 90 in 2007 – figures that include the personnel hired via the non-for-profit organisation *Egov*)[16] may be perceived as challenging the current balance of power within the federal government structure. Fedict adopted a "low profile, low key" strategy: it has so far put significant efforts into its own organisational development, driving e-government development in a bottom-up approach starting in its own organisation, making use of informal communication channels and gradually convincing other administrations and the political level of the benefits of its services.

Fedict cannot impose the use of its e-government applications but rather has to convince potential public institutions within and outside the Federal Government with the features of its services, such as reliability, cost-efficiency and high security. In addition to its strategic and supportive role at the federal level, Fedict has since 2005 been pursuing wider goals: the digitisation of society, and promoting Belgium as an ICT knowledge region with specific expertise that other countries may benefit from. Political responsibility for the common e-government strategy of Fedict lies with the Federal Minister for Civil Service and Public Enterprise.

The **Federal Agency for Administrative Simplification**, founded in 1998, is responsible for promoting and co-ordinating initiatives related to the simplification of administrative procedures. The Agency operates under the oversight of the State Secretary for Administrative Simplification, who reports to the Prime Minister.[17] The Agency provides judicial assistance to and co-ordinates certain e-government projects such as the Crossroads Bank for Enterprises and the DEUS[18] project; however, responsibility for the technical aspects of e-government projects always remains within Fedict.

Like Fedict, the Agency for Administrative Simplification cannot impose any policy measures. Rather, its leadership in the field of administrative simplification at the federal level is backed by the following principles:[19]

- The right of initiative to inform the Prime Minister and submit proposals within its field of competence.
- Operation as a neutral and politically independent body.

- The right to obtain all necessary information from the Federal Government to fulfil its mission.
- The duty to submit an annual report to the Prime Minister who, in turn, transmits the report to the Federal Government and the Federal Parliament (both the Senate and the Chamber) and ensures the report's publication.

Initially, the Agency was mainly concerned with simplifying administrative procedures for businesses, especially small and medium-size enterprises and self-employed, which bore the risk of citizens coming second. In contrast to Fedict, which is mainly concerned with technological and technical aspects of business process re-engineering, the Agency has responsibility for administrative burden reductions. In addition, the Federal Ministry for Personnel and Organisation has responsibility for business process re-engineering at the federal level. OECD interviewees indicated that synergies among the stated three institutions (Fedict, the Agency for Administrative Simplification, and Federal Ministry of Personnel and Organisation) are not sufficiently exploited; neither does the current distribution of business process re-engineering tasks allow for clear ownership of end-to-end business processes.

The **Federal Ministry of Economy, SMEs, Self-employed and Energy** is responsible for certain aspects of the Information Society, such as the economic growth impact of ICT usage. The link between its policies and the policies of other federal e-government actors – and hence the role of e-government as a key element of a broader and future-oriented vision of the development of the Belgian Information Society – were not mentioned in OECD interviews.

OECD interviews showed that the perception of e-government leadership by ministries outside the group of co-ordinating ministries is weak. Interviewees said e-government goals are less clearly perceived than the political goal of administrative burden reduction, and the leadership of ministries outside the group of co-ordinating ministries is less obvious, especially for government agencies and institutions. Government agencies, and public and quasi-public institutions, are mainly left to develop of e-services themselves.

The messages and perceptions of e-government leadership at the federal level are perceived as strong but scattered and vulnerable to considerations on the balance of power among multiple federal institutions. They should be considered further with regards to:

- Ensuring continuous political support over time for e-government projects where benefits can accrue with significant time lags.
- Developing simpler and clearer lines of e-government responsibility within the Federal Government.
- Encouraging more transparency and accountability in e-government decisions through simplification of decision organisations.

- Exploiting further synergies among bodies that hold e-government responsibilities or responsibilities for policies that are tangent to e-government.
- Creating co-ordination tools that allow for the pursuit of broader policy goals such as public sector transformation goals and Information Society goals.
- Determining appropriate incentives for all federal administrations to make use of e-government both within their own areas of responsibility, but on the other hand using common public sector e-government building blocks.

Leadership at the regional and community levels

In the **Flemish Region** e-government and administrative burden reduction were linked in one policy area in the portfolio of the Minister of Administrative Affairs, Foreign Policy, Media and Tourism in 2004. They are under the political responsibility of one minister. *CORVE* has been responsible for implementing his e-government policies. The Better Administrative Policy reform (*Beter Bestuurlijk Beleid* or "*BBB reform*") of the Flemish Region Government, fragmenting the Flemish administration into 13 policy-making departments and a large number (65) of policy-implementing agencies seems to have considerably the possibilities to achieve the goal of integrated e-government. Notwithstanding limited budgettary and manpower resources, the Flemish E-government body has realised a number of significant projects that have laid the foundations for an integrated e-government for the whole of the Flemish administration and for the Flemish Local Governments. Similarly to other Belgian governments, the Flemish e-government development risks being hindered by the limited resources that its e-government cell – *CORVE* – has at its disposal. Capacity may be lacking, especially when it comes to supporting the wide range of public sector entities at the regional and local levels.

In the **Walloon Region**, *EASI-WAL* bears e-government and administrative simplification responsibilities since 2005. Before, three separate bodies were responsible for administrative simplification, e-government, and readability issues, respectively: the Agency for Administrative Simplification (*Commissariat à la Simplification Administrative* – CSA), Wall-On-Line (WOL) and the "readability" body that edited forms to simplify them before putting them online. The fact that EASI-WAL is today operating under the direct supervision of the Minister President of the Walloon Region suggests high political priority and attention, and OECD interviews confirmed the political focus on e-government. The Walloon Region was the first government in Belgium to merge e-government and administrative burden reduction responsibilities in a single body.

EASI-WAL has four main areas of responsibility: administrative simplification, ICT, cross-cutting activities, and internal administrative issues. EASI-WAL has – with the political consent and support of the Walloon Region Government – developed a detailed e-government and administrative burden

reduction action plan. As the action plan indicates, the Walloon Region is pursuing ambitious objectives by defining a holistic vision of its future administration and taking into account a wide range of related matters, such as e-inclusion, the digital divide and political leadership. Strong emphasis is also put on communications and user-centricity, at least at the documentation level. The evaluation of EASI-WAL's action plan by an external scientific committee (*Comité scientifique*) addresses this wide scope of matters by pointing out that the success of implementing the plan strongly depends on the resources available within EASI-WAL and the Walloon administrations.

In terms of e-government leadership, **Brussels-Capital Region** faces the challenge of reconciling different viewpoints on e-government and related matters within its multiple governance structure: all political actors tend to pursue their own objectives and budgetary choices. As a result, apparent divergences slow down and risk lowering the potential impact of e-government projects. It seems to be difficult to enhance e-government policies for the political level in a situation where demand for e-services is low, both among citizens and businesses, and internally in administrations. There is a need to increase awareness about e-government, especially as the region could – because of its high population density and the widespread presence of businesses on its territory – benefit from geographic advantages typical for urban agglomerations. A promotion campaign targeting the population and politicians is being envisaged.

In the bilingual Brussels-Capital Region there is no single structured community, but three different language-oriented commissions. The French commission COCOF (*Commission communautaire française*) and the Flemish commission VGC (*Vlaamse Gemeenschapscommissie*) represent the interests of their respective communities in the Brussels-Capital Region (their main responsibilities are education and cultural issues). Both commissions are composed of the respective linguistic groups of the Parliament of Brussels-Capital Region, along with a board gathering Brussels' government representatives. The Common Community Commission is a bi-communitarian commission responsible for individual issues that relate to matters common to both language communities, such as bilingual hospitals and social assistance to individuals. It is composed of a United Assembly of members of the two linguistic groups of the Brussels-Capital Region Parliament, and a Board of Ministers of the Brussels-Capital Region Government.

Given the small size of the **German-speaking Community** (*e.g.* in terms of its population), it focuses on adopting and reusing e-government solutions from other governments. OECD interviews indicated that the e-government leaders of the *Informatikdienst der deutschsprachigen Gemeinschaft* continuously need to ensure their own participation in other governments' projects, especially as concerns of being marginalised or being left behind in the Belgian e-government landscape are prevalent.

Box 3.1. **International examples of strong e-government leadership**

Canada

Canada has since the late 1990s focused on developing seamless services through initiatives like Government On-Line (GOL) and Service Improvement Initiatives (SII). The main goal of this approach has been to promote collaboration among departments that share common clients: reducing wait times, increasing interoperability, and making programmes and services easier to find and access, particularly online. GOL and SII have embedded a user-focused approach to service within departments and changed how the public interacts with the Federal Government. The Canadian approach builds on a commitment to a concept for public sector transformation based on the *Public Sector Service Value Chain*, which focuses on getting the right programmes, service, knowledge and information to the right people and organisations at the right time – a so-called "just-in-time" approach for high-quality and user-focused service delivery. The main approach is to develop and implement joined-up services without regard to formal jurisdiction through focused collaboration and co-operation across the four levels of government (one federal, ten provincial, three territorial and more than 5 000 municipal).

Source: Source: Treasury Board of Canada, Chief Information Officer Branch, Canada's Country Report 2006, *www.tbs-sct.gc.ca/cio-dpi/2006/canada/canadatb_e.asp*, accessed 28 February 2008.

Denmark

In order to strengthen transformation efforts in the Danish public sector and enhance cross-cutting digitisation processes, the Danish Government, the regions, and the municipalities agreed in 2001 to establish a common public sector e-government project: Project Digital Administration. A management board was established and a digital taskforce was created in the Ministry of Finance through secondments of staff from central government, the regions, and the municipalities. The organisational concept was groundbreaking, but necessary in order develop necessary project working skills and competencies, and to break down silo-thinking and broaden the understanding of a necessary cross-cutting whole-of-public-sector thinking in transformation and digitisation processes.

The Digital Taskforce focused its work on cross-cutting e-government projects among central government, regions, and municipalities without regard to formal jurisdictions. In January 2006 – following the proposal for action by the OECD e-government review – all parties in Project Digital Administration decided to extend the project for the period 2006-2010 and at

Box 3.1. **International examples of strong e-government leadership** *(cont.)*

the same time integrate the project organisation – The Digital Taskforce – into the regular organisation of the Ministry of Finance, merging the division with divisions of administrative simplification and administration policy into an Administration Political Centre. The aim of this reorganisation was to better use key competencies to support and enhance public sector transformation processes after a major change of the public sector structure where municipalities and regions were reduced and merged, and major areas of responsibility were shifted towards the enlarged municipal units and central government from the previous regions. E-Government has been mentioned as a key lever for harvesting efficiency and effectiveness gains within the new public sector structure, including creating larger and more skilled and competent e-government units locally as well as centrally.

Source: OECD (2006), *OECD e-Government Studies. Denmark*, OECD Publishing, Paris, and the Danish Government's modernisation website: *http://modernisering.dk/da/vision_strategi/den_digitale_taskforce*, accessed 28 February 2008.

Inter-governmental co-ordination

Key points

- *The **Crossroads Bank for Social Security is an example of best practice in Belgium**, where e-government was successfully used to transform the social services to be more client and user-focused. Its main success factors are:*
  - *The "board of directors" governance model, which has successfully created trust among independent partners.*
  - *The achieved agreements on a common vision and the alignment of concrete social security projects with this vision.*
  - *The created trust between political and administrative levels.*
  - *The unified vision among administrations on global benefits of e-government projects.*
- *Collaboration and co-operation with municipalities is a major issue for the development of more citizen-focused e-government services, as they are closest to the citizens. The municipalities are currently supported in their e-government efforts by the regional/community governments and, to a lesser extent, the Federal Government. However, there are **concerns about local capacity to implement and deliver e-government**.*

At the federal level, **practical e-government co-ordination** is ensured by Fedict. Fedict supports federal institutions through the entire policy cycle and hence helps them to elaborate, initiate and support the implementation of their e-government projects. It is also in charge of developing, implementing and maintaining some elements of the national infrastructure itself, such as the federal portal *belgium.be*, the network FedMAN (Federal Metropolitan Area Network) and the Universal Messaging Engine (UME) middleware.

The only institutionalised co-ordinating mechanism at the federal level which horizontally co-ordinates specific aspects of e-government among all ministries is the federal consultation platform on Information security. A forum co-ordinated by Fedict, the federal consultation platform brings together Chief Information Officers from all ministries on a monthly basis. According to OECD interviews, this group functions practically as a co-ordination forum for Information security matters and discusses mainly technical security issues.

At the political level, the minister in charge of e-government at the federal level is the Minister of Employment. The Cabinet of the Minister is mainly responsible for policy development and monitoring, and follow-up on policy implementation. Political co-ordination within the Federal Government is supported by inter-cabinet workshops which basically prepare issues to be presented to the Council of Ministers for decision. These inter-cabinet workshops are *ad hoc* (and frequent), and issue-specific to be later approved by the Council of Ministers. Cases going to the inter-cabinet workshops are cross-cutting matters concerning several ministries, such as the electronic ID card (eID). In OECD interviews, the inter-cabinet workshops were described as a "negotiation procedure" among ministries to gain consensus on decisions before presenting them to the Council of Ministers.

In the Walloon Region, EASI-WAL has several co-ordination roles:

- Project management (*e.g.* management of the regional portal and regional forms on the regional website, access to federal authentic data sources).
- Project support (*e.g.* participation in working groups linked to the inter-governmental co-operation agreements on e-government and administrative simplification, studies on topics of cross-cutting interest such as e-democracy, region-wide co-ordination of digital divide activities, and promotion of exchange of best practices).
- Communications (*e.g.* representation of the Walloon Region at events inside and outside Belgium, communications on outputs and outcomes of e-government and administrative simplification policies Wallonia-wide).

Box 3.2. **Best practice in Belgium: The Crossroads Bank for Social Security**

The achievements of the Crossroads Bank for Social Security show that, despite Belgium's federal state structure, co-operation and even collaboration is possible if consensus is reached among all stakeholders on the benefits of working together.

The social security system in Belgium involves more than 2 000 offices that deal with collection of contributions, delivery of benefits (such as unemployment, holiday pay, health care reimbursement, old age pensions) and determination of supplemental benefits. These institutions are spread across all governments – federal, community, regional, provincial and municipal. For example, the National Office for Social Security (NOSS), an independent government agency, is charged with collecting social security contributions on behalf of the Federal Government. Other main agencies are: Local Public Service Centres for Social Welfare (CPAS)[1] and municipalities themselves; social institutions at the regional and community levels; the Federal Ministry of Finance (for taxation issues); and the public transport administration (for free/reduced-cost transport passes).

To improve the efficiency of the Belgian social security sector, the Crossroads Bank for Social Security was created in 1990. As an engine and service co-ordinator, the CBSS helps the vast range of social security actors to offer services effectively and efficiently with minimal administrative burden, improving both processes and relationships through the use of technology. CBSS promotes ICT security and privacy protection among social security institutions, and handles all policy initiatives aimed at improving social security policies and processes.

E-Government as a transformative tool for the Crossroads Social Security Bank is built on 5 principles:

- Information modeling (indicating that information has to reflect the real world as closely as possible).
- Unique collection and re-use of information.
- Management of information.
- Electronic exchange of information ("pull and push system", *i.e.* those requiring information should receive it automatically without having to request it).
- Protection of information (supervised by special committees of the Belgian Privacy Commission and Fedict as clearinghouses).

The CBSS is governed by a board of directors. This board reunites representatives of all stakeholder groups[2] and drives agreements at the strategic level. The board as such automatically creates the necessary consensus

Box 3.2. **Best practice in Belgium: The Crossroads Bank for Social Security** *(cont.)*

for co-operation. The advantage of the board is that strategic management lies in the hands of direct and, ideally, also indirect users (other public and para-public institutions) of the CBSS' services. This consensus-based approach helps assign clear responsibilities and promote detailed programmes.

The main leadership strengths of the CBSS approach stem from its client and user focus, which is formulated in *ex ante* agreements with ministries, social partners and administrations active in the social security domain and which is renewed on an annual basis. Every year in March a letter is sent to about 2 000 representatives of institutions who state their individual needs and requirements within the CBSS' activities. A meeting is held in June to commonly agree on concrete needs and requirements. Finally, in September, the board of stakeholders agrees on an overall action plan for the coming year.

1. Which exist in each Belgian municipality.
2. Example: The enriched CBE is currently more up-to-date than the central one and meets specific requirements of Flanders region. Should the CBSS model be applied to the CBE, regions would have to be adequately represented within the board of directors of the CBE.

- Oversight/harmonisation of e-government and administrative simplification issues (*e.g.* elaboration of the legal basis on e-procurement, issuing guidelines for Web forms).
- Driver of new development projects (*e.g.* promotion of open source solutions, provision of methodologies to analyse processes).

As an example of EASI-WAL's co-ordination responsibilities for projects of common public sector interest is the ongoing e-procurement project *IAM-PAM* (*Informatisation des Avis de Marchés-Publication des Avis de Marchés*) – even though that the e-procurement project was initially started in the Ministry of Equipment and Transport (MET), and spread beyond this to the whole region, with plans to be fully used by local authorities by 2009.[20]

In general, the limits of EASI-WAL's responsibility seem to be subject to interpretation and constant negotiations among actors. Lines of responsibility and accountability are not clearly defined. EASI-WAL pro-actively take responsibility for e-government projects if relevant, as well as pursuing a support role, and steps into projects whenever requested; it therefore cannot actively determine the speed of e-government and administrative simplification developments in the Walloon Region.

To ensure that future decisions aimed to improve co-ordination among stakeholders and to develop and implement user-focused e-government services, these Social Security Banks success factors should be considered:

- The "board of directors" governance model, which has successfully created trust among independent partners.
- The achieved agreements on a common vision and the alignment of concrete social security projects with this vision.
- The created trust between political and administrative levels.
- The single vision on global benefits of e-government projects.

Co-ordination with municipalities

Recent political and constitutional state reforms[21] devolved responsibility for the municipalities to regional authorities. While there is no national framework for e-government co-operation at the local government level in Belgium, different organisational co-operation frameworks have been established upon the initiative of political leaders within the local governments. Table 3.1 highlights some of the organisations that deal with e-government at the provincial and local levels in Belgium.[22]

Table 3.1. **E-Government co-ordination in local governments**

Level	Name	Activities in relation to e-government	Membership
Provincial	APW	Representing provinces in the "local authorities" working group for the implementation of the Walloon e-government Action Plan 2005-2009.	Provinces.
	VVP	Working to enhance competencies in the Flemish region at the province level.	Provinces.
	VERA	A provincial association that provides support to local authorities in the territory.	Local authorities in the province.
Local	VVSG	Working to enhance ICT-related competencies in Flemish cities and municipalities.	Local authorities, social care centres, local police and inter-municipal regions.
	V-ICT-OR	Working to develop competencies of ICT staff in local authorities.	Local authority ICT personnel, ICT personnel in NGOs, private "supporting members".
	UVCW	Providing support for local ICT projects at the commune level.	All 262 local authorities in the Walloon Region.
	AVCB-VSGB	*None* *The BRIC/CIRB/CIBG is responsible for almost all e-government co-ordination and support activities in the region.	Local authorities, social care centres, and other interested parties.
	RIC	Providing information and training to ICT civil servants, helping to improve the ICT management at the local level and the opening of local ICT to competition.	Network of local Walloon ICT civil servants.
	CommunesPlone	Gaining independence from IT services providers by developing, essentially by themselves and in a cooperative manner, applications and websites for their own use as well as for their citizens.	Network of around 60 local authorities amongst which 45 from the walloon region.

Each region has begun to engage municipalities in its e-government development, providing economic, as well as skills and competency, support through joint e-government development projects. Examples are the *e-Communes* (e-Municipalities) projects started in the Walloon Regions,[23] and the *Irisbox Project* in the Brussels-Capital Region.[24] The regional frameworks give the municipalities a platform and incentives to work more closely together locally in order to meet political e-government goals.

Informal practical *ad hoc* co-operation does, however, take place between Fedict and the municipalities with regard to the usage of the e-government building blocks developed and offered by Fedict to all public sector institutions.

Interaction and co-operation among municipalities

Local governments can take advantage of sharing tools that have been developed by individual local authorities, as well as combining forces to improve efficiencies in development costs. Several applications and services exist across Belgium to encourage local governments to collaborate. The federal and regional frameworks and, in some cases, provincial and inter-municipal programmes have provided infrastructure and working examples for implementation by local authorities. However, many municipalities have not utilised these resources due to three main obstacles:

- Lack of promotion and awareness of e-government at the local level. This is critical to raise political support for deployment of e-government services.
- Re-use of applications is not predominant. Development of frameworks to enable re-use of applications in local authorities should be enhanced (at Fedict or the regional level).
- Collaboration among local authorities appears to be very successful when it occurs, even on an international level – but it is rare.

As a result, organisations such as VERA (see Box 3.3), V-ICT-OR (see Box 3.4), and the *Cellule E-Communes* in the *Union des Villes et Communes de Wallonie* (UVCW) have been established to ensure that local authorities can participate in knowledge-sharing networks.[25]

Political agreements among municipalities to "share resources" (*mutualisation*)[26] for specific areas or specific projects have encouraged inter-municipal joint e-government leadership driving e-government development and implementation. These *ad hoc* mutualisation arrangements give a fragmented and incoherent impression of municipal leadership; driving centres for advancing e-government development and implementation are limited or non-existent.

Box 3.3. **The Flemish-Brabant Extranet (Vlaams-Brabant Extranet – VERA)**

The *VERA Autonoom Provinciebedrijf* – an autonomous company established in 2000 by the Province of Flemish Brabant and supported largely (80%) by provincial funding – is a key actor in the Province for the provision of e-government services to local authorities. It provides ICT-related services to over 80% of the local authorities, for purchase and use at reduced cost. These services include the provision of: a website structure, (described in Chapter 6), a calendar, and email outside of the VERA network for employees of the local authorities ("AgendaWeb"), a system for distributing agendas, minutes, and documents for discussion in council meetings ("e-Raden"); and a VoIP telephone service.

Box 3.4. **The Flemish Association for ICT responsibles in local government (*Vlaamse vereniging voor informatie – en communicatie – technologieverantwoordelijken in het locale bestuur* – V-ICT-OR)**

In Flanders, efforts to promote co-operation among local authorities has been ongoing since 2001. V-ICT-OR is a non-profit organisation established to achieve five main objectives:

1. Promote and develop the expertise of local government ICT staff and raise the common knowledge to a higher level.
2. Organise service and protect the interests of all ICT professionals in the local authorities.
3. Establish a network, present a forum for exchanging experiences, andcreate opportunities for face-to-face meetings for local-level ICT staff.
4. Promote co-operation and synergy among levels of government.
5. Be the voice of the ICT professionals.

Source: www.v-ict-or.be/content/content/record.php?ID=20&s_navID=24, accessed 28 February 2008.

Although cases of inter-municipal collaboration are limited. There is an increasing tendency among Belgian municipalities to work with each other and to use limited resources in a more cost-efficient manner. In the cities of Antwerp and Ghent, for example, the Digipolis Antwerp and Digipolis Ghent companies were established to work with both local authorities separately. The Brussels-Capital Region has successfully developed a common platform that allows all 19 municipalities within its borders to share a large number of resources (for example, infrastructure) to reduce costs.

Local authorities are learning to work together to create spaces for sharing information, experiences and best practices; the largest are organised at the regional level. These are supported by a variety of financial models, with some provincial and municipal support, whereas others rely on third-party intervention to supplement their own activities. Membership fees also ensure continuing stability of the organisations.

One example of an independent body that has been established is V-ICT-OR (see Box 3.4). V-ICT-OR relies on membership fees from local authorities and sponsorship from the ICT industry. The day-to-day management of V-ICT-OR is handled by officials from different local authorities (a staff of six). In 2006, V-ICT-OR established a marketplace for e-government service providers, called "e-government for local governments", which is intended to bring together the providers and the users of e-government services. This marketplace, or network, is supported by the Flemish Innovation Network (*Vlaams Innovatienetwerk*), which is managed by the Institute for Innovation through Science and Technology in Flanders (*Innovatie door Wetenschap en Technologie in Vlaanderen*).

The Association of Flemish Cities and Municipalities, VVSG, brings together 308 local authorities, 308 Public Social Welfare Centres (OCMW),[27] 100 police districts, and over 50 inter-municipalities in the Flemish Region with the aim of strengthening local democracy and local policymaking, and promoting the quality of local policies. Its members finance the association, along with corporate sponsorship. In support of e-government, the VVSG has disseminated research carried out by other organisations and institutions in the field.

All 262 municipalities in the Walloon Region are members of the Union of Walloon Towns and Municipalities, UVCW. The UVCW developed *Cellule E-Communes* to support the dissemination of ICT development information to local authorities. Several communes have worked together in this framework to develop common tools under the *CommunesPlone* project. These include the electronic management of communal meetings, and municipality website development.

Despite the potential for organising and exercising joint e-government leadership among municipalities using these and other municipal associations as an organisational framework, OECD interviews did not show any significant role for the associations as anchors for municipal e-government leadership. Other avenues for developing service outside individual municipalities exist, and many local authorities are also looking to third-party service providers to facilitate e-government deployment.

In addition to co-operation among local governments, some Belgian municipalities have also worked together with non-Belgian local governments. Box 3.5 indicates such an example of cross-border co-operation, which makes use of a private-sector solution developed for use in local authorities worldwide.

Box 3.5. **Cross-border/International learning experiences: Aalter**

Officials from Aalter, a town in the Flemish Region, have made efforts to learn from other European cities' experiences with user-focused e-government. After deciding to use an online platform for interactions with citizens, the local authority realised that the most effective way to deliver a practical and user-centered service was to review existing best practices and applications. Girona, Spain, provided one useful example, so authorities travelled to Spain to examine the case in detail.

To meet the unique needs of citizens, businesses and public servants, Girona implemented a customisable digital town hall that includes a system for online tax payments. In 2006, Aalter launched a new website inspired, in part, by the sharing of experiences between Aalter and Girona. The study trip and conversations with the Spanish city of Girona has led to plans to enable continuous sharing of experiences between the two administrations through electronic means.

Source: The *PublicTechnology.net* link: *www.publictechnology.net/modules.php?op=modload&name=News&file= article&sid=6547&mode=thread&order=0&thold=0*, accessed 28 February 2008.

Box 3.6. **International examples of agreed inter-governmental e-government strategies**

Germany

The German Federal Government in November 2006 launched a new e-government strategy. A federal country, German e-government operates within a public sector with decentralised responsibilities to 16 federal states (*Länder*) and local governments. Even though the focus of the strategy is the e-government strategy of the Federal Government, it recognises the key difficulties of cost-effective implementation of e-government programmes in a federalised state. The strategy states that the e-government programme should focus on: closer co-operation among public authorities; provision and use of joint solutions for similar tasks; and safeguarding investments made by the Federal Government in e-government services. Strong emphasis has been placed on demand-oriented e-government development including the nation-wide Deutschland-Online Strategy, the Federal Government provides resources to ensure implementation according to schedule, including setting up a framework for joint project management, information management, controlling and sharing support services among levels of government.

Source: German Federal Ministry of the Interior, Office of the Chief Information Officer (2006), *eGovernment 2.0. The Programme of the Federal Government*, *www.verwaltung-innovativ.de*, 28 February 2008.

Box 3.6. **International examples of agreed inter-governmental e-government strategies** *(cont.)*

Switzerland

As a federalised country, the Federal Government of Switzerland is highly dependent on consensus among 26 cantonal governments for joint efforts. (Nevertheless, the Federal Government has since 1998 latest revised January 2006 a strategy for an Information Society in Switzerland mandating the development of a national e-government strategy.) The e-government strategy has three objectives: the business community shall conduct administrative procedures with authorities electronically; the authorities shall modernise their business processes and deal with each other electronically; and the population can conduct important, frequent, or complex administrative procedures with authorities electronically. The approach to these national objectives covers a number of principles shared by all cantons and supported by a framework agreement: focus on services, processes, and priorities; transparency and commitment; innovation due to federalism; savings through multiple usage of solutions and open standards; access for all; and support of decision makers. The framework agreement consists of formal agreements between the Federal Government and the cantonal governments; specific rules for co-operation among the three governmental levels (Federal government, cantonal governments, and the municipal governments); and the establishment of an organisation to oversee and co-ordinate the implementation of the strategy.

Source: Presentation slides by Switzerland on Switzerland's e-government strategy at the meeting of the OECD Network of Senior E-Government Officials the 12 October 2007, and *www.admin.ch*, accessed 28 February 2008.

E-Government Leadership – Proposals for Action

- Belgian governments could consider strengthening the operational practice of achieving synergies between them based on a common vision and a set of common strategic goals. As operational e-government co-operation has been proven to function within specific projects and specific areas/sectors, there is a need to discuss, decide, and implement e-government using a sufficiently large degree of pragmatism and a minimum of political idealism to ensure a whole-of-public-sector approach rather than a compartmental approach as experienced today.
- Belgian governments' political desire for targeted e-government services should only be considered at the presentation level of the provided e-services leaving functionalities as a shared resource in the public sector in order to achieve a common look and feel towards users without regard to

formal competences among the governments. Shared generic services among all governments could be experimented with to achieve the necessary economies of scale.

- Municipality-level service delivery issues –like equity of services, local capacity to develop and implement e-government services, and oversight and support – are increasingly being given special attention. This process should be stimulated further. Belgian governments will need to find a delivery model that is increasingly efficient, transparent and participatory, and matches political goals while responding to changing user needs.
- Co-operation should be enhanced at the programme level and must go beyond the current inter-governmental co-operation agreement that provides a formal rather than a practical operational consensus.

Notes

1. OECD (2003), *OECD e-Government Studies. The e-Government Imperative*, OECD Publishing, p. 93 ff.
2. *Accord de cooperation entre l'Etat fédéral, les Communautés flamande, française et germanophone, la Région flamande, la Région wallonne, la Région de Bruxelles-Capitale, la Commission communautaire flamande, la Commission communautaire française et la Commission communautaire commune concernant la construction e l'exploitation d'une e-plate-forme commune, mars 2001*. (Co-operation agreement between the Federal State, the Flemish, French, and German-speaking Communities, the Flemish Region, the Walloon Region, the Brussels-Capital Region, the Flemish Community Commission, the French Community Commission, and the Joint Community Commission with regard to the development and the use of a joint e-platform, March 2001.)
3. *Accord de cooperation entre l'État fédéral, les Communautés flamande, française et germanophone, la Région flamande, la Région wallonne, la Région de Bruxelles-Capitale, la Commission communautaire flamande, la Commission communautaire française et la Commission communautaire commune concernant les principes pour un e-gouvernement intégré et la construction, l'utilisation et la gestion de développements et de services d'un e-gouvernement intégré. 21 September 2006* (Co-operation agreement between the Federal State, the Flemish, French, and German-speaking Communities, the Flemish Region, the Walloon Region, the Brussels-Capital Region, the Flemish Community Commission, the French Community Commission, and the Joint Community Commission with regard to the principles of an integrated e-government and the development, use, and management of the development of services of an integrated e-government, 21 September 2006).
4. *Convention de coopération du 10 décembre 2003 Entre l'Etat fédéral, les Communautés flamande, française et germanophone, la Région flamande, la Région wallonne, la Région de Bruxelles-Capitale, la Commission communautaire flamande, la Commission communautaire française et la Commission communautaire commune concernant la simplification administrative (*Co-operation agreement of 10 December 2003 between *the* Federal State, the Flemish, French, and German-speaking Communities, the Flemish Region, the Walloon Region, the Brussels-Capital Region, the Flemish Community Commission, the French Community Commission, and the Joint

Community Commission with regard to administrative simplification) available from *www.epractice.eu/resource/955*, accessed 28 February 2008.

5. This was the primary goal of the first intergovernmental co-operation agreement on e-government.

6. The 21 members of the Committee are: three representatives each from the Federal Government, the Flemish, French and German-speaking communities; two representatives from the Flemish Region and two from the Walloon Region; one representative from each of the following entities: the Brussels-Capital Region, the Flemish Community Commission, the French Community Commission and the Common Community Commission.

7. *Résolution sur l'e-government intégré en exécution du 2e accord de coopération intergouvernemental en matière d'e-government*, (Resolution on integrated e-government and the execution of the second co-operation agreement on the subject of e-government, 7 and 8 November 2006) available from *www.belgium.be/eportal/ShowDoc/kabinet_egov/imported_content/pdf/Resolution_e-government.pdf?contentHome=entapp.BEA_personalization.eGovWebCacheDocumentManager.fr,* accessed 28 February 2008.

8. OECD (2006), *OECD e-Government Studies – Denmark*, OECD Publishing, Paris.

9. OECD (2004), *OECD e-Government Studies – Finland*, OECD Publishing, Paris.

10. OECD (2007), *OECD e-Government Studies – Netherlands*, OECD Publishing, Paris.

11. OECD (2005), *OECD e-Government Studies – Norway*, OECD Publishing, Paris.

12. Administered by the Walloon Region.

13. Universal Messaging Engine.

14. "Authentic sources" is understood as a set of basic databases containing key information and data to be shared among institutions in the Belgian public sector.

15. Fedict (2005), Rapport d'activités 2001-2005: Un terrain fertile pour un e-government conviviale, Brussels.

16. For further information on *e-government*, see Chapter 4.

17. See *www.vereenvoudiging.be/showpage.php?iPageID=227&sLangCode=NL*, accessed 28 February 2008.

18. The acronym stands for Déclaration Électronique Unique "Starters". DEUS allows businesses registered with the Crossroads Bank for Enterprises to electronically apply for permission for sectoral activities, and product and service-related permissions.

19. According to the Web site managed by the Federal Agency of Administrative Simplification, *http://simplification.be/showpage.php?iPageID=218&sLangCode=FR,* accessed 28 February 2008.

20. As stated in the EASI-WAL Action Plan, EASI-WAL (2005), Plan d'action de la Région wallonne: Fiche 4: IAM-PAM. *http://easi.wallonie.be/easi/col_gauche_niveaux_fr/e-gouvernement-simplification-et-lisibilite/plan-d-action-de-la-region-wallonne/les-actions-d-easi-wal-et-des-groupes-thematiques/les-actions-decidees-en-juin-2005/plan-d-action-des-groupes-thematiques/marches-publics/fiche-4-iam-pam/fiche-4-iam-pam.html?LANG=fr&ACTION_PANIER=AJOUTER_PANIER&descriptif_panier=FICHE%204 :%20IAM-PAM*, accessed 4 January, 2008.

21. Brans, M., C. De Visscher, D. Vancoppenolle (2006), "Administrative Reform in Belgium: Maintenance or Modernisation?", West European Politics 29:5, November, pp. 979-998.

22. At the regional level, the Flemish CORVE and the Walloon EASI-WAL are supporting local government, but this is an emerging area, as their responsibilities were previously strictly at the regional level. The Brussels CIBG/CIRB has been a long-term supporter of the 19 local authorities with regard to e-government services.

23. E-Communes or e-Municiplaities in Belgium – *www.uvcw.be/espaces/e-communes/*, accessed 28 February 2008; *http://tic.pouvoirslocaux.wallonie.be/apps/spip/article.php3?id_article=99*, accessed28 February 2008. The e-Communes initiative was launched in 2002 in the Brussels-Capital Region, *www.cirbcibg.irisnet.be/site/component/Library_fr/Documents/1024653114.66/doc_cahier21.pdf*, accessed28 February 2008.

24. Irisbox is a secure electronic counter operated the CIRB. This secure counter resembles an electronic post box, provides access to official documents and allows for online payments to the administration, *www.irisbox.irisnet.be/*, accessed 28 February 2008.

25. The associations organising the municipalities are: The Vereniging van Vlaamse Steden en Gemeenten (The Association of Flemish Cities and Municipalities) (VVSG), the Union des Villes et Communes de Wallonie (Union of Walloon Towns and Municipalities) (UVCW), and the Association of the City and Municipalities of the Brussels-Capital Region (AVCB-VSGB).

26. Mutualisation is the concept of sharing a resource or a solution which permits the involved parties to decrease costs through economies of scale, have a coherent development founded on shared main basic e-government components, and approach identical problems or opportunities with common e-government solutions. Mutualisation often occurs between at least two municipalities which have the same general or specific interest to develop, implement and share the same solutions.

27. In Dutch: *Openbaar Centrum voor Maatschappelijk Welzijn*.

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Chapter 4

Implementation of E-Government

Each Belgian government defines the scope and pace for implementation of its e-government programmes. Belgian e-government bodies support other entities in delivering e-services – but this ***collaboration is voluntary, not mandatory****. Fedict was created as the organisational framework to maintain and manage e-government services for federal public sector institutions; however, a* ***nation-wide e-governance solution for integrated service delivery has not been established****.*

The Belgian federal state structure, as defined in its Constitution, establishes equality among all governments. Autonomous development of e-government solutions is a prevalent approach throughout Belgian governments. Some governments offer free tools to reduce e-government implementation costs; however, this has been perceived by other governments as creating dependency on the initiating level. Such beliefs could result in a shift in the careful equilibrium of power among the different governments.

OECD interviews indicate a ***project management culture*** *that lacks the systematic usage of business case analyses, monitoring, project evaluations, and prioritisation of choices of ICT projects. E-Government implementation is taking place in this same context. Effective measurement of e-government progress requires basic indicators, which may include evaluation of costs and benefits as well as other qualitative and quantitative indicators describing progress towards stated policy goals.*

Newly introduced ***management tools*** *(e.g. quality management tools, human resource performance management systems, e-government monitoring methodologies) that support different government activities are not designed to exploit synergies among policies.*

Private sector involvement in e-government *activities seems to take place on an ad hoc project-by-project basis: private bodies mainly deliver outsourced services to public sector institutions. There is no framework in place governing public-private partnerships to enable better public sector service delivery; additionally, the governance structure is perceived as being too complex to identify opportunities for such co-operation. Clearer insight into ongoing and planned projects in the public sector and the creation of single points of contact for private sector partners would be helpful.*

Belgian governments have recently implemented individual ***competency-oriented systems for recruitment and staff development****. However, they are increasingly realising the necessity to co-operate on human resource management across governments.*

This chapter covers the Belgian governments' monitoring and evaluation frameworks, service delivery mechanisms and contract management, and the skills and competencies needed to increase e-government performance.

Successful management of e-government implementation requires well-proven operational management and steering concepts, feedback mechanisms (like monitoring and evaluation systems), innovation management skills, risk analysis and management, and organisation of stakeholder involvement. These core competencies are not always sufficiently developed within the public sector – as in other OECD countries – and can run counter to the more solid, risk-averse and change-resistant ethos of many public service organisations. There is also a growing recognition that e-government is just one aspect (albeit an essential element) of transformational and innovative change, and therefore must be considered in a wider context of organisational development.

Autonomous development of e-government solutions is a prevalent approach throughout Belgian governments. Governments are responsible for their own project management, measurement and evaluation. However, OECD survey results suggested that overall implementation could be improved by further developing a project management culture based on the systematic use of business case analyses, a monitoring and evaluation concept, and prioritisation of choices. Figure 4.1 shows that 45% of OECD survey respondents use project planning tools and 43% use monitoring tools. Almost the same percentage of respondents (39% and 41%, respectively) replied that no toolkits exist for project planning and monitoring. The majority of Belgian governments also lack toolkits for evaluation (50%), project selection (60%), and cost-benefit analysis (63%), suggesting limited possibilities for making informed decisions with regard to e-government projects.

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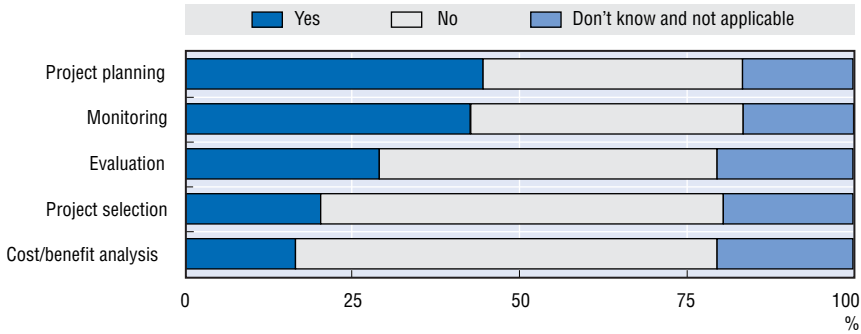
Figure 4.1. **Application of management toolkits for e-government project management**



Note: Survey Question 4.5: Do any of the following management toolkits exist in your government that apply to e-government projects?

Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

Monitoring and evaluation frameworks

Key points

- *The **lack of a common systematic management approach** has left Belgian e-government implementation fragmented and incoherent. The inter-governmental co-operation agreement could become a focus point to align management approaches and introduce monitoring and evaluation concepts to be used in implementing the commonly agreed action plans.*
- *Belgian governments should exploit successful managerial approaches for e-government implementation. Proven good practices can be used to agree on a common concept or framework for monitoring and evaluation, to allow for **whole-of-public-sector transparency and accountability** of implementation processes.*
- *Belgian municipalities have fragmented approaches to implementation management with limited guidance and help from regions, communities, and the Federal Government. Initiatives have commenced in the regions to **engage municipalities in concrete e-government projects or pilots**. However, municipalities do not generally make use of their regional associations to facilitate collaboration or to strengthen the managerial toolbox and approaches.*

Monitoring and evaluation methodologies should be part of day-to-day project management; they help gauge performance, track progress and detect upcoming challenges in a timely manner. OECD countries are increasingly looking to subject e-government programmes to their standardised

managerial procedures for monitoring and evaluation, cost-benefit analysis, and measuring economic impact.

The Belgian governments have begun to recognise business process re-engineering as a precondition for e-government – adapting their processes before making them electronic.

Belgian governments have introduced public sector performance management frameworks such as: Balanced Score Cards,[1] external and internal audit processes, and quality assurance programmes such as the Common Assessment Framework (CAF)[2] used in the Walloon Region and the French Community. These concepts are expected to drive public sector transformation within organisations; however, decision makers in the Belgian public sector do not seem to be convinced of the necessity or tangible benefits of performance measurements, according to OECD interviews.

The second Inter-Governmental Co-Operation Agreement on E-Government (see Chapter 3) urges co-operation within specific implementation areas: unique identification keys, authentic data sources (*e.g.* registers), privacy and data protection, interoperability, harmonisation of the navigation structure, and service portals. However, it does not mention monitoring and evaluation of implementation against stated goals. This leaves limited common tools for tracking implementation progress and outcomes, and limited opportunities for feedback to policy developers on whether cross-government implementation goals are met within stated timeframes. The lack of project management tools also hinders the implementation of accountability mechanisms within the inter-governmental co-operation agreements; these could help in tracking the development of joint e-government projects.

According to OECD interviews, the lack of monitoring and evaluation tools in Belgium limits the exchange of good practices and hinders structured practitioners' dialogue, which would require substantial evidence. Benchmarking seems to be difficult (as comparisons across governments would potentially be necessary), but indicators and evidence-based approaches to exchanging good practices could be feasible.

Belgian governments do not seem to transfer their knowledge on monitoring and evaluation by developing and sharing toolkits and other types of guidance. Standardised guidance, frameworks and methods for project managers would both help them develop business cases, and provide them with tools to collect data that could be compared across projects and sectors. This would, in turn, allow policy makers to make better-informed, evidence-based decisions about whether to proceed with, modify or terminate projects.

Belgian governments are independently developing quantitative and/or qualitative indicators, leaving little room for the development and re-use of common e-government indicators.

Monitoring and evaluation of e-government at the federal and sector levels

The Copernicus Reform laid the grounds for more thorough managerial thinking, and first results of a shift towards a project management culture are apparent. For example, the Copernicus Reform introduced managerial and operational planning (*Plan de management* and *Plan opérationnel*) throughout the Federal Government and provided guidelines for these planning tools. The Royal Decree of 29 October 2001 defined the minimum content of a federal ministry's management and operational plan.[3]

Management of e-government projects is a focus of Fedict (see Box 4.1), the Federal Ministry of Finance (see Box 4.2) and the Crossroads Bank for Social Security (see Box 4.3).

Box 4.1. **Balanced scorecard approach of Fedict**

A "balanced scorecard" uses a color-coded, "traffic light" system to evaluate organisations' performance and results in key areas. Fedict systematically measures its achievement of operational and service objectives using performance indicators on a balanced score card. Fedict measures four dimensions:

- Results for customers and society: Customer satisfaction, the impact of Fedict's activities on Belgian society, the perception of Fedict's image.
- Internal operation: Progress in activities underlying Fedict's operational objectives and key processes.
- Staff satisfaction and achievement of the training plan.
- Allocation and use of people and resources.

This approach is a first attempt towards simultaneously considering the internal and external dimensions of e-government performance. In addition, the balanced scorecard combines quantitative and qualitative indicators.

Note: Fedict's balanced scorecard is an integral part of its management plan (*Plan de management*). See Plan de management SPF ICT 1/10/02.

Box 4.2. **Monitoring ICT projects at the Ministry of Finance**

Since 2003, major ICT projects under the *Coperfin*[*] action plan at the Federal Ministry of Finance are reviewed through a multi-stage process. Review stages include the description of the project's e-government policy concept and the assessment of the underlying technical architecture, at a minimum. A more thorough project analysis and the definition of contract specifications may also be undertaken, as well as assistance to the administration in selecting the implementing enterprise.

The Federal Ministry of Finance's step-by-step process can be seen as a first shift towards a staged review process methodology, even though the focus is *ex ante* assessments before the actual contract is awarded. This leaves further room for assessing outputs and outcomes of e-government projects. The situation is similar in most OECD countries aiming to create more sophisticated measurement tools for "better ICT-enabled governance", but which have not yet been able to successfully implement such tools.

* For more detailed information see the most recent Coperfin operational plan: *Service d'encadrement ICT*-Service Public Fédéral Finances (2006), Brussels.

Box 4.3. **Integrated assessment and monitoring of the Crossroads Bank for Social Security (CBSS)**

The Crossroads Bank for Social Security (CBSS) has been a leading actor in the Belgian e-government landscape since 1990, handling information and data exchange among social security institutions. The CBSS builds on a highly advanced, fully automated evaluation and monitoring system. The work of CBSS is continuously monitored through integrated indicators that measure: message integrity, content appropriateness, exchange speed and performance, service availability, and security of operations. A data warehouse system records 136 indicators, which are used to improve systems and performance, and for resource allocation decisions.

The success of CBSS shows that systematic monitoring and evaluation can help achieve a management culture and support decision makers, in respect to the development and implementation of e-government solutions to support primary policy goals.

All social security actors can access the integrated statistics, on a coded or anonymous basis. This feedback allows them to improve systems and services, making them better, faster and less burdensome. The CBSS itself undertakes monitoring on both a regular and *ad hoc* basis; the agency also manages a database of labour market statistics, which, when combined with the social security monitoring, offers the possibility to determine much information about the overall employment and social allocation situations in Belgium.

Box 4.3. **Integrated assessment and monitoring of the Crossroads Bank for Social Security (CBSS)** *(cont.)*

The CBSS experience has shown that key performance indicators must be determined during the design phase of projects, and that measurement results should made accessible in a data warehouse environment that includes powerful aggregation, analysis and reporting facilities.

The availability of groupware for all involved parties has, in general, continuously ensured documentation, project planning, project follow-up, issue management, and co-ordinated management of the information model and glossaries.

The Federal Government has used the *Fed-e-View/Administration* study in 2004 to evaluate the digitisation of federal institutions (including agencies and the CBSS), and particularly their back-office organisations, with the help of a balanced score card-like system. It is being considered to use this monitoring and evaluation tool in a periodical basis. These indicators constitute the federal barometer of digitisation. Each participating federal department receives a detailed analysis of its own scores, while other entities are represented graphically and anonymously. Along with Finland and Italy, Belgium is one of the first European countries to develop such a measurement. The *Fed-e-View* concept has been extended to measure "user needs" and "user satisfaction" in separate surveys. The *Fed-e-View/Administration* and the *Fed-e-View/Citizen* studies are not currently linked, but may be in the future, as "traditional" balanced scorecards cover the user dimension.[4]

The purpose of *Fed-e-View/Administration* is not to measure the ICT performance of each department but to get an idea of the extent of computerisation within the federal administration, particularly in the back office. The concrete objectives are:

- To determine and implement indicators of the digitisation process in different dimensions (from strategic to technological).
- To measure these indicators.
- To develop an evolving but comparative computerisation scoreboard on the basis of these indicators.

The barometer is an internal tool intended for multiple stakeholders: the Minister/State Secretary in charge of State Computerisation, federal agency ICT managers, and the heads and general administrators of the departments concerned. Measurement tools that are intended for diverse audiences, however, risk biased measurement or interpretation of indicators depending on the interests of stakeholders and other involved parties. Limitations of the

current approach include the lack of weighting to take into account the differing sizes of assessed departments, the fact that measurement takes place across different organisational structures, and varying budgetary principles across the assessed departments. Additionally, the *Fed-e-View* study presents indicators without providing context, leaving all participating departments to ensure adequate management skills. The *Fed-e-View* balanced scorecard measures these dimensions:

- Strategic.
- Financial.
- Organisational structures and procedures.
- Personnel-related.
- Technological.

The 2004 study results lead to the following conclusions:

- There is a strong variation in the usage of evaluation tools among federal-level departments. Also, the median of the indicator on the use of evaluation tools is very low.
- The Fed-e-View study indicates that, in the short term, federal administrations will need a significant number (about 14% of existing staff levels) of new civil servants with ICT skills. Also, many ICT-skilled civil servants are over 50, which means that many current ICT skills will disappear within 10 years when they retire.
- Departments that are proportionally less advanced in terms of e-government have proportionally fewer ICT personnel.

Examples of monitoring and evaluation of e-government at the regional and community levels

All governments have chosen their own approaches to e-government monitoring and evaluation at the regional and community levels. The Flemish Region has mainly used *ex ante* project evaluation, emphasising pre-launch selection criteria for project funding. The Walloon Region focuses on *ex post* monitoring and uses output- and results-based indicators. The Flemish Region uses its indicators internally to help public sector decision makers ensure coherence of projects with regards to their underlying technical infrastructure and broader policy goals; the Walloon Region has chosen a highly communicative output-oriented approach towards external stakeholders (including e-government users). No Belgian governments are focusing on process indicators.[5]

In the Flemish Region, e-government projects are mainly evaluated *ex ante* prior to implementation (*i.e.* in the project selection phase). The Flemish Region Government supports projects that promote the objectives of the

Region's e-government programme. Projects that fulfil the following objectives are financed through the Flemish Region's Integration Projects Programme (VIP):

- The projects must provide visible benefits for citizens and businesses.
- They must make use of the generic components provided by the Flemish government.
- The projects must involve administrative simplification.
- There must be an element of co-operation within the Flemish Region, or with other government administrations.[6]

The VIP programme has financed only 13 projects since 2005. In order to qualify for VIP funding, proposals must include an adequate business case including a feasibility study and an analysis of the potential use of the tool.

In June 2007, 464 e-government projects were being tracked (but not individually monitored) by CORVE in the Flemish Region. The Flemish Integration Competence Cell *(Vlaamse Integratie Competentie Cel – VICC)* manages the development of the technical competencies of the Flemish Region's e-government programme. Its main role is to support the government's efforts to achieve data, application, and process integration and to ensure the technical coherence of e-government projects.

In the Walloon Region, EASI-WAL follows up twice per year on the e-government projects defined in the 2005-2009 Action Plan on administrative simplification, e-government, and readability. EASI-WAL has defined 232 project-based, results-oriented indicators. These include for instance the number of forms that have been redesigned according to administrative simplification principles, the number of forms that are interactive or transactional, and the number of users of the Walloon Region's portal who have created individual user profiles. EASI-WAL presents the results of its activities to the Walloon Region Government in a dedicated session every four months, and shows the results of its project-per-project evaluations publicly on its website.

Monitoring and evaluation in local governments

Belgian municipalities, like those in other OECD countries, seem to lack adequate expertise to reap the benefits of e-government. OECD interviewees confirmed that maturity of municipal e-government services is low. Because support for implementation to municipalities is not systematically tracked, the public sector has only a fragmented overview of e-government activities at the local level. Information about municipal implementation of other governments' applications is also limited.

There is no public body or entity responsible for monitoring and evaluating e-government implementation at the local level (due to the federal

state structure in Belgium). It is therefore left to municipalities themselves to produce monitoring and evaluation toolkits. An overview of good practices that could provide municipalities with guidance, and monitoring and evaluation toolkits are in place.

The Flemish Region did, however, evaluate local governments through their participation in the *Dialoog voor Vereenvoudiging* (Dialogue for Simplification) in June 2005.[7] Projects were evaluated on a set of criteria which included impact on users, adherence to Flemish Region rules for regulatory management, and feasibility of the project.

Box 4.4. **International examples of monitoring and evaluation frameworks**

France

The French Electronic Administration Development Agency (ADAE) has developed an analytical method for analysing the value of e-government projects called MAREVA (*Méthode d'analyse et de remontée de la valeur*). MAREVA is used in selecting projects to be funded, monitoring projects during implementation, and evaluating projects after implementation. By February 2006, the methodology had been applied to 30 projects.

The power of MAREVA lies in providing a standard, consistent, repeatable method for appraising and selecting projects to be funded that can also be applied at the termination of the project to determine the actual value of the project. Many countries use return on investment (ROI) or cost/benefit analysis to evaluate projects. Because these two types of analysis can be carried out in many different ways, it is often impossible to compare projects. MAREVA standardises what costs and benefits will be considered and what metrics generated. The system also considers equity between employees, users and organisations in evaluations, as well as risk and origin of the project mandate (law or other circumstances).

The MAREVA method consists of:

Standard calculations of return on investment (ROI) using three indicators: breakeven point, internal rate of return, and recurring gain from the project.

Assessment of value using four additional indicators: strategic alignment with organisational goals, economic justification using benefits and costs, risk assessment, and follow-up on expected results.

Presentation format using a radar diagram to portray values for profitability, risk control, external considerations, internal considerations, and the necessity of the project.

Box 4.4. **International examples of monitoring and evaluation frameworks** *(cont.)*

The MAREVA valuation methodology explicitly considers external benefits to users as well as internal benefits to public sector employees and administration. The methodology also measures risk and the necessity of the project (*i.e.* is the project obligatory).

MAREVA is useful because it defines an adequate (not too complex) approach to evaluating projects by considering return on investment (ROI) and four other important aspects. By using five major metrics, MAREVA allows projects to be compared and an investment portfolio developed.

Source: OECD (2006), *Benefits Realisation Management*, [GOV/PGC&EGOV(2006)11/REV1], Paris.

Norway

Hoykom is a grant programme promoting broadband use and applications in the public sector. It is financed by the Department of Trade and Industry and the Department of Education and Research. The Research Council of Norway has provided oversight of the programme and its over 400 projects through external reviews and audits. The Council has taken several steps to improve the programme's effectiveness and results:

Require a benefits realisation plan laying out benefits to be achieved and how and when they will be achieved, and to demonstrate high-level organisational support.

Require a cost/benefit analysis.

Mandate reporting of progress in terms of indicators used in the benefits realisation plan.

Update the benefits realisation plan at the end of the project.

Report actual benefits one year after project implementation.

There are three crucial elements: a realistic project and benefits realisation plan, high-level organisational support, and a measurement system that facilitates identification of benefits to be achieved and what was actually realised. The Research Council has developed an initial set of indicators to measure benefits of expanded broadband infrastructure and use.

The Hoykom case demonstrates the advantages of standardising measures to be used for similar types of investments (*i.e.* sectoral or technological investments), allowing for comparison across similar projects and identification of best practices.

Source: OECD (2006), *Benefits Realisation Management*, [GOV/PGC/EGOV(2006)11/REV1], Paris.

Service delivery mechanisms and contract management

Key points

- *Belgian governments are comprised of* ***various types of sub-governmental institutions, managed differently****. The number of institutions is particularly high in the Flemish and Brussels-Capital Regions.*
- *Private-sector involvement in e-government projects seems to take place on an* ad hoc *project-by-project basis; private sector companies mainly deliver outsourced ICT services to public sector institutions.* ***The framework for private sector co-operation – used by all governments – seems limited****. Each government has kept its power of procurement, implementation capabilities, and negotiation with ICT providers.*
- *The Belgian government is increasing its efforts to implement* ***e-procurement*** *– with the goal to conduct all procurement electronically by 2010, in line with the European Union i2010 programme. Wide-scale adoption of electronic public procurement in Belgium can be a major catalyst for the introduction of modern information systems and connectivity for businesses, if backed up with appropriate support programmes.*

The widespread use of ICT in governmental organisations undoubtedly impacts organisational structures and work processes; public sector managers must start thinking more strategically about how to use e-government as a tool for change and as a means to re-engineer processes and procedures across organisational boundaries (despite different reform paths and administrative cultures in Belgian governments). Service delivery mechanisms and the importance of contract management are exemplified by the review of outsourcing practices, the use of public-private partnerships, and the introduction of e-procurement.

Outsourcing

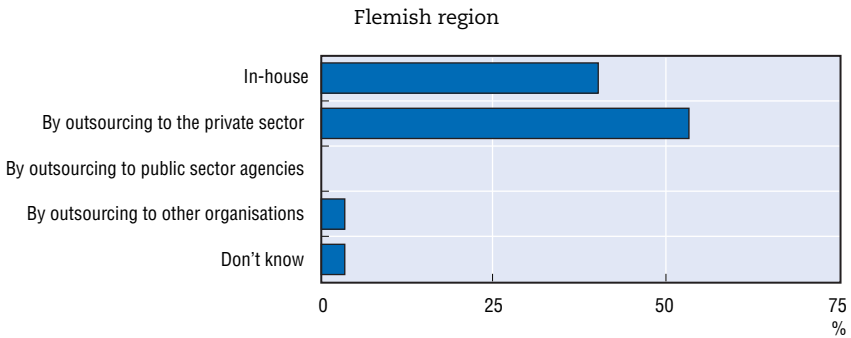
Belgian governments are comprised of various types of sub-governmental institutions, managed differently. The number of institutions is particularly high in the Flemish and Brussels-Capital Regions. This fragmentation of entities is not counterbalanced by an empowerment of e-government bodies to provide strong e-government programmes and better deliver e-government services. Most collaboration with e-government bodies is voluntary, not mandatory.

Belgian governments show significant differences in their outsourcing frameworks. The Walloon Region and the French Community seem to have chosen an in-house approach to developing and implementing e-government.

In the Flemish and Brussels-Capital Regions, there is a high level of outsourcing, particularly in the area of infrastructure. For example, some governments rent e-government applications, and/or use hybrid solutions for shared development and maintenance tasks with non-governmental actors. At the local level, there is evidence of similar outsourcing practices; however, these often involve public-private partnerships or arms-length institutions.

Among Belgian governments, the Flemish Region has the strongest historical tradition of outsourcing. The OECD survey shows that Flemish public sector institutions extensively outsource e-government development and implementation activities to the private sector (53%), with a lower but still significant use of in-house development and implementation (40%) (see Figure 4.2). It is significant that no Flemish public institutions (0%) indicated that they outsource e-government activities to other public sector agencies; this confirms the general national trend of limited operational collaboration and co-operation across the public sector. (Box 4.5 highlights a major outsourcing example in the Flemish Region that covers both ICT infrastructure and service delivery.)

Figure 4.2. **Organisation of e-government development and implementation in the Flemish Region**



Note: Survey Question 4.14: How do you mainly develop and implement e-government projects?
Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

Box 4.5. **Outsourcing in the Flemish Region**

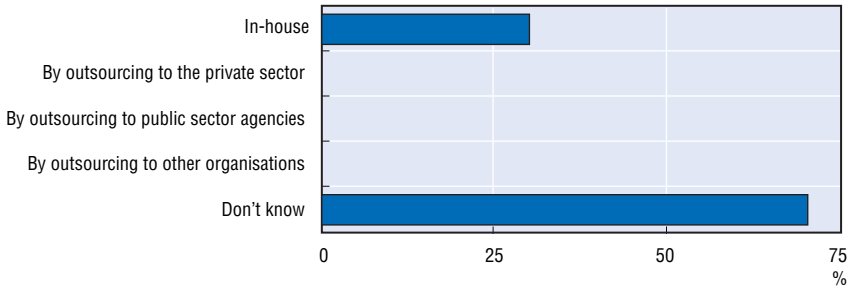
ICT service delivery in the Flemish Region has, since 2003, been outsourced to a consortium of two private ICT services companies covering infrastructure and services. This was arranged under a framework agreement which can be extended to include municipalities at a later stage. The services provided under the agreement include application development and maintenance, and network security, in addition to user support. The Flemish government offered the contract to a consortium rather than a single company, in order to maximise the contractors' ability to provide a wide range of solutions. Other governmental actors work with EDS-Telindus, such as e-IB and CORVE, in a monitoring and co-ordinating role.

Source: PRNewsWire (27 June 2003), "EDS-Telindus Consortium Enters Five-Year Contract to Provide ICT Services to the Flemish Government", *http://outputlinks.com/html/news/news-01155.shtml*, accessed 7 June 2007; CRIB (May 2004), "Livre Blanc: Les technologies de l'information en Région de Bruxelles-Capitale. Perspectives 2004-2009", Cahier du CIRB (*Centre d'Informatique pour la Région bruxelloise*).

In the Brussels-Capital Region, most outsourcing is to other public sector agencies (70%), in addition to some in-house e-government development and implementation (30%) (see Figure 4.3). This could indicate a habit of closer internal collaboration and co-operation among the institutions within the Brussels-Capital Region and more use of previously developed and implemented services and operational experiences.

Figure 4.3. **Organisation of e-government development and implementation in the Brussels-Capital Region**

(Brussels-Capital Region)



Note: Survey Question 4.14: How do you mainly develop and implement e-government projects?
Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

Like other OECD governments, the Belgian public sector has started to develop and implement e-government by using "arms-length" organisations or "organisations of public interest" focused on operational implementation of e-government, in a separate and more sustainable institutional setup outside

the government political structure. Both types of implementation organisations have advantages and disadvantages. The "arms-length" organisations lead and manage e-government projects and infrastructure development using extensive private sector involvement by outsourcing operations and services, according to OECD interviews. Examples of "arms-length" e-government organisations can be found in The Netherlands and Denmark (see Box 4.6).

Box 4.6. **International examples of arms-length e-government organisations**

The Netherlands

BKWI: The Netherlands Bureau of Information Exchange (Bureau Keteninformatisering Werk en Inkomen)

The Netherlands Bureau of Information Exchange within the Work and Income Sector (BKWI) serves as a central locus for data exchange within the social affairs and work sector. The agency provides an electronic back-office infrastructure for a network of more than 30 000 public sector employees located throughout the Netherlands. These individuals use the BKWI network to share data and information on Dutch citizens' employment benefits and welfare entitlements.

ICTU: The Dutch Organisation for ICT and Government

ICTU has been set up as a foundation fully managed by the Ministry of the Interior. It oversees and administers several programmes on behalf of and in co-operation with Dutch government organisations; the agency is managed by a Board including representatives from all levels of government.

GBO.Overheid – the Dutch Government-wide Shared Service Organisation for ICT

The GBO.Overheid is responsible for the tactical and operational management and maintenance of generic shared key services for e-government in the public sector.

Denmark

KMD is an ICT service provider owned by the Association of Danish Municipalities. It has since 1972 been the dominant e-government implementer in the public sector, but operates today both in the public and private market on full market conditions.

Source: OECD (2007), *OECD e-Government Studies: Netherlands*; OECD (2006), *OECD e-Government Studies: Denmark*, OECD Publishing, Paris.

Public-private partnerships for service delivery

In many OECD countries, public-private partnerships are used to develop and implement e-government services. They can:

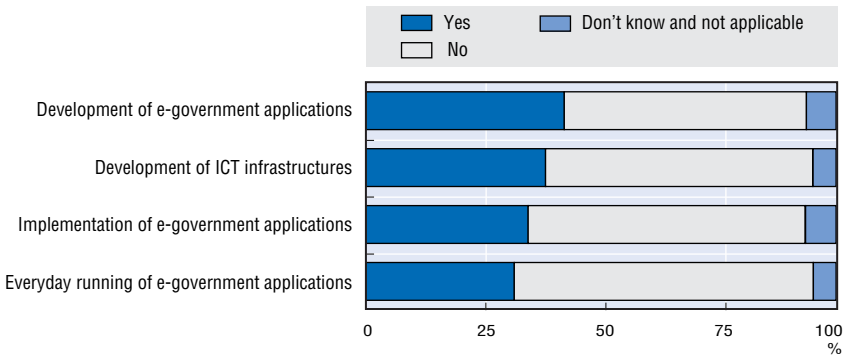
- Free up administrations' resources to focus on core policy and business issues.
- Provide governments with specialised skills and innovative products for timely service deliveries.
- Help reduce managerial risks by sharing development and technology concerns with private partners, and/or using proven solutions or components available on the market.

In return, private companies benefit from partnering with public administrations by building new expertise and market segments and, to some extent, sharing development risks for innovative and new products or services with the public sector partner.

Despite general recognition of partnerships with non-governmental actors, the OECD survey shows a rather low usage of public-private partnerships for developing and implementing e-government in Belgium (see Figure 4.4). This can be due to the high risks perceived in partnering with private companies; OECD interviewees stated that responsibilities are not always clearly defined and accountability structures are not effectively implemented, especially assigning project responsibilities. In any case, there seems to be a need for Belgian governments to more quickly respond to and reconsider partnerships that do not function and produce expected results.

Figure 4.4. **Use of public-private partnerships for e-government implementation**

All governments



Note: Survey Question 4.18 a): In what areas is your organisation currently partnering with the private sector (Public-Private Partnerships)?

Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

OECD interviews confirm that governments often develop e-government programmes for themselves, while outsourcing day-to-day operations to the private sector. This leaves the private sector with the responsibility for significant basic operational service provision.

Box 4.7 provides an example of a Belgian public-private partnership that has been implemented successfully: IRISNet.

Box 4.7. **Public-private partnerships in the Brussels-Capital Region – IRISNet**

The Brussels-Capital Region Informatics Centre, BRIC (CIRB, CIBG), has developed its own high-speed telecommunications network – IRISNet – in collaboration with a consortium consisting of Telindus and l'Association Momentanée France Telecom. The consolidation of telecommunications services for local authorities and public sector bodies in the region has enabled a savings of 30%. IRISNet provides Internet and Internet-related services to schools, public administrations, medical centres, and other entities in the region. It also provides the Internet connection for the URBIZONE wireless network, currently being piloted at one of the campuses of the Flemish and Francophone Free Universities of Brussels. The partnership is structured as follows: investments are made by the operator (the consortium of AMFT-Telindus), which is managed by the BRIC. BRIC also controls the fees, and verifies tariffs. It also monitors a pre-defined Service Level Agreement and the level of investments. The consortium provides its experience and knowledge to the network.

Source: CIRB (May 2004), "Livre Blanc: Les technologies de l'information en Région de Bruxelles-Capitale. Perspectives 2004-2009", Cahier du CIRB (*Centre d'Informatique pour la Région Bruxelloise*). pp 27-28.

Private sector partners also view the federal governance structure as too complex to identify opportunities, according to OECD interviews. It would therefore be beneficial to provide clearer insight into ongoing and planned projects in the public sector and to create single points of contact for private sector partners. The private sector is not necessarily perceived as a potential partner by the public sector, but rather as a potential competitor.

E-Procurement

The Belgian government is increasing its efforts to implement e-procurement – with the goal to conduct all procurement electronically by 2010, in line with the European Union i2010 programme. The most recent version of the Belgium e-procurement action plan was approved in October 2004; it contains a three-point mission: *a)* management of the federal e-procurement system; *b)* determination of a roadmap for moving forward with e-procurement in Belgium; and *c)* implementation of short-term steps to make e-procurement a reality. An e-tendering portal, *www.jepp.be*, was launched in November 2002 by the Federal Government for electronic publication of calls for tender.

Box 4.8. **International example of a public-private partnership**

Norway

ICT security infrastructures – also known as Public Key Infrastructures (PKI)* – have been established through public-private partnerships in some OECD countries such as Denmark, Norway, and Sweden. Norway in 2003 established project SEID (Co-operation on Electronic ID and Signature) in partnership between the central government and 15 private companies (among them all major banks, Telenor, Norwegian Post, Netcom mobile service provider, IBM Norway and Microsoft Norway). The project was jointly financed by the participants with most of the funding coming from the private sector. The aim was to develop joint standards securing interoperability of PKI services available at that time on the Norwegian market. The project was terminated at the end of 2005 after delivering three different interoperability standards.

* An ICT security infrastructure is a coherent and robust security infrastructure to support the usage of digital signatures. The more technical term is: *Public Key Infrastructure*, or *PKI*. PKIs consist of three elements: *a)* a trusted third party – a *Certificate Authority*, or *CA* – which guarantees the identity of a person or entity between the sender and the receiver of a message; *b)* digital signatures, or *certificates;* and *c)* two keys, one for signing messages, and one for encrypting messages.

Source: OECD (2005), *OECD e-Government Studies: Norway*, OECD Publishing, Paris.

The current e-procurement system – a common tool for use by all government agencies and some non-government buyers – is administered by the Federal E-Procurement Service of the Federal Ministry of Personnel and Organisation. This agency's specific tasks are: defining and designing processes, contracts, implementation, training; conducting an information campaign for buyers and sellers; working with users; and keeping track of progress on the e-procurement roadmap. Efforts are underway to increase collaboration with regions and communities, and internationally. The Federal E-Procurement Service aims to create an efficient and effective procurement process, achieve administrative simplification, and make public procurement more transparent and more satisfactory for both buyers and sellers.

Wide-scale adoption of electronic public procurement in Belgium can be a major catalyst for the introduction of modern information systems and connectivity for businesses, if backed up with appropriate business support programmes. Small and medium-sized enterprises in particular can benefit from such synergies by using guidelines, resources, procedures, recommendations, handbooks, etc. elaborated for public administrations.

This will have obvious spill-over benefits for business-to-business electronic supply chain management and procurement in general, as well as the ICT industry. Particular opportunities are likely to exist for local ICT

companies in customisation and enhancement, language versions, support, and training. The impact for businesses can be a significant improvement in access to information, and increased transparency and competitiveness among private actors. This strategy will also contribute to reducing administrative burden for businesses in particular.

The Walloon Region has developed its own e-tendering application – the IAM-PAM, initially developed by the Ministry of Equipment and Transports. The IAM application allows encoding of public procurement offers, which are then published on the online PAM (*Web wallon des Publication des Avis de Marché*) where organisations can consult the entire range of public procurement offers electronically. Businesses can define their own profiles and receive automatic alerts for offers corresponding to these profiles. These online publications have equal judicial status to offers being publicised in the Official Journal of the European Union and the *Bulletin des Adjudications*.

Box 4.9. **International example of e-procurement**

Denmark

From 1 February 2005, as a result of new legislation, the Danish public sector only accepts invoices from suppliers in electronic format. Several factors led to the successful implementation of this project: a strong business case; the use of legislation to ensure rapid take-up of the new arrangements by both public and private sector organisations; basing the format of invoices on Danish government interoperability standards; and providing a variety of ways for suppliers to comply with the new requirements, depending upon their size and ability to use electronic channels.

One particularly important factor in implementation of the project was use of existing private sector ICT infrastructures rather than development of new ones. The *e-Faktura* infrastructure is based on the existing Danish VANS network, which has been used to send EDIFACT messages (Electronic Data Interchange for Administration, Commerce and Transport – one of the first international information standards created for e-business transactions) between commercial partners since the early 1980s. VANS is a privately owned "digital postal service" comprising five private VANS providers, who receive electronic invoices and forward them to the correct public institution. For those businesses that cannot directly provide invoices via the VANS network, the government has established two private "scanning-in" bureaus that forward invoices on their behalf. The Agency for Governmental Management feels that this, coupled with the use of existing proven private infrastructures, has been a key success factor for this project.

Source: OECD (2006), *OECD e-Government Studies: Denmark*, OECD Publishing, Paris.

E-Government skills and competencies in the public sector

Key points

- *Belgium is struggling with a* ***growing e-government skills gap, an ageing work force and high retirement rates*** *that challenge the positioning of public administrations as employers in the future.*
- *With the introduction of* ***Egov*** *and similar* "arms-length" *organisations, governments have developed inventive ways of bypassing burdensome employment regulation. However, the new types of employment arrangements are being questioned by labour organisations.*

Like other OECD countries, Belgium is struggling with a growing e-government skills gap – related to an ageing work force and high retirement rates – that challenges the positioning of public administrations as future employers. All Belgian governments share these challenges and have implemented their own solutions along common action lines:

- Systematic competency management to ensure availability of ICT skills.
- Design of new, more flexible employment opportunities that circumvent traditional cumbersome hiring procedures and increase governments' attractiveness as employers for ICT-skilled labour.
- Cross-governmental human resources management to create joint recruitment reserves and increase information and data sharing on HR, as well as staff mobility.
- Thorough discussions to foster cultural change in the Belgian public administration towards increased efficiency and customer orientation.

These skills – particularly the abilities to manage complex ICT projects, and to motivate and support organisational change – are necessary to transform the Belgian public sector and to create user-focused e-services.

Availability of ICT skills and competencies

Belgian governments have implemented their own competency-oriented systems for recruitment and staff development. Staffing plans are no longer expressed in terms of positions, but include the skills and competencies each administration should ensure. Ideally, a combination of generic skills and competencies (*i.e.* management skills and competencies) and technical skills and competencies (*i.e.* Information Society or ICT skills and competencies) are determined for each e-government related position. The introduction of such systems includes the translation of competency profiles into precise job

profiles that clearly describe the strengths and weaknesses of employees and potential candidates, and outlines possibilities for acquiring lacking competences.

However, there are differences in the use of competency frameworks across Belgian governments. For example, the Federal Government and the Flemish Region have taken significant steps towards competency planning arrangements. The Federal Government has created a competence matrix with core values and five competency clusters.[8] In the Flemish Region, competency management has been a core activity of the human resource policy for some years, with the following four core values: user-oriented approach, reliability, co-operation, and permanent improvement. The Walloon Region and the French Community seem to put less emphasis on competency management. They introduced their competency planning frameworks in 2005, but still rely on job families and diploma-based recruiting, and maintain the particularities of traditional public sector recruitment schemes.

OECD research shows the benefits of using competency frameworks, which can help to identify e-government skills gaps and determine competencies in staff to be recruited, or to be developed by training current staff. Competency frameworks must be used as strategic management tools, complemented with performance-based systems, in Belgian governments. More precisely, competency-based HR systems should be complemented with performance-based management that, in turn, should lead to promotions, rewards, or sanctions. Moreover, competency frameworks need not be used only as a basis for development of dialogue between staff and managers, but also for systematic workforce planning to ensure the adequateness of public administration work in the short and long run.

In line with their shift towards competency planning, the Flemish Region Government and the Federal Government seem to be in a mature phase of reform implementation; in fact, the Flemish Region has developed a somewhat more consistent set of management reforms including the systematic use of a coherent cascade of performance targets and incentives, a certain degree of delegation of decision making, and a consistent organisational structure. Both governments have taken steps away from the traditional career-based system of employment, through some broad-banding and the opening of some posts to lateral entry. In the French Community and Brussels-Capital Region the reform approach has been more incremental, with no significant steps away from the traditional career-based system, but some emphasis on performance measurement at the organisation level and on competency management. The Walloon Region has taken the most cautious and incremental reform path with an explicit emphasis on retaining the distinctive traditions and attractiveness of public sector employment.[9]

The link between competency frameworks and performance management is crucial for e-government, where an increasing proportion of civil servants are hired on a contractual basis via arms-length organisations. There is a risk that such staff might not be properly managed (*i.e.* not have access to incentives, promotions or sanctions), as competency- and performance-based systems do not necessarily apply to contractual staff. According to OECD interviews, new types of employment are more weakly embedded in career management systems, and there is an urgent need to provide such contractual staff with a performance-based career path to locate talents and skills in appropriate incentive frameworks.

Flexible employment: market-type mechanisms

Competency and skills shortages for ICT professionals have been on the rise in the Belgian labour market, and the public sector has been forced to find new ways to hire ICT-skilled staff to fill posts, without being constrained by the less flexible conditions of normal civil servant hires.

- Two non-profit organizations – SMALS, which was created in 1939 for the social sector, and the *e-gov,*[10] which was created in July 2001 – provide ICT and e-government specialists to the administrations. The board of directors of *e-gov* are Federal Government institutions. *e-gov* provides ICT-related services including the possibility of "body-shopping" – or "secondments" – to organisations facing skills shortages. *E-gov* builds on the principle of full cost recovery, so the hiring institution has to pay for employee trainings and other costs. *E-gov* has led to a significant reduction in administrative costs: hiring procedures are less cumbersome, allowing governments to focus on their core businesses. This approach has proven quite successful, according to OECD interviews; the "secondments" have especially fulfilled a demand which otherwise could have been difficult to meet within the framework of public sector staff regulations and salary levels.
- The Flemish Region is currently examining the possibility of adopting a human resource framework similar to the non-profit *e-gov* mentioned above. The French Community relies on ETNIC to provide ICT-skilled human resources. Brussels Capital-Region has already adopted a concept (IRISteam) that is similar to *e-gov* (see Box 4.10).

Box 4.10. **Attracting e-government skills and competencies in the Brussels-Capital Region**

In the CIRB's mission statement* as of July 20th, 2006, the Brussels Capital-Region defined the necessity of building on an "experienced, dynamic and enthusiastic" work force within IRISteam. IRISteam is an arms-length organisation of CIRB that was recently created to deal with recruitment of highly ICT-skilled labour for the public administration of Brussels Capital-Region, in response to:

High labour turnover that generates significant brain drain and forces the administration to hire costly external resources. At the CIRB, training programmes have been based on the principle of technological neutrality, which causes the administration to lose the added value of its HR investments.

Difficulties in attracting experienced, highly qualified employees given the attractive working conditions at private companies.

Legal difficulties due to the sharing of IRISteam personnel among public administrations and regional bodies.

OECD background research also confirmed the increasing difficulties of Belgian administrations in achieving the right equilibrium between experienced employees and young employees who can be readily trained in quickly advancing technological fields. The absence of extra-legal advantages makes administrations unattractive employers. Current premiums are not linked to concrete achievements (such as deadlines, budgetary results, client satisfaction). IRISteam has been created to face these challenges and importantly, to create a dynamic organisational culture for the range of its employees.

Since the creation of IRISteam in 2007, the (smooth) transfer of personnel to IRISteam has become a key issue. Each employee currently employed by the CIRB can apply for a transfer to IRISteam. This implies an obligatory evaluation of competences, performed by an external consulting firm. The evaluation results trigger a multi-layer feedback process that includes a schematic representation of the candidate's results, an evaluation of the candidate's potential, a summary of the weaknesses and strengths of the candidate, and suggestions concerning future competences evaluations.

* As published in BRIC's yearly report 2006.

With the introduction of *e-gov* and similar "arms-length" organisations, governments have developed inventive ways of bypassing burdensome employment regulations. However, the new employment arrangements are being questioned by labour organisations. Belgium appears to be a special case among OECD countries with regard to the large and increasing extent to which

governments use contractual staff. Belgium is further distinct, in that contractual staff are employed under rules that are clearly different from general government employment rules.

Belgian governments are increasingly realising the necessity to co-operate on human resource management across governments. In human resource management, only a patchwork of small-scale inter-governmental agreements exists for governments that volunteer to co-operate in particular areas. For example, during the inter-ministerial conference in September 2006, certain agreements on cross-governmental public service modernisation issues were reached:[11]

- Informal agreement to create joint recruitment reserves.
- Informal agreement to encourage staff mobility across governments.
- Increased sharing of information across governments on administrative simplification.
- Creation of a working group to look at concrete measures to enhance acquired competencies.

Despite this agreement, there does not seem to be forum for regular discussions of public management matters. Such discussions could to take place between senior civil servants of the different governments to determine concrete actions.

Box 4.11. **International examples of resource sharing**

Germany

In a federal system like Germany there is an additional government level, which can make the development of interoperable services challenging; different agencies have wide-ranging independence across a large number of public sector functions. The German Länder governments are independent – both of each other and the Federal Government – in their areas of competence. However, the country is taking an interesting approach to fostering cross-governmental collaboration, which may provide a real boost in the future. The country's "*Einige für Alle*" (Some for All) strategy is being set up as a model of co-operation among different levels of government, as well as potentially for co-operation on a pan-European Union level. The Federal Government has selected a number of services to be developed across the country by lead units (federal ministries, Länder governments or municipalities), which will have ownership over the development of particular services and will roll these services out to the other levels of government as they are developed. This model is designed to enable the entire country to capitalise on the fruits of many focused efforts.

Box 4.11. **International examples of resource sharing** *(cont.)*

Germany

The Deutschland-Online initiative has developed a decentralised vision of a fully integrated e-government landscape, to be created gradually and finalised by 2010 through the development of transferable best-of-breed solutions by lead units. The approach stresses the importance of synergies for e-government in a highly federated state and is an interesting bottom-up approach to developing cross-government service interactions.

Source: www.deutschland-online.de, Accenture (2005), "Leadership in Customer Service: New Expectations, New Experiences". The Government Executive Series, and Booz, Allen, Hamilton (2005), "Beyond e-Government: the world's most successful technology-enabled transformations", commissioned by the UK Presidency of the European Council and published in November 2005.

The Netherlands

The Netherlands chose to create centres of competence in the different e-government implementation organisations. The Dutch E-Government Implementation Organisation (ICTU), for example, has adopted a deliberate strategy of cross-fertilisation between the public sector and the private sector by hiring civil servants from the public sector (primarily ministries) as project staff for a specific period in order to give them the opportunity to learn project management through hands-on e-government implementation. In this way, civil servants will bring new competencies back to their original workplaces and be part of a long-term change in administrative and operational approaches, traditions, and cultures to a more project-oriented way of organising and performing tasks.

Source: OECD(2007), *OECD E-Government Studies: Netherlands*, OECD Publishing, Paris.

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- The inter-governmental e-government co-operation agreement could become a focus point to align management approaches and introduce monitoring and evaluation concepts to be used in implementing the commonly agreed action plans.
- Belgium could consider to use an institutional or "virtual organisational" framework of an "arms-length" public body as an operational e-government development, implementation, and shared services centre. Such a physical or virtual body – jointly created, financed, and mandated by Belgian governments –could focus on providing generic e-government services and components to the public sector as a whole. This strategy has been successful in The Netherlands.[12]

- Achieving the aim of building the necessary capacity to deliver and implement e-government in the public sector will require careful review of the project management culture with the systematic usage of business case analyses, monitoring, project evaluations, and prioritisation of choices, as well as the development of skills and competencies.
- Some Belgian governments have implemented their own new competency-oriented systems for recruitment and staff development. They are increasingly realising the necessity to co-operate on human resource management across governments. These competency frameworks should serve as a basis for the development of a dialogue between staff and managers resultingin systematic workforce planning to ensure adequate public administration skills in the short and long run.
- Belgian governments could improve the usage of skills and competencies in the private and voluntary sectors and optimise the buying power of the public sector through a jointly agreed upon common policy on outsourcing and the usage of public-private partnerships. A coherent framework for partnerships with the private and voluntary sectors could improve the overall capacity of the public sector as a whole.

Notes

1. "… A "balanced scorecard" is a set of measures that gives top managers a fast but comprehensive view of the business. The balanced scorecard includes financial measures that tell the results of actions already taken. And it complements the financial measures with operational measures on customer satisfaction, internal processes, and the organization's innovation and improvement activities – operational measures that are the drivers of future financial performance." Citation from the article "The Balanced Scorecard – Measures that Drive Performance" by Robert S. Kaplan and David P. Norton, Harvard Business Review, January-February 1992.
2. The Common Assessment Framework (CAF) is a tool to assist public sector organisations across Europe to use quality management techniques to improve performance. See also: "Improving an organisation through self-assessment. The common assessment Framework (CAF)", 2nd Quality Conference for the Public Administrations in the EU, October 2002.
3. A management plan should include a precise description of managerial missions and obligations, strategic and operational objectives, as well as the allocated resources to accomplish these objectives. An operational plan at a minimum requires a three-year plan of concrete actions to fulfil the organisation's missions, strategic and operational objectives, and the annual budgetary breakdown of envisioned actions. For further information: *Copernicus décembre 2001, Méthodologie pour la mise en place d'un plan de management et d'un plan opérationnel.*
4. The Balanced Scorecard of the Balanced Scorecard Institute covers the following four dimensions: the learning and growth perspective, the business process perspective, the customer perspective, and the financial perspective.

5. OECD (2007), Working Paper "E-Government as a Tool for Transformation", [GOV/PGC(2007)6], background paper for a meeting at the OECD in Paris, 28 March 2007, see *www.olis.oecd.org/olis/2007doc.nsf/4582bc8915d31134c12573a70050a430/c5bfb886ebcafe06c12572ac0057513c/$FILE/JT03224646.PDF*.
6. Lieven Raes (2007), *Infosessie Vlaamse Integratie Projecten VIP 2007, www3.vlaanderen.be/e-government/documenten/2007_VIP-oproep.ppt,* accessed28 February 2008.
7. Press release of 6 June 2005 from Mr. Geer Bourgeois, Flemish Minister of Administrative Affairs, Foreign Policy, Media, and Tourism, *www.vlaanderen.be/servlet/Satellite/c=MIN_Publicatie&cid=1118721610113&lang=NL&lyt=1141721307967&p=1103027410260&pagename=ministersites%252FMIN_Publicatie%252FPublicatiePageMIN&title=minister+Geert+Bourgeois,* accessed28 February 2008.
8. Their core values are objectivity and respect, integrity, room for self-development, qualitative work environment. The five competency clusters are: information management, task management, management, interpersonal relationships, and personal qualities.
9. "OECD Review of Government Human Resource Management in Belgium", [GOV/PGC/PEM(2007)1/FINAL], OECD, Paris, 13 July 2007.
10. SMALS – *www.smals.be/site_fr/content/Enterprise/egov.html,* accessed 28 February 2008.
11. OECD (2007), *OECD Review of Government Human Resource Management in Belgium*, OECD Publishing, Paris, 13 July.
12. OECD (2007), *OECD e-Government Studies. Netherlands*, OECD Publishing, Paris.

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Chapter 5

Collaboration Frameworks

Belgian governments have worked for a number of years on achieving ***interconnectivity and interoperability*** *within their own jurisdictions. This line of work has become the foundation for closer co-ordination among the governments in efforts to achieve fully public-sector-wide interconnected and interoperable e-government services.*

Despite differences in the stage of e-government development across the governments and the slow pace of achieving full consensus and joint agreements, the Belgian ***interoperability framework BELGIF*** *is seen as a concrete and tangible result of successful co-operation, with practical impacts for improved coherency of e-government solutions.*

Belgian governments are pursuing the same ***data sharing*** *goal – "collect once, use many times". However, institutional or collaborative frameworks have not been established to enable an effective whole-of-public-sector* ***standardisation of data****; common public sector definitions of data entities, data exchange formats and interfaces have not been agreed. This might hinder Belgian governments from delivering seamless services with full back-office integration, as has been achieved in the social security sector and the Crossroads Bank for Social Security.*

Research shows that ***Belgian ICT security policy*** *is challenging, as it is spread over a number of authorities at the federal level with limited apparent co-operation and no focal point for national policy development and implementation.*

The different governments should continue promoting existing ***multi-channel, or "the right channel", strategies*** *based on thorough user research.*

This chapter examines collaboration on e-government through proposed or established joint public sector collaboration frameworks such as common business processes, standardisation of information and data, common enterprise architecture to ensure interoperability and connectivity, and multi-channel strategies.

E-Government enables major transformational change in public sector organisations. Where the transformation involves a number of independent and loosely joined public bodies, successful strategies must go beyond aligning technology standards or improving the networking of organisations. Collaboration among governments and their public sector institutions is both a key requirement and a significant challenge for the efficient and effective exploitation of e-government. Experiences in other OECD countries have shown that without collaboration or collaborative frameworks, some of the important results that governments are seeking through e-government cannot be achieved.

Since the first inter-governmental co-operation agreement in 2001, Belgium increased collaboration and co-operation on back-office integration. The focus on back-office integration shows a steadily growing recognition by Belgian governments of the necessity to enable the public sector to deliver seamless and user-focused e-government services to citizens and businesses, going outside formal governance structure if necessary. The results-focused approach to e-government implementation has provided Belgium with an opportunity to replace former highly politicised and rigid formal co-operation practices with a more pragmatic approach – also shown by the use of "grey zones" (see Chapter 3) as the context for informal discussions and negotiations on practical collaboration and co-operation.

The inter-governmental e-government co-operation agreement of 2005 covers joint technical approaches within the following areas:

- Unique identification keys.
- Authentic data sources (*e.g.* registers).
- Privacy and data protection.
- Interoperability.
- The navigation structure and the provision of integrated services through portals.

OECD research and interviews show that each Belgian government has worked hard on developing proper back-office integration. However, these efforts were mostly limited to silos within the government itself, and only limited attention has been paid to identifying and organising basic back-office infrastructure elements that could be standardised or shared among administrations across the whole of the public sector. This lack of common whole-of-public-sector view and approach is the perspective of the analysis of this chapter.

Common business processes

Key points

- *Belgian governments do* ***not share business processes across the public sector****, according to OECD interviews. Even the sharing of business processes* within *governments is limited.*
- *There are* ***no or only limited incentives for public sector institutions to work together*** *on exploiting the benefits of e-government. Public sector institutions are still "stove-piped", preferring to work within their own organisational boundaries, a fundamental challenge to achieving a common whole-of-public-sector perception and approach among civil servants.*

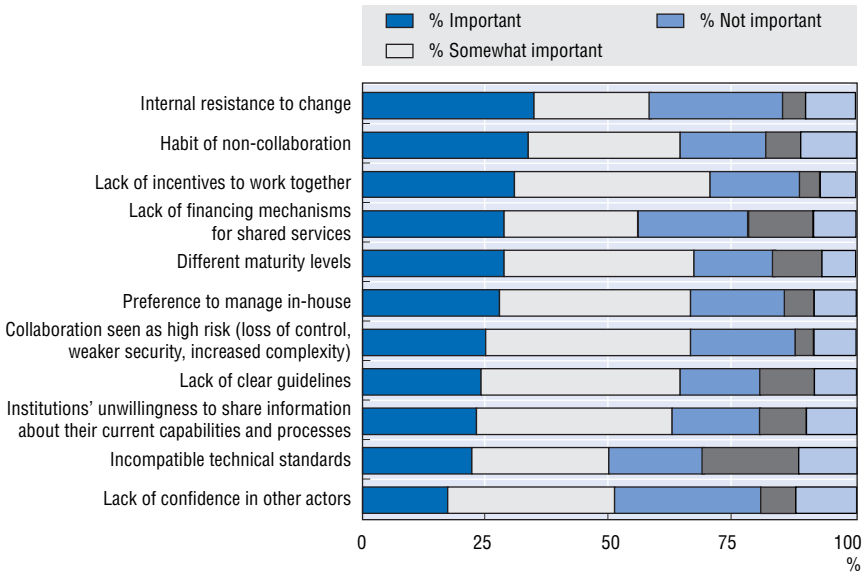
Collaboration frameworks for common business processes are a prerequisite for reaping the benefits of e-government services. They reduce duplication of work processes, enhance the reuse of e-government services and applications, improve interoperability of e-government solutions, strengthen scalability and capacity of service delivery, and promote consistent rules and administrative simplification.[1] By sharing business processes where possible the Belgian public sector could improve efficiency and effectiveness in service delivery and, at the same time, ensure consistency and transparency.

Belgian governments do not share business processes across the public sector, according to OECD interviews. Even the sharing of business processes *within* governments is limited. This is also true in other countries (such as Denmark, Hungary, and The Netherlands) previously peer reviewed by the OECD.[2] The OECD survey supports this impression as it shows a number of significant challenges preventing public institutions from working together (see Figure 5.1): 71% of respondents identify lack of incentives as an important or somewhat important challenge for working together; 68% state that the difference in maturity level of e-government development is a challenge; 67% state that they prefer to manage

e-government development and implementation in-house, and that collaboration in general is seen as high risk due to the loss of control, weaker security, or increased complexity. Many respondents (65%) also state that the lack of clear guidelines and the habit of non-collaboration are preventing them from working together. The least important challenge identified by participants is incompatible technical standards, cited by 50% of the respondents.

Figure 5.1. **Challenges to collaboration on e-government projects and end-to-end solutions**

All governments



Note: Survey Question 5.6: How important are the following challenges in preventing working together with other organisations to deliver e-government solutions?

Source: OECD Survey of E-Government in Belgium, 2007 (see Annex A on methodology).

The OECD survey responses highlight a need for a jointly accepted coherent effort to create the necessary and sufficient incentives for Belgian governments to work together on e-government implementation. Public sector institutions are still "stove-piped", preferring to work within their own organisational boundaries, a fundamental challenge to achieving a common whole-of-public-sector perception and approach among civil servants. This challenge seems to be recurrent in OECD countries with mature e-government programmes, but it seems to be a more significant feature of the Belgian e-government landscape due to its federal state structure.

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The differences in development stages of e-government among Belgian governments is even more evident in analysing a breakdown of the OECD survey results on challenges to collaboration:

- **Federal Government** respondents state that the greatest challenges to collaboration are: institutions' unwillingness to share information about their current capabilities and processes, and different maturity levels (both 65%), and the preference to manage e-government implementation in-house (62%). These answers confirm the need to change administrative culture towards a more whole-of-government perception and approach – and eventually towards a whole-of-public sector perception and approach.
- **Flemish Region** respondents state that the greatest challenges to collaboration are: collaboration is seen as high risk (83%), the lack of incentives to work together (73%), and the lack of financing mechanisms for shared services (70%). These answers, which show a mindset of "independence" and "self-determination", confirm the transformation of Flemish administration through the public administration reforms of the last 10 years (see Chapters 1 and and 3) with emphasis on decentralisation of work and shifting of responsibilities towards independent agencies.
- **Walloon Region** respondents state that the largest challenges to collaboration are: lack of clear guidelines and the lack of incentives to work together (both 63%), the preference to manage e-government implementation in-house, and the habit of non-collaboration (both 56%). These answers also confirm the "stove-piped" work culture of public institutions, which prefer to act alone rather than collaborate on e-government.
- **Brussels-Capital Region** respondents state that the greatest challenges to collaboration are: lack of clear guidelines and the lack of incentives to work together, lack of confidence in other actors, and lack of incentives to work together (all 100%). These answers show significant lack of trust between public sector actors compared to other Belgian governments, and highlight the "stove-piped" work culture in public institutions, which prefer to act alone rather than collaborate on e-government.
- **French Community** respondents state that the greatest challenges to collaboration are: the preference to manage e-government development in-house, lack of clear guidelines and lack of incentives to work together (all 100%). These answers confirm the strong "stove-piped" work culture in public institutions, which prefer to act alone rather than collaborate on e-government.
- **German-speaking Community** respondents state that the greatest challenges to collaboration are: collaboration is seen as high risk, different

maturity levels of e-government development, and the lack of financing mechanisms for shared services (all 100%). These answers show a lack of trust between public sector actors, and a general lack of financial tools to support collaboration. There seems to be a will to co-operate and collaborate among public institutions, shown by the low number of public institutions identifying the habit of non-collaboration (33%) as a challenge.

The general impression is that collaboration frameworks for common business processes do not exist for the public sector as a whole (there is no systematic or institutionalised analysis and exploitation of business processes) or they are only vaguely defined (there is a diversity of approaches, mainly due to each government's administrative history and chosen development paths). The only exception is the electronic ID card project which has provided – with the agreement of all Belgian governments – a true common public sector e-government building block and a set of procedures which supports the authentication of individuals (see Box 5.1).

Box 5.1. **The Belgium electronic ID card (eID)**

The Belgian electronic ID card programme was launched in October 2002; from the beginning, the Belgian approach was to roll out the eID card before developing concrete applications, driving demand for e-services. More than 5 million eID cards were issued by July 2007,[1] more than 6.3 by close of editing for this report.[2] All citizens over 12 years old (more than 8 million inhabitants) are expected to have eID cards by 2009.

The eID's functions are threefold:

- *Efficient consultation and transfer of identity details:* inserting the card in the card reader provides faster and easier access to information, which is guaranteed to be correct.
- *Authentication:* the eID is a universal, secure way for users to prove their identity for all applications and/or websites. Authentication via the eID is PIN-code protected to ensure high security standards, even when the card is lost.
- *Electronic signature:* the eID enables the cardholder to attach a legally valid signature to electronic documents. Like written signatures, electronic signatures give documents authenticity (*i.e.* it is actually the cardholder who signed it), integrity (*i.e.* nothing has been changed in the document since the cardholder signed it) and irrefutability (*i.e.* the card holder cannot deny that he or she was the person who signed the document).

1. According to "eID Newsletter", No. 5, July 2007, *http://eid.belgium.be/fr_BE/common/imported_content_eid/pdf/Newsletter5_FR.pdf*, accessed 28 February 2008.
2. According to OECD fact-checking with Belgian senior officials, 28 February 2008.

Box 5.1. **The Belgium electronic ID card (eID)** *(cont.)*

Importantly, the Belgian eID card is just a key to access (controlled access) the information stored in the back-office: no data (except basic identity data) are stored in the eID. This means for example, that the eID will be the access key to information on driving licences or information on the social security status stored in back-office. This concept is somewhat different to other eID or smartcards initiatives.

Future directions for the eID card the full distribution of eID cards to all 8 million Belgium citizens over the age of 12. The eID card solution is one of the largest smart-card-based identity card programmes in Europe and has brought Belgium to the front in Europe with regard to a common public sector electronic ID card solution. *(See Case Study: Electronic Identity Card for further information.)*

Box 5.2. **International examples of e-government building blocks**

Australia

Australia's e-government strategy has emphasised the importance of using technology to improve structures and processes to meet users' needs. The vision is to achieve connected service delivery allowing government to present a consistent and unified face to citizens and businesses regardless of whether interactions are in person, over the phone, or using the Internet or any other form of technology. The elements or "building blocks" of connected service delivery that enable the Australian Government to deliver the vision of a connected government address four cross-cutting areas: access and distribution; interoperability; authentication and ID management; personalised service options. Common frameworks and tools will include:

- The Australian Government Service Delivery Principles: a set of standards for the design, development, deployment and evaluation of government service delivery.
- Distribution and access models: a conceptual overview of models for planning and delivering government services utilising community and business delivery mechanisms where appropriate.
- The Service Delivery Capability Model: a guide for mapping an agency's capability to deliver multi-agency, multi-channel and customer-centric services.

Box 5.2. **International examples of e-government building blocks** *(cont.)*

Australia

- The Australian Government Interoperability Framework: consisting of chapters on business process, information and technical interoperability, and highlighting the standards and protocols for greater connectivity across these domains.
- Managing Multiple Channels: a guide for the strategic assessment and development of service delivery channels (Web, shop-front, telephone, etc.)

It is anticipated that the Australian Government will develop an architectural model of how its service delivery vision will be implemented using this collection of frameworks and standards – a so-called cross-agency service oriented architecture (SOA).* Common SOA elements include: identity management, simplified and single sign-on, user account repositories, consent models and systems, authoritative source models and interfaces, Web services standards and interfaces, techniques for exposing all business processes as Web services, "translation" facilities to enable data from one agency to be used by another, security standards and modules, and a repository of reusable designs and systems.

* A service oriented architecture (SOA) is a framework consisting of principles and standards for designing and developing computer systems so that each service provided by the system exists as a discrete module that can also be used by other systems. Such an architecture supports standard ways of processing, re-use of systems, interoperability, single sources of authoritative information and improved return on investment.

Source: Australian Government, Department of Finance and Administration, Australian Government Information Management Office (2006), *Responsive Government. A New Service Agenda. 2006 e-Government Strategy*, March 2006. Australian Government, Department of Finance and Administration, Australian Government Information Management Office (2006), *Delivering Australian Government Services. Access and Distribution Strategy*, April 2006.

The Netherlands

The Dutch government has prioritised development of a number of basic e-facilities or "building blocks" to support e-government development in the Netherlands. An e-government building block is a generic functional component or service which several or all public institutions can use in their development of e-government services. Examples are key registers, e-authentication, etc. The building blocks fall into five categories: e-access (*e.g.* Personal Internet Page), e-authentication (DigiD – digital signature), numbers (Business Service Number and Citizen Service Number), key registers (*e.g.* Persons, Businesses, Buildings and Addresses, Land Registry and Topography, Vehicles, etc.), and management (*e.g.* Government Shared Services for ICT).

Source: OECD (2007), *OECD e-Government Studies; Netherlands*, OECD, Paris, France.

Data standards

Key point

- *Belgian governments are pursuing the same data sharing goal – "collect once, use many times". However, institutional or collaborative frameworks have not been established to enable an effective whole-of-public-sector standardisation of data; common public sector definitions of data entities, data exchange formats and interfaces have not been agreed. This might hinder Belgian governments from delivering* ***seamless services with full back-office integration****, as has been achieved in the social security sector and the functioning of the Crossroads Bank for Social Security.*

Experiences in OECD countries show that whole-of-public-sector agreement on information and data standards is an important and necessary step towards achieving the basic conditions for the development and implementation of integrated e-government services. Belgium has not established a co-operation framework for public sector data standardisation. According to OECD interviews, the lack of a legal basis for information and data exchange across Belgian governments is a major challenge for e-government development. Limited bilateral attempts to legally address the issue of information and data exchange have taken place (*e.g.* between the Federal Government and the Flemish Region). Likewise, closer co-operation between the Walloon Region and the French Community is underway.

Some examples of successful data standardisation activities in Belgium include: the sector standardisation of information and data exchange in the social security sector, and the application *Digiflow*.

- The social security sector's data standardisation has been a fundamental prerequisite for achieving an integrated social security back office enabling the sector to deliver fully seamless services (see Case Study 1).
- *Digiflow* is an application that has been developed at the federal level to provide access to federal "authentic sources". It is also used to facilitate document retrieval. The role of *Digiflow* is to integrate data management of the databases offered at the federal level. It provides back-office support to the Belgian Federal Government's portal *www.belgium.be*, and is accessible to civil servants through that portal.[3]

Both examples illustrate that co-operation on information and data standardisation (and thus information and data exchange) is feasible and successful when it involves well-defined applications subject to the same legislation. This is the case of the back-office integration within the social security sector and with *Digiflow,* which has been accepted as a shared

application despite its original purpose of solving deficiencies in accessing information and data across organisational boundaries within the Federal Government.

Data standardisation requires a number of factors – organisation, responsibilities, and cross-governmental commitments – in addition to technical considerations; Belgian governments' work in this area is fragmented and not co-ordinated, according to OECD interviews. On a whole-of-public-sector level, no organisational framework is has been politically and administratively agreed. Even though the inter-governmental co-operation agreement from 2005 covers work on standardisation issues such as BELGIF, the Belgian interoperability framework,[4] and "authentic sources" (see Box 5.3), the co-operation agreement has only been defined within the narrow and

Box 5.3. **Organisation of registers in Belgium**

Ensuring interconnectivity and interoperability of e-government services depends on the availability of reliable data sources, such as valid information and data in registers and databases. Managing different types of data sources is complex due to the different competences given to each of the Belgian governments. Co-operation ensuring the accuracy, completeness, and authenticity of information and data collected by public authorities is therefore imperative to the goal of providing seamless services to citizens and businesses. The figure shows organisation and "classification" of registers and databases, highlighting the difference between *(base) registers*, *authentic sources*, and non-authentic sources of information and data – also called general *data sources*.

Base registers are developed and maintained primarily at the federal level. They do not necessarily contain authentic data, but can also contain references to where this data is stored. The two base registers in use are:

- The register of the Crossroads Bank for Enterprises.
- The register of the Crossroads Bank for Social Security.

The information in these registers has been established as part of the administration of a federal law or a decree. Use of the information therein by other government entities is not required.

Authentic data sources provide accurate and timely data. One authentic data source maintained at the federal level is the *Rijksregister* (National Register). General non-authentic data sources are generated independently by individual public institutions. These sources may well contain out-of-date data, which is therefore not considered reliable for re-use. Examples of authentic sources are: land register information and addresses.

Source: www.belgium.be/eportal/application?pageid=contentPage&docId=36700, accessed 28 February 2008.

limited scope of formal competences and has not taken into consideration the specific needs of a whole-of-public-sector approach to data standardisation.

The agreement, in principle, to establish "authentic sources" is a vital first step for e-government development in Belgium; it will establish the conditions for the use and re-use of public sector information and data.[5] It is also a fundamental prerequisite to deliver on the common goal of "collect once – use many times", and to reduce administrative burdens. The co-ordinated re-use of information and data in the Belgian public sector depends on establishing the right and balanced conditions – creating an accepted equilibrium between public sector needs for information, and data exchange and necessary and sufficient considerations towards privacy protection. Additionally, the formal division of competences among the different Belgian governments with varying legal frameworks (see Chapter 2) creates an extra level of complexity to the issue of information and data sharing.

Box 5.4. **International examples of standardisation**

Australia

The Australian employment services network provides comprehensive networking and integration of different agencies and actors providing a range of services. These include:

- Job placement, work and related benefits.
- Information about working arrangements and conditions for employees, students and minority groups.
- Information about assistance schemes.
- Information about employment legislation.
- Integration with the government's welfare agencies for referrals to and from the welfare system.
- Services used by the government to monitor the success of economic participation programmes intended to increase employment in targeted groups.

The employment services network has been designed to provide higher-quality and more efficient services to assist job seekers, employers and the government across the whole range of related services by increasing flexibility, choice and competition. The national network covers about 200 private, community and government organisations contracted by the Australian government to deliver services to help the unemployed find jobs. Each of these agencies – together with job seekers themselves – has its own interface portal to the networked system with different access rights. The network is operated largely by the private sector and not-for-profit

Box 5.4. **International examples of standardisation** *(cont.)*

Australia

organisations, but in a fully integrated manner with the relevant government agencies. Network members are rewarded by results; a fully integrated ICT platform allows monitoring of job placements that drive members' remuneration.

The network pursues its objectives through a number of interactive and integrated services. For example, in the case of job seekers and employers, services are delivered via Internet and touch-screen kiosks in Job Network offices (as well as in person), this allows job seekers to receive career advice, build a résumé and search for jobs; and enables employers to advertise jobs and search résumés. Registered job seekers can be advised automatically of possible jobs by email, postings on the job seeker's personal page or by calling a call centre. This part of the service has 109 network members, over 70 000 jobs displayed, about half a million page accesses per day, and 700 000 résumés listed.

Source: http://workplace.gov.au/workplace/jobnetwork and Booz, Allen, Hamilton (2005), "Beyond e-Government: the world's most successful technology-enabled transformations", commissioned by the UK Presidency of the European Council and published in November 2005.

The Netherlands

The Standardisation Council, supported by a Standardisation Forum with stakeholder representation, was formally set up in October 2005 by the Ministry of Economic Affairs and the Ministry of the Interior and Kingdom Relations to enhance central co-ordination of standards used to implement e-government in the public sector. The Standardisation Council and Standardisation Forum began work in April 2006:* the emphasis of its work is on ensuring interoperability of information systems by getting agreements on semantic (*e.g.* uniformity of usage of language) and organisational standards (*e.g.* harmonisation of information requests and procedures within organisations).

* *Staatscourant* (The Dutch Official Journal), No. 70, 7 April 2007.

Source: OECD (2007), *OECD e-Government Studies. Netherlands*, OECD Publishing, Paris, France.

Enterprise architecture

Key point

- *The Belgian Interoperability Framework,* ***BELGIF****, is explicitly mentioned in the Inter-governmental co-operation agreement for e-government, which shows recognition of the need to align at least the technical standards behind e-government development in order to achieve strong and coherent back-office integration across all governments.*

Developing and implementing a common public sector enterprise architecture[6] – a corporate organisational and technical e-government platform for the public sector – could trigger government transformation, creating an agile and responsive administration for the future. It could enable the public sector to steer e-government implementation by developing elements that can fit into an overall logical, organisational and technical structure supporting integrity and interoperability of e-services, and will increase take-up and deliver on promises of both increased efficiency and effectiveness. An increasing number of countries are developing or have developed national public sector enterprise architecture programmes.[7] For example, Denmark and The Netherlands are implementing enterprise architectures for the public sector in order to align present and future e-government services to a common framework that can better support full interoperability and technical compatibility.[8]

Belgian governments have chosen to focus on co-operating on back-office integration and have agreed on technical interoperability standards: the Belgian Interoperability Framework, BELGIF, contains a set of technical recommendations which each of the governments has committed to follow as part of the 2005 inter-governmental co-operation agreement. BELGIF constitutes the technical and infrastructure-oriented part of a whole-of-public-sector enterprise architecture; the organisational and systemic parts of an enterprise architecture remain undefined[9] (see Box 5.5).

Despite Belgian government's aim to ensure integrated e-government services, and despite the interoperability framework, the landscape remains fragmented. The very limited number of standards recommended by BELGIF (see Box 5.6) could indicate a challenge for Belgian e-government implementers; decision processes are slow and questions remain about whether BELGIF will become a multi-use platform and create necessary and sufficient guidelines in time for cross-public sector interoperability.

Examples of other Belgian government interoperability activities are:

- The **Federal Government** has since 2003 worked broadly on different aspects of an enterprise architecture, leading to a number of white papers on the use of open standards and a coherent e-government architecture for the Federal Government.[10] The Federal Government (Fedict) has issued a directive and recommendations to federal administrative bodies on the use of open standards and/or open specifications.[11]
- The **Flemish Region** has developed the MAGDA platform to create a common technical foundation for the exchange of authentic data and the integration of e-government services across the Flemish public sector.[12]
- The **Walloon Region** has since 2003 worked on an interoperability framework called CINAPS (*Cadre d'Interopérabilité: NormAlisation, Politiques et*

Structuration) defining basic standards as a foundation for e-government development in the Region. Since 2005 it has been integrated with BELGIF.[13]

Belgium does not have a common whole-of-public-sector enterprise architecture and does not seem to have plans to create one. This view was

Box 5.5. **The Belgian Interoperability Framework – BELGIF**

The Belgian Government Interoperability Framework, BELGIF, was established in 2005 as part of the Inter-governmental co-ordination agreement. It provides the Belgian public sector's e-government actors with advice on technical standards within the following areas:

- Data presentation and exchange.
- Data integration and middleware.[1]
- Interconnection services.
- Security services.

BELGIF provides a framework and a *qualification process* for recognising and elevating standards to different levels of use[2] by the co-operating parties of the Interoperability Framework. Standards recognised by BELGIF must comply with the European Interoperability Framework[3] and be supported or recognised by one of the international standardisation organisations. Standards recommended by BELGIF must go through a validation process including an impact study and approval by the technical working group set up by the inter-governmental co-ordination agreement. Standards can become mandatory within the framework of BELGIF.

Even though the BELGIF framework has existed since 2005, and a significant number of technical standards have been proposed (at least 75), only four have been recommended by BELGIF[4] (as of 8 August 2007). A study[5] on the accessibility of official Belgian .be sites has shown that only 2.7% of the assessed municipal websites followed the BELGIF framework. The extension of BELGIF to local governments therefore clearly remains a challenge.

1. "Middleware" is a set software which exist between the operating system of a computer and the actual applications. Their tasks are to ensure that software from a variety of sources will work together correctly.
2. The BELGIF framework describes a qualification procedure for standards which can be in three levels of strength of recommendation: "proposed" (the weakest level of recommendation stating that a standard is recognised within the framework); "recommended" (stating that a standard is recommended to be used); and "mandatory" (stating that a standard is mandatory to use).
3. European Communities (2004), "European Interoperability Framework for Pan-European eGovernment Services", version 1.0, Luxembourg, 2004. See also *http://ec.europa.eu/idabc/en/document/3473/5887*, accessed 28 February 2008.
4. See also: Belgian Government Interoperability Framework at *www.belgif.be*, accessed 28 February 2008.
5. This study was undertaken by an independent institutions and published on the belgif.be site, *www.belgif.be/index.php/Web_accessibility_cluster*, accessed 28 February 2008.

Source: www.belgif.be, accessed28 February 2008.

confirmed by OECD interviewees, who stated that each government develops its own frameworks within its own areas of competence. Interviewees identified no common vision or strategies for a coherent infrastructure policy covering all types and levels of government. The Federal Government, represented by Fedict, is working on developing an enterprise architecture for the federal level alone, driven by the goal of fully interoperable and coherent federal e-services. The OECD interviews did not reveal any incentive to explore the possibilities of developing a whole-of-government enterprise architecture that could help to ensure both horizontal and vertical coherency of the public sector e-government infrastructure and standards by any of the governments.

BELGIF, however, was explicitly mentioned in the Inter-governmental co-operation agreement for e-government, showing recognition of the need to align at least the technical standards behind e-government development in order to achieve strong and coherent back-office integration. Even though BELGIF creates the necessary stepping stone towards establishing a coherent and common public sector enterprise architecture, co-operation must be broadened to cover the strategic visions and organisational structures in the description.

ICT Security

Key points

- *The fragmentation of ICT security responsibilities in Belgian governments limits the possibility of effective and co-ordinated responses to ICT security incidents and threats. The responsibility for Belgian ICT security policy is spread over a number of authorities at the federal level with limited apparent co-operation and no focal point for national policy development and implementation. As* ***ICT security covers society-wide issues, there is a need for clear mandating of authorities and policy co-ordination and collaboration across the Federal Government****. ICT security measures (technical, managerial, or organisational) are only as strong as the weakest link, so it is necessary to strengthen the co-ordination of both policy development and operational implementation across all Belgian governments.*

Securing public sector information systems and electronic networks against attacks is imperative to the protection of information and data – and therefore the e-government services provided to citizens and businesses. ICT security has increasingly become a necessity to maintain integrity, confidentiality, and accessibility of information and data, ICT systems, and electronic communication networks. Belgium was the first European Union member state to pass the specific law aspect of the European telecommmunications directive on ICT security into national law.[14] It is

interesting to note, however, that enforcement of the law is not the responsibility of any one public authority, but of several in each government.

Belgium has isolated but well-implemented examples of ICT security activities within specific sectors, like the social security sector, which handles sensitive personal information and data. ICT security policy includes organisational, managerial, human resources, and technical considerations to create a good ICT security culture and limit or prevent ICT security incidents.

The responsibility for national ICT security policy is spread among a number of federal public authorities:

- **Federal Government – Fedict:** Fedict is responsible for general ICT security co-ordination for federal e-government services solutions. It has elaborated a general security strategy for the federal level and encouraged the creation of a consultation platform on information security, as well as the creation of a forum uniting Chief Information Security Officers of all Federal Public Services. Fedict supports all federal ministries in their ICT risks analysis, and can provide guidance and support for such analysis and advise federal ministries on so-called "disaster recovery plans".
- **Federal Government – BIPT:** The BIPT's (Belgian Institute for Postal services and Telecommunications) main role is the regulation of the Belgian telecommunications market. However, it has also been given the responsibility for ICT security with regards to networks and network security. BIPT has established a virus alert centre, but does not ensure a whole-of-public-sector government CERT function. Its main information security goal is to alert the public about ICT security incidents. The alert centre also co-operates with private partners providing expertise on viruses.
- **Federal Government – Ministry of the Interior and Fedict:** They co-operate with the federal computer crime unit, which is a part of the federal police authority.
- **Federal Government – Ministry of Economy:** The Federal Ministry of Economy, SMEs, Self-employed and Energy has responsibility for consumer and business policy with regard to e-business, spam, etc.
- **National Research Network – BELNET:** BELNET is the Belgian national research network; it provides high-bandwidth Internet connections to Belgian universities, colleges, schools, research centres, and government departments. BELNET CERT is the Computer Emergency Response Team for the BELNET community, which provides information and help to the BELNET community for network security incidents. Services offered by BELNET CERT are typically divided into three categories: proactive services, reactive services and security quality management services.

Belgium does not have a CERT function for the whole public sector. Government CERTs – or Computer Emergency Response Teams – have been created to help public institutions react to and prevent ICT security incidents. The importance of ICT security has been increasingly emphasised over recent years through national vulnerability studies and subsequent strategies (*e.g.* Denmark,[15] Norway,[16] Sweden,[17] and the United States[18]). Dependence on the Internet as a critical information infrastructure backbone for electronic communication within governments and with society as a whole is considerable. ICT security policy is thus an integral and important part of e-government policy, ensuring that the e-government services provided by public institutions are secure and can be trusted by users.

ICT security policy issues are mainly handled by the Federal Government (regions, communities and local government have only limited or no activities). However, there are some examples of common or harmonised ICT security policies. The ICT security, technical and procedural components supporting online authentication via the electronic identity card are in place for the whole of Belgium, including all 589 municipalities. Furthermore, all governments are implementing or considering implementing common ICT security standards (such as, ISO standard 17 799, which covers 10 main security domains[19]) within each of their public administrations. However, no government has yet taken concrete steps towards common, cross-governmental security standards and measures. Each public institution is still responsible for developing and implementing sufficient ICT security standards, guidelines, and measures to meet basic ICT security requirements.

The Walloon Region confirmed the lack of a structured co-operation framework on ICT security within its own administration. It is currently aiming at fulfilling the minimum security requirements as communicated by the Federal Government using both Fedict's and the Crossroads Bank for Social Security's norms as guidelines for its own security levels. The Walloon Region has expressed its ambition to create an internal security officers' forum to increase basic co-operation on ICT security matters within its regional public administration. A first description of an organisational responsibility for ICT security policy and implementation in the Walloon Region has been drafted, giving responsibility to EASI-WAL.[20]

The fragmentation of ICT security responsibilities in all Belgian governments limits the possibility of effective and co-ordinated responses to ICT security incidents and threats. OECD interviews revealed limited interest in handling ICT security policy development, implementation, and collaboration and co-ordination Belgium-wide. Even though Belgium could take advantage of a CERT function in the public sector, the organisational responsibilities are seemingly uncoordinated: Belgian governments need to

recognise the importance of institutionalised operational bodies to deal with computer security incidents. There seems to be resulting limited possibilities of establishing an efficient and effective whole-of-government ICT policy framework with a sound institutional structure, as well as clear responsibilities and commonly agreed approaches.

Interconnectivity

Key points

- *Belgian governments have worked for a number of years on achieving* ***interconnectivity and interoperability*** *within their own jurisdictions. A limiting factor for the enforcement and coherence of interconnectivity frameworks in Belgium is the natural division of power between the centre and the federalised entities, and the sensitive political situations which can arise.*
- *Unique identification keys, the* ***unique personal identifier*** *(based on individuals' birth data), as well as the unique identification number for businesses are important cornerstones of Belgian e-government service delivery.*
- *As to authentic data sources, sector projects (such as the Crossroads Bank for Enterprises) have successfully exploited the benefits of sharing data by exchanging it via a crossroads bank instead of storing it. With regards to* ***interoperability****, the e-government interoperability framework* BELGIF *(Belgian Government Interoperability Framework) promotes interoperability, not only among governments but also at the European level.*
- *First progress was made on* ***aligning portal navigation structures across governments*** *according to life-cycle based content.*
- *The Belgian governments have taken first steps in addressing* ***cross-broader interoperability issues for electronic ID cards****; this includes respecting the sovereignty and technological choices of all EU member states.*

Interconnectivity of e-government services – the provision of integrated, user-focused services t3hat are independent from federal jurisdictions, competencies and responsibilities – is achieved through a number of different activities:

- Sharing of resources (*e.g.* electronic infrastructures, key registers, information and data).
- Common standards and procedures (business processes, technical, or organisational).
- Basic and advanced ICT skills and competencies of staff and users.

All these activities will enhance interconnectivity of e-services, and become the "glue" that keeps different parts of a country's e-government

landscape together and the coherent foundation for joined-up services across the parts of the public sector.

For Belgium, interconnectivity of e-government services is a significant challenge, constrained by the federal state structure formally limiting common actions. E-Government interconnectivity is critically important: it allows the public sector to act as one multi-faceted body so citizens and businesses perceive one public sector and not a fragmented landscape of narrowly defined public authority competences. As stated in the Inter-governmental co-operation agreement from 2005, joint actions are important to enable a holistic approach ensuring interconnectivity. An example of a common public sector building block which enhances interconnectivity of e-government services is the electronic ID card solution, built on a common ICT security infrastructure (PKI).[21] Unique identification keys, the unique personal identifier (based on individuals' birth data), as well as the unique identification number for businesses are important cornerstones of Belgian e-government history. First progress has also been made on aligning navigation structures of portals across governments according to life-cycle based content. Finally, the Belgian governments have taken first steps in addressing cross-broader interoperability issues for electronic ID cards; including all EU member states.

Belgian governments have prioritised the development of electronic infrastructural platforms to support and enhance interconnectivity and interoperability of e-government services, and exchange of information and data between public institutions. Examples are:

- Network infrastructure projects within the Federal Government (see Box 5.6).
- The Crossroads Bank for Social Security shows the most complete and best integrated example of achieving full interconnectivity and interoperability across types and levels of government (see Case Study 1).
- The MAGDA platform for the exchange of authentic data and the integration of e-government services within the Flemish Region (see Box 5.7).
- The Walloon Region has also taken action to develop an integration platform including standardised ways of exchanging information and data between public sector institutions. This was integrated as part of BELGIF[22] in 2005.

These examples show that creating proper interconnectivity and interoperability is prioritised by e-government implementers in the Belgian governments in order to strengthen coherency within jurisdictions. This is also reflected in the results of the OECD survey; respondents stated that interoperability (51%) and interconnectivity (47%) standards are provided (see Figure 5.2). It is also significant to note, however, that 42% implied limited or

non-existent mechanisms to ensure coherency of e-government services. These observations again confirm that Belgian governments on the operational level are aware of the necessity to ensure back-office interconnectivity and interoperability in order to provide efficient and effective e-government operations.

Box 5.6. **The Federal Government's network projects**

FedMAN (Federal Metropolitan Area Network) – a high-speed network – has been created to enable federal institutions to exchange data in a secure and controlled environment. The network is protected against viruses, spam and intruders; and additional services are gradually incorporated, such as firewalls and antivirus programs. These components are especially important as Belgium does not have a national CERT. More than 80 000 civil servants have access to FedMAN via 24 access points, or remote secured access. There are plans to expand the network to connect the larger cities. FedMAN is used by Federal Government for:

- Structured exchange of data.
- Exchanging e-mail messages.
- Consulting websites and web services.
- Consulting the federal directory service – FedDS.
- Exchanging large files.

FedMAN further offers federal institutions central access to the European Union TESTA network.* It also offers Voice over IP telephony and a data sharing centre infrastructure between federal institutions.

The Federal Government has also developed the **Universal Messaging Engine (UME)**, a standardised way of exchanging information and data between different ICT platforms in use in the federal institutions. The Universal Messaging Engine manages electronic traffic between federal institutions and the Crossroads Bank for Social Security and exchanges data with the information systems run by the regions, communities, and municipalities. Federal civil servants are able to access relevant information and data made available by the UME.

The Universal Messaging Engine exchanges more than 100 000 structured messages using open standards for data descriptions and exchange. Data can therefore be exchanged between heterogeneous systems: the UME ensures that information and data are converted into the appropriate format

* The Trans European Services for Telematics between Administrations network – or TESTA network – is a pan-European network platform for secure exchange of information and data between European public administrations launched in 1996. See also *http://ec.europa.eu/idabc/en/document/2097/5644* accessed28 February 2008.

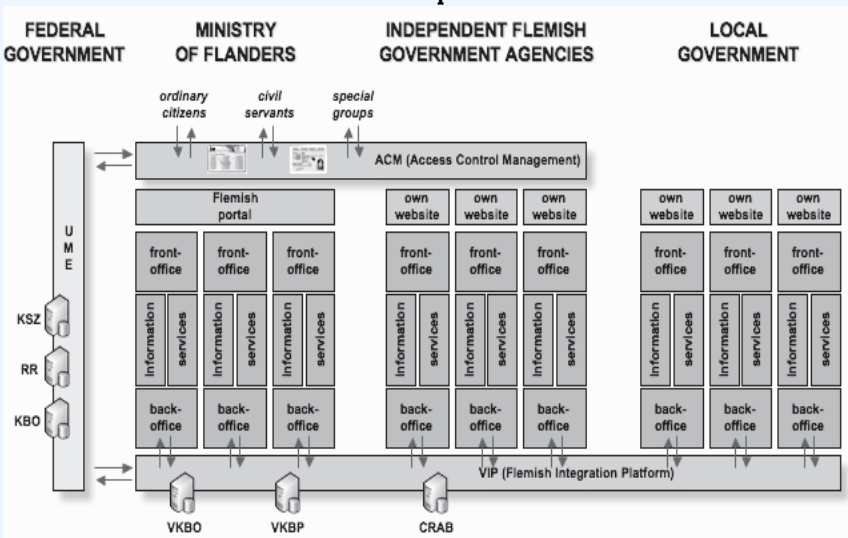
Source: www.belgium.be,accessed 9 August 2007.

Box 5.7. **The Flemish MAGDA platform**

The MAGDA (*Maximale Gegevensdeling Tussen Administraties* or Maximum Data sharing between Administrations) Platform ensure a standardised platform for accessing and sharing authentic data within the Flemish Region, as well as with the Federal Government. The MAGDA platform guarantees that e-government services provided by different Flemish public authorities can achieve full "seamlessness" by ensuring that relevant data can be shared across the Flemish public sector. It provides the following main services:

- Messaging services, which ensure that messages get delivered to their destinations.
- Transformation services, which ensure that recipients of data receives it in the required format.
- Process control services, which ensure tracking of data access and flows.
- Workflow services, which ensure that data can only be accessed and transferred by following pre-defined processes.

The Flemish MAGDA platform: Workflow



CRAB: *Centraal Referentie Adressen Bestand* (Central Spatial Address Register).
KBO: *Kruispuntbank van Ondernemingen* (Crossroads Bank for Enterprises).
KSZ: *Kruispuntbank van de Sociale Zekerheid* (Crossroads Bank for Social Security).
RR: *Rijksregister* (National Register).
UME: Universal Message Engine.
VIP: *Vlaamse integratieprojecten* (Flemish Integration Project).
VKBO: *Verrijkte kruispuntbank voor ondernemingen* (Enhanced Crossroads Bank for Enterprises).
VKBP: *Verrijkte kruispuntbank voor personen* (Enhanced Crossroads Bank for Persons).

Source: www.corve.be/producten/magda-diensten/index.php, accessed 28 February 2008.

Box 5.8. **International examples of sharing registers and databases**

Norway

The Brønnøysund Register Centre in Norway is an administrative agency responsible for a number of national control and registration schemes for business and industry. The overarching aim of the centre is to improve the conditions for financial security and efficiency for business and industry, and the public at large. The Brønnøysund Register Centre performs an important task by coordinating the reporting obligations of business and industry. The aim is to prevent superfluous collection and registration of information, which will especially alleviate the workload for small and medium-sized businesses. The Register of the Reporting Obligations of Enterprises catalogues the information the various registers and public bodies require from business operators and compares the forms issued by the various bodies. If two or more public authorities or agencies ask the same type of questions of the same type of companies, these bodies must co-operate so that their questions are asked only once. The Act relating to the Register of Reporting Obligations stipulates that the public authorities and agencies must co-operate.

The Brønnøysund Register Centre operates a number of national electronic registers. The major ones are the Register of Mortgaged Moveable Property, the Register of Business Enterprises, the Central Coordinating Register for Legal Entities, the Register of Company Accounts, the Register of Bankruptcies, and the Register of Marriage Settlements.

Source: OECD (2005), *OECD e-Government Studies. Norway*, OECD Publishing, Paris, and the website of The Brønnøysund Register Centre: *www.brreg.no*, accessed 28 February 2008.

United States

Electronic health records have revolutionised the Veterans healthcare system in the United States. Wherever health data is stored, medical practitioners can use a single interface to access and update patients' medical information; patients themselves can also view, and in some cases input, their own information (such as weight data). The Veterans Health Information Systems and Technology Architecture, VistA, is an integrated system of software applications that directly supports day-to-day operations at local Department of Veterans Affairs (VA) health care facilities by enabling access to all types of health care data, regardless of the facility at which they are stored. VistA has resulted in a reduction in the number of medical errors made by staff, leading to significant improvements in care provided.

Box 5.8. **International examples of sharing registers and databases** *(cont.)*

United States

The Veterans Health Administration consists of 21 regional networks that support 158 hospitals, 133 nursing homes, and 698 community-based outpatient clinics. The VistA system includes over 90 separate business packages that support the day-to-day activities of VA healthcare operations including: health data systems; registration, enrolment and eligibility systems; provider systems; management and financial systems; and education systems.

All information is stored, tracked and referenced for real-time access by any authorised user. Although electronic health records are stored in separate hospitals and clinics, they can be accessed from anywhere on the network. This store of medical information can be used by researchers to compare treatments and identify those which are most effective. The system also flags any conflicts between the different databases for attention. VistA Imaging provides a multimedia, online patient record that integrates all database information into patient records, enhancing traditional medical chart information with medical images including x-rays, pathology slides, video views, scanned documents, cardiology exam results, wound photos, dental images, endoscopies, etc.

Source: Booz, Allen, Hamilton (2005): "Beyond e-Government: the world's most successful technology-enabled transformations", commissioned by the UK Presidency of the European Council and published in November 2005, and *www.va.gov/vista_monograph/docs/vista_monograph2005_06.doc*, accessed 28 February 2008.

Multi-channel strategies

Key points

- *Belgium has* ***not prioritised developing and implementing multi-channel strategies*** *as a guiding framework for user-focused e-government. This issue was not included in the Inter-governmental co-operation agreement from 2005, leaving the development and implementation of multi-channel strategies for service delivery to each government itself.*
- *Belgian governments are looking into the use of* ***ICT to provide services via innovative electronic channels other than the Internet****; the Flemish Region government, for example, has launched pilot projects using interactive digital television (iDTV) to exploit the high coverage and growth potential of digital television in the Belgian population.*

Developing and implementing multi-channel e-government service delivery strategies and determining how to best meet user needs requires public sector institutions to reconsider traditional ways of service delivery and broaden their perspectives towards the possibilities of delivering targeted and more individualised services. E-Government has made it possible for governments to reconsider the whole philosophy behind service delivery to citizens and businesses using ICT as a lever to reorganise and reprioritise resources (financial and human) within the public sector. By guiding citizens and businesses towards digital channels rather than burdening public sector workers with routine services which could more easily be delivered through an appropriate e-service, the public sector will free up resources and reprioritise them for areas where direct physical contact and personal services are required.

Many OECD governments are following such political visions and strategies, prioritising e-government development as part of a public sector transformation policy. Making the public sector as a whole more efficient and effective through e-government has enabled governments to reap the benefits of e-government investments. Multi-channel strategies, combined with a whole-of-public-sector approach, have led countries like Denmark, France, and Portugal to integrate e-government with other public sector policy areas such as regulatory policy (administrative simplification activities), public management and governance policy, and public administration policy.[23]

Even though Belgian governments have not developed and implemented multi-channel strategies, some activities have begun to emerge as part of evolutionary development towards becoming more user-focused; both the Flemish Region and the Walloon Region have commissioned studies on multi-channel strategies for e-government, and both studies look broadly at how different possibilities could be used to develop user-focused e-government services (see Box 5.9).

Box 5.9. **Belgian studies on multi-channel strategies for e-government**

The Flemish Region

The Multigov project was commissioned by a number of parties from both the public and the private sectors[1] in October 2006. The aim of the project is to establish strategic knowledge on multi-channel strategies for e-government and develop a framework for a multi-channel strategy in the Flemish Region. The study covers:

Box 5.9. **Belgian studies on multi-channel strategies for e-government** *(cont.)*

The Flemish Region

- How to strategically use communication channels in interacting with citizens and government, including getting an overview of existing and emerging service delivery channels, their characteristics, the preferences and needs of specific user groups, current and future use of these channels, and the scalability of services.
- How the increase in the number of channels and the diversity in devices will impact electronic publishing on different platforms. The project will also map the organisational and technical prerequisites for the development of a publication engine for e-government.

A study delivered in May 2006 analyses the strengths and weaknesses of the Flemish Region e-government approach and highlights a number of success factors for e-government development. The study considers the Flemish approach to multi-channel e-government by *De Vlaams Infolijn* (the Flemish Info-line), which successfully used different communication channels – both traditional channels such as the telephone, fax, e-mail, the portal *www.vlaanderen.be*, and emerging channels such as interactive digital television (iDTV).[2]

The Walloon Region

A study carried out by the Walloon Agency of Telecommunication at the request of EASI-WAL finalised in March 2007 gives a broad overview and assessments of a number of channels for service delivery. The channels covered in the study are: digital, interactive, and broadcast television; different types of vocal technologies such as speech recognition; collaborative technologies and delivery channels using the Internet such as IP telephony (telephone communication over the Internet), video conferences, etc. The study concludes that there is a broad range of possibilities for delivery of e-government services, which need to be taken into account subject to user segment preferences. The study will give the Walloon Region government a solid foundation for developing multi-channel e-government services.

1. The parties were: Corve (the e-government co-ordination cell of theFlemish Region), *Vlaamse Infolijn* (the Flemish Info-line), Digipolis Antwerpen, Indigov, and Innoxys.
2. Steven De Looze (2006), *Kritische successfactoren voor e-government. Casestudy bij de Vlaamse overhead* (Critical Success Factors of E-Government. A Case Study by the Flemish Government), Universiteit Gent, Facultei economie en bedrijfskunde, Academiejaar 2005-2006, Mei 2006.

Source: The Interdisciplinary Institute for Broadband Technology: *https://projects.ibbt.be/multigov/*, accessed 28 February 2008. Agence Wallonne des Télécommunications (2007), *Étude sur les perspectives de l'e-gouvernement multicanal. Rapport de l'AWT pour EASI-WAL*, *www.awt.be/easi*, accessed 28 February 2008.

User-focused e-government development also means that governments in general want to move from a number of discrete and non-prioritised service delivery channels to a fully networked multi-channel service-delivery approach. This is not the case in Belgium today: Belgian governments do not include multi-channel service delivery strategies as part of their e-government strategies. The issue is not included in the 2005 Inter-governmental co-operation agreement, and each Belgian government is thus left to act as it sees necessary and appropriate according to its chosen e-government approach. OECD interviews did not reveal any significant activities with regard to developing multi-channel service delivery strategies to support a user-focused e-government approach. Belgian governments have chosen to prioritise back-office integration and rather than optimising and individualising e-government services towards user needs.

Collaboration Frameworks – Proposals for Action

- The cross-cutting nature of e-government development and the need to focus on operational implementation requires a whole-of-public-sector perspective and approach. There therefore is an urgent need to ensure the necessary and sufficient development of common public sector e-government components ("building blocks") and services. There is also a need to ensure a holistic and depoliticised approach to e-government which provides fully integrated services based on common public sector standards.
- Inter-governmental projects and programmes need to be clearly defined. Areas with obvious common public sector value need to be agreed upon, prioritised, developed, and implemented. Such areas are:
  - eID services and applications.
  - A common public sector ICT security policy framework.
  - A shared governance model for authentic databases.
  - Shared applications and components.
  - A common practical approach to information and data sharing respecting European legal frameworks.
- As Belgian governments are focusing on mainly technical back-office issues as stated in the formal co-ordination agreement, there is a need to improve the effectiveness and the outcomes of the formal co-ordination agreement. Belgian governments could also consider whether a jointly agreed and pragmatic approach to e-government in general could be extended to cover also front-office integration in order to enable each of the governments to deliver on their strategic goals with regard to fully integrated, standardised, and seamless services leaving the presentation level of these services as the level for differentiation and individualisation by each of the governments.

- As ICT security covers society-wide issues, there is a need for clear leadership towards policy co-ordination and collaboration across the Federal Government. ICT security measures (technical, managerial, or organisational) are only as strong as the weakest link in the public sector. It is necessary to strengthen the co-ordination of both policy development and operational implementation across all Belgian governments.
- By adopting a common ICT security standard following the principles of ISO 17799, the public sector could systematically apply measures to prevent ICT security incidents and strengthen awareness across the public sector on ICT security.
- To increase the impact of BELGIF as a foundation for technical interconnectivity and interoperability, Belgian governments must ensure that BELGIF gets appropriate resources and political will to enable it to develop quickly; this must also include consideration of joint standards for all public sector e-government implementers within their own jurisdictions, where possible.

Notes

1. OECD (2005), *e-Government for Better Government*, OECD Publishing, Paris, page 68 ff.
2. OECD (2004), *OECD e-Government Studies – Finland*,. OECD (2005), *OECD e-Government Studies – Norway*, OECD (2005), *OECD e-Government Studies – Mexico,* OECD (2006), *OECD e-Government Studies – Denmark,* OECD (2007), *OECD e-Government Studies – Turkey*, OECD (2007), *OECD e-Government Studies – Hungary*, OECD (2007), *OECD e-Government Studies – The Netherlands*.
3. Luc van Tilborgh (2006), *Digiflow: attesten vooropenbare aanbestedingen. Presentatie voor de Vlaamse Gemeenschap*, available at *www.corve.be/english/digiflow.php,* accessed 28 February 2008.
4. BELGIF defines a set of common basic technical standards for Belgian e-government implementers to follow in the public sector. These standards covers also technical data standards like accessibility and interface standards, character set standards, etc. See also the link: *www.belgif.be,* accessed 7 August 2007.
5. The co-operation agreement from 2005 (see Chapter 3) mentions specifically the need to develop "authentic sources" – that is unique databases with basic public sector information and data that can be used across the public sector as an authoritative information and data source.
6. The definition of a common public sector platform for e-government implementation – a so-called ***enterprise architecture*** – is a logical extension of looking at public ICT provision as a corporate function delivering ***shared e-government services*** where possible, optimising efficiency and effectiveness of delivery of e-services by the public sector. "Enterprise Architecture" is ambiguous and suffers from being considered solely as a "technological platform" by some while is also has a wider definition to embrace organisational structures and functionalities.
7. Peter Engelund Christensen and John Gøtze (2006), "International Enterprise Architecture survey – Trends in governmental Enterprise Architecture on a

national level", Association of Enterprise Architects, version 1.0, 2006. See also the link: *www.easurvey.org,* accessed 28 February 2008.

8. Kristian Hjort-Madsen and Marijn Janssen (2007), "Analyzing Enterprise Architecture in National Governments: The cases of Denmark and the Netherlands", Proceedings of the 40th Hawaii International Conference on System Sciences (HICSS'07).

9. See also the link: Belgian Government Interoperability Framework *www.belgif.be,* accessed 28 February 2008.

10. A number of white papers on open standards and aspects of an e-government architecture has been published on: open standards, application architecture, architecture blueprint, service guidelines, service interface guidelines, service management strategy, information security policy, and risk management, *www.belgium.be/eportal/application?origin=searchResults.jsp&event=bea.portal.framework.internal.refresh&pageid=contentPage&docId=44777,* accessed 28 February 2008.

11. The directive and recommendations were issued on 10 October 2004, *www.belgium.be/eportal/application?origin=searchResults.jsp&event=bea.portal.framework.internal.refresh&pageid=contentPage&docId=36436*. The document can be retrieved from: *www.belgium.be/eportal/ShowDoc/fed_ict/imported_content/pdf/StandardsOuvertsFEDICT.pdf?contentHome=entapp.BEA_personalization.eGovWebCacheDocumentManager.fr*. Both links accessed 28 February 2008.

12. The MAGDA (*Maximale Gegevensdeling Tussen Administraties* or Maximum Data sharing between Administrations) platform supports the accessing and exchanging of authentic data between the Flemish Region and other relevant public sector authorities in municipalities or in the Federal Government.

13. The Walloon began early in the 2000s work on developing a common framework for e-government interoperability and promoted the interoperability framework CINAPS (*Cadre d'Interopérabilité: NormAlisation, Politiques et Structuration*). These rather technical specifications were aligned and fully integrated into BELGIF in 2005 when the Inter-governmental co-operation agreement was signed and implemented. See also the link: *www.wallonie.be/fr/actualites/archives-des-actualites/l-egov-wallon-a-la-base-du-cadre-d-interoperabilite-belge-belgif.html,* accessed 28 February 2008.

14. The law of 13 June 2005 (Moniteur belge 20.06.2005) is a part of the implementation of the European Union telecommunication directive package: 2002/21/CE (24 April 2002, L 108/33); 2002/20/CE (24 April 2002, L108/21); 2002/19/CE (24 April 2002, L 108/7); 2002/22/CE (24 April 2002, L 108/51); 2002/58/CE (31 July 2002, L 108/51); and 2002/77/CE (17 September 2002, L 249/21). Even though telecommunication area as such is a federal competence the implementation of it was referred to the implementation of a collaboration protocol to be approved by each of the Belgian Parliaments due to the ruling of the Constitutional Court that matters concerning culture – and in this case includes the medium bearing signals for cultural diffusion – is a regional/community matter to be decided independently by each region and community. By July 2007 the Federal Parliament and the Flemish Region Parliament has approved the protocol.

15. "National Sårbarhedsudredning", Udvalget for National Sårbarhedsudredning, januar 2004. ("National Vulnerability Study", Committee for National Vulnerability Study, January 2004. See *www.brs.dk/dokumentarkiv/rapport/default.htm#pdf,* accessed 28 February 2008.

16. "Et sårbart samfund" (A Vulnerable Society) from 2001 was the basis for a message to the Norwegian Parliament [St.meld. nr. 17 (2001-2002)] on the security of society.

17. "Säkerhet i en ny tid" (Security in a new era), the Swedish national vulnerability study, from 2001.

18. "National Strategy for Homeland Security" from 2001. See: *www.whitehouse.gov/homeland/book/nat_strat_hls.pdf*, accessed 28 February 2008, and "The National Strategy for The Physical Protection of Critical Infrastructures and Key Assets", February 2003. (See link: *www.whitehouse.gov/pcipb/physical_strategy.pdf*), accessed 28 February 2008.

19. Measures related to security policy, system access control, computer & operations management, system development and maintenance, physical and environmental security, compliance, personnel security, security organisation, asset classification and control, business continuity management (BCM).

20. Sécurité de l'information en Région wallonne: Document de niveau 0. Engagement de EASI-WAL en matière de sécurité. 07/05/2007. (Information security in the Walloon Region: Level 0 document. Engagement of EASI-WAL in matters of security. 7 May 2007).

21. Public Key Infrastructure – or PKI – is an ICT security infrastructure supporting the digital authentication such as verification of digital signatures.

22. According to the Walloon Region's *Plan d'action simplification administrative, e-gouvernement et lisibilité 2005 – 2009 – Le plan d'action d'EASI-WAL* (Action plan for administrative simplification, e-government, and readability 2005 – 2009 – Action plan of EASI-WAL), the Walloon Region has fully integrated into its action plans the back-office co-operation agreement with regard to interconnectivity and interoperability of e-government. The e-government "brick" No. 13 aligns the Walloon Regions interoperability framework CINAPS to BELGIF, and the "brick" No. 23 integrate the Universal Messaging Engine of the Federal Government into the e-government infrastructure of the Region.

23. OECD (2007), Working Paper "E-Government as a Tool for Transformation", [GOV/PGC(2007)6], background paper for a meeting at the OECD in Paris, 28 March 2007, see *www.olis.oecd.org/olis/2007doc.nsf/4582bc8915d31134c12573a70050a430/c5bfb886ebcafe06c12572ac0057513c/$FILE/JT03224646.PDF*.

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Chapter 6

Outputs and Outcomes

Belgium has recently considerably improved in ***international benchmarks for full online availability of services for businesses and citizens****. According to the European Commission Benchmark of European Online Public services, Belgium evolved from a fully online availability of 50% in 2006, to 60% in 2007. Belgium has shown progressive year-by-year advancement from a position some 20% below the EU27+ average to now being a few percentage points above.*

In a wider European Union comparison of ***online sophistication of basic public services*** *for businesses, Belgium ranks among the leaders. However, usage of e-government services both by citizens and businesses remain comparatively low in comparison to its benchmark countries. Thirty per cent of online citizens and 59% of online businesses use e-government services, suggesting potential of growth for the future – if the digital divide is tackled and if e-government services add real benefit to citizens and businesses.*

User needs are not systematically considered in the development of e-government services, leaving Belgian governments with limited possibilities of developing customised e-government services to their users. The lack of a common approach has left ***customisation of e-government services*** *with each of the Belgian governments, steered by their current development stage and e-government priorities.*

The few ***user surveys*** *conducted reveal that citizens demand more and better-quality e-government services. According to the* Fed-e-View/Citizen *study on user needs, which was initiated by the Federal Government, access to public services can drive non-users of Internet to go online: rapidity, flexibility (in terms of location and time of access) and user-friendliness have been identified as particularly attractive e-government features. An important further finding of the study is the fact that users demand personalised services.*

Citizen involvement *requires accessibility, transparency, responsiveness and accountability on the part of the government, and a desire or demand to participate on the part of the citizen. Belgian governments have not sufficiently prioritised developing this channel of communication by implementing electronic participatory concepts in order to engage citizens in policy development and implementation.*

Even though OECD interviewees did not mention tools for ***e-participation or e-democracy*** *as priorities, they indicated that they experience increasing – but still mainly* ad hoc *– public demand for consultation or participation in the design and delivery of e-government services. As few public sector organisations are taking systematic and proactive steps to include user needs and expectations to create user-focused e-government, this may mean that demand for participation is latent, rather than non-existent.*

This chapter discusses the impact of e-government services across Belgium. Specifically e-government services to citizens and businesses are reviewed. Finally, this chapter discusses e-democracy and e-participation in Belgium, as many OECD countries also aspire to improve democratic engagement and participation through e-government.

The governments in Belgium have for several years focused on developing their own e-government services for citizens and businesses. In addition to services per government, emphasis was put on a number of sectors of activity with (potentially) high-volume online transactions, like social security or tax administration. To a greater extent than putting services online, Belgium has deliberately been focusing on back-office improvements and is by consequence currently facing a number of challenges in attaining policy goals of delivering measurably better and less burdensome services around user demands and user needs. These challenges include:

- Increasing take-up.
- Attracting a wider range of users.
- Overcoming the observable fragmentation and varied quality and sophistication of e-services (particularly at the municipality level).

Impact assessment of e-government policy

Key points

- *According to the European Commission Benchmark of European Online Public services,* ***Belgium evolved from a fully online availability of 50% in 2006, to 60% in 2007****. The level of online sophistication has also risen to a level of 80%. Belgium has shown a progressive year-on-year advancement from a position some 20% below EU27+ average to now being a few percentage points above.*
- ***Total supply of e-government services to citizens remains low 42%*** *and therefore well below the leading EU benchmark countries such as Denmark, Sweden or the Netherlands and the EU15 average.*

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Key points *(cont.)*

- *In a wider European Union comparison of* ***online sophistication of basic public services for businesses, Belgium is among the leaders****. Belgian results for level of sophistication show that the services for businesses have a score of 94%.*
- *Uptake of e-government services by citizens and businesses are low in Belgium. Thirty percent of online citizens and 59% of online businesses use e-government services, suggesting potential of growth for the future – if the digital divide is tackled and if e-government services add real benefit to citizens and businesses.*
- *In international benchmarks, national indices tend to miss developments at sub-national levels. Also, weighting and compiling measures into aggregated whole-of-Belgium e-government indices that adequately reflect the overall performance of Belgium has proven difficult.*

With respect to full online availability of services for businesses and citizens, Belgium has recently made significant progress (see Figure 6.1). Within 3 years Belgium developed from one of the laggards in an EU comparison to above average supply of e-government services (Belgium 60%, EU27 average 58% of e-government services online). This confirms the efforts of all Belgian governments to improve e-government services in terms of supply.

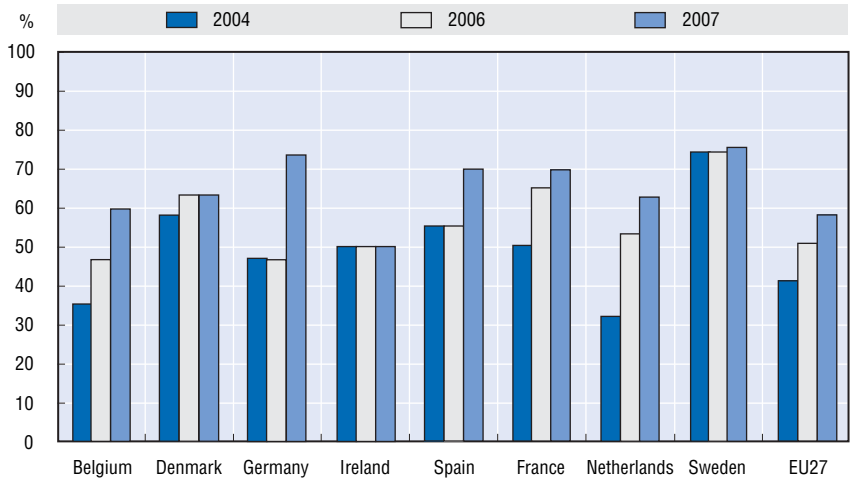
For citizens, however, Belgium's **online total supply** is at 42% and therefore well below the leading EU benchmark countries such as Denmark, Sweden or the Netherlands and the EU15 average (see Figure 6.2). Uptake of e-government services in Belgium in 2007 has just reached 30% according to Eurostat data. This strongly suggests that all levels of the public sector should focus on the development of a better delivery strategy of e-government services towards citizens, and focus on the communication and promotion of e-government services by developing a compelling story to shift channel.

In contrast to benchmarking results for citizens' e-government services, **Belgium has been among the leaders in supply of e-government services for businesses** for a few years (Belgium has 88% of supply). The 2007 data confirms this (see Figure 6.3). Uptake of e-government services by businesses has only reach 59%, however. Given the significance to growth, innovation within the economy and direct savings that can be achieved by focussing on businesses, this strongly suggests a prioritization of the business segment.

Online sophistication of e-government services for citizens in Belgium is comparable to its EU benchmark countries (see Figure 6.4). As many other

Figure 6.1. **Development of total availability of e-government services (2004-07)**

Belgium, OECD benchmark countries, EU27

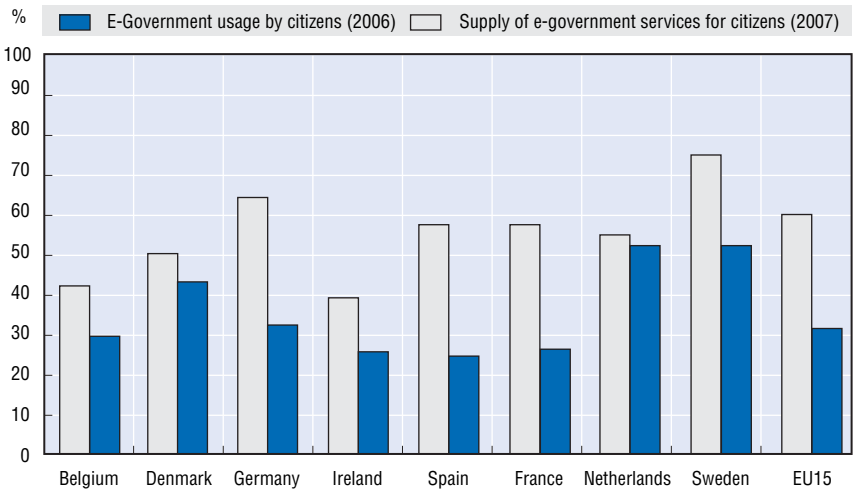


Note: Data for October 2004, April 2006 and April 2007.

Source: CapGemini Survey, "The User Challenge: Benchmarking The Supply Of Online Public Services – 7th Measurement", prepared for the European Commission, 2007, *http://ec.europa.eu/information_society*, OECD Compilation.

Figure 6.2. **Comparison of supply and usage of e-government services by citizens (2007)**

Belgium, OECD benchmark countries, EU15



Note: Data of e-government usage for Sweden is from 2005.

Source: CapGemini Survey, "The User Challenge: Benchmarking The Supply Of Online Public Services – 7th Measurement", prepared for the European Commission, 2007, *http://ec.europa.eu/information_society*, OECD Compilation.

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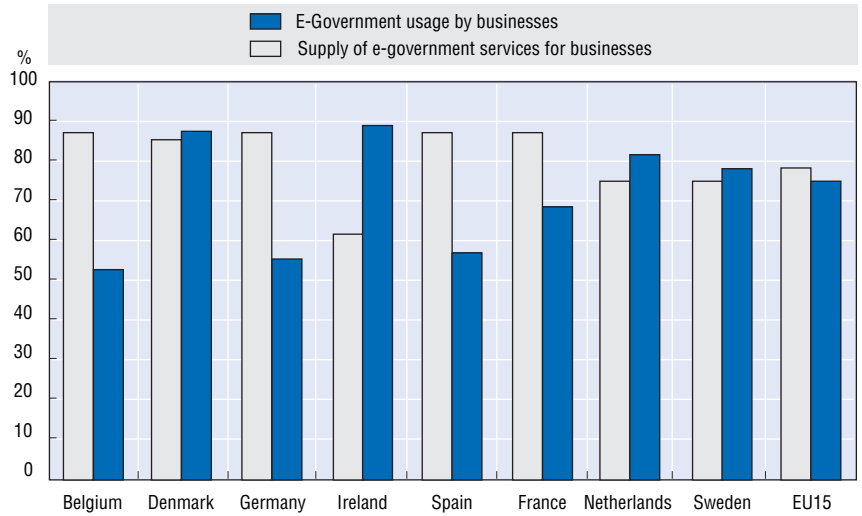
Figure 6.3. **Comparison of supply and usage of e-government services by businesses (2007)**

Belgium, OECD benchmark countries, EU15

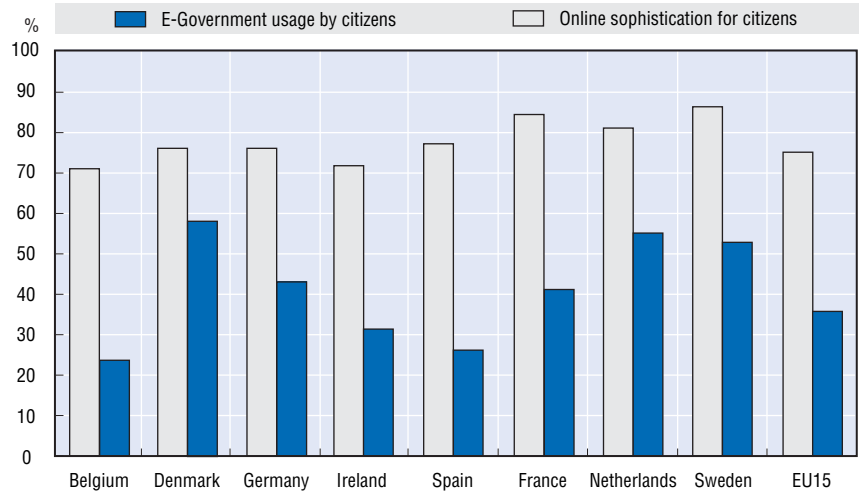


Note: Data of e-government usage for Sweden is from 2005.

Source: CapGemini Survey, "The User Challenge: Benchmarking The Supply Of Online Public Services – 7th Measurement", prepared for the European Commission, 2007, *http://ec.europa.eu/information_society*, OECD Compilation.

Figure 6.4. **Comparison of usage and sophistication of e-government services for citizens (2007)**

Belgium, OECD benchmark countries, EU15



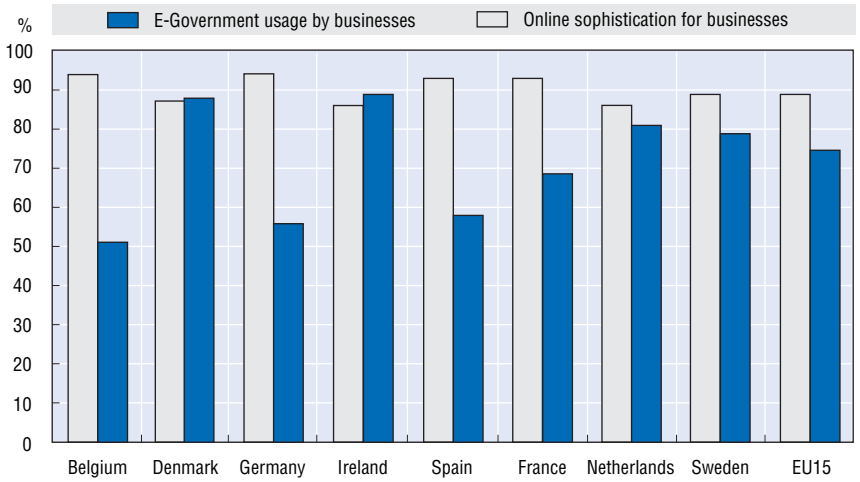
Source: CapGemini Survey, "The User Challenge: Benchmarking The Supply Of Online Public Services – 7th Measurement", prepared for the European Commission, 2007, *http://ec.europa.eu/information_society*, OECD Compilation.

OECD countries Belgium is facing the challenge to achieve higher takeup of e-government services. There seems to be a positive correlation between sophistication and usage of e-government services, hence sophistication and accessibility of e-government services should be carefully monitored across Belgian governments.

Whilst **online sophistication of e-government services for businesses is high** in Belgium (see Figure 6.5, Belgium ranks at 94%), leading countries in online sophistication of e-government services for businesses such as Denmark, Sweden and Ireland display significantly higher uptake figures (Denmark (87/87%), Sweden (89/80%), Ireland (86/84%). A review of the barriers to uptake for businesses and incentives for uptake should be undertaken.

Figure 6.5. **Comparison of usage and sophistication of e-government services for businesses (2007)**

Belgium, OECD benchmark countries, EU15



Source: CapGemini Survey, "The User Challenge: Benchmarking The Supply Of Online Public Services – 7th Measurement", prepared for the European Commission, 2007, *http://ec.europa.eu/information_society*, OECD Compilation.

While the mixed pictures revealed in such comparisons indicate clear room for improvement, it is important to consider that international benchmarks cannot always appropriately take into account the particularities of a country:

- E-Government in Belgium has been a dispersed activity with significant differences in scope and speed from all Belgian governments. In international benchmarks, national indices tend to miss developments at sub-national levels. Also, weighting and compiling measures into

aggregated whole-of-Belgium e-government indices that adequately reflect the overall performance of Belgium has proven difficult.

- In Belgium, e-government development has focused mainly on technical solutions and back-office re-engineering. Belgium's position therefore may vary from one international benchmarking exercise to another, depending on whether the ranking's focus is on front-office or back-office performance.
- Throughout the past years, Belgium has been among the more developed e-government players within the OECD. In international benchmarking, the relative and absolute growth potential of more developed countries can be restrained, as they have already benefited from harvesting "low-hanging fruits" and have fewer possibilities to leapfrog stages of e-government development.

Box 6.1. **International examples of improving international positioning**

Austria

Austria has since 2001 focused on establishing a fully digitised public sector through a joint public sector e-government strategy – *Digital Austria* – co-ordinated by a *Chief Information Officer* unit in the Federal Government. The Austrian public authorities have jointly defined some basic principles for their e-government development: *a)* all citizens and businesses shall be able to easily access the public administration electronically without any knowledge of the public sector and special technical skills; and *b)* the Austrian e-government strategy is based on a close collaboration between the Federal Government, the federal states (*Länder*), cities, and municipalities. All governments agree that only successful co-operation will ensure the efficient use of resources and synergies from e-government development. The result of these efforts placed Austria in the top in the e-government benchmarks by Capgemini on behalf of the European Commission in 2006 and 2007 mainly due to achieving 100% fully online availability of benchmarked electronic services, and 99% on the new benchmark indicator measuring online sophistication of the services.

Source: Digital Austria – The Federal E-Government Strategy, *www.digitales.oesterreich.gv.at/site/5237/default.aspx*, accessed 28 February 2008. Capgemini for the European Commission (2007), *The User Challenge. Benchmarking The Supply of Online Public Services. 7th Measurement, September 2007, http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/egov_benchmark_2007.pdf*, accessed 18 November 2007.

Box 6.1. **International examples of improving international positioning** *(cont.)*

Hungary

E-Government development in Hungary has been driven by the overarching national goal to integrate Hungary in the European Union (EU). Combined with strong political leadership, these efforts have brought results in a short period of time – as evidenced by Hungary's development of a central government infrastructure and by the online availability of the core 20 e-government services, as benchmarked by the EU, as well as other transactional services. The next set of challenges involves: *a)* better using e-government to support the reform agenda and business process re-engineering in the context of major budget restrictions: *b)* increasing cross-governmental collaboration and standardisation; and *c)* improving take-up and local e-government development.

Source: OECD (2007), *OECD e-Government Studies. Hungary*, OECD Publishing, Paris.

User knowledge

Key points

- *Monitoring and evaluating user demand, user needs, and user satisfaction are recent concerns in Belgium. So far,* ***user demands, needs, and satisfaction are not systematically monitored and evaluated by Belgian governments****. This leaves each of the governments with limited knowledge of user needs and how to integrate them into the design and development of e-government services. Even though different Belgian governments have emphasised the user-focused approach the main impression is that analysing and integrating knowledge on users in e-government services is in its infancy and needs to be developed further by all governments.*
- *Belgium has in 2005 and 2006 systematically monitored user needs through the* ***Fed-e-View/Citizens surveys****. The impact of these monitoring activities is not yet obvious, and systematic usage by the different Belgian governments in their development of e-government services is not apparent.*
- *Evaluation of e-government outputs and outcomes by independent research institutes or private sector consultancies are mainly ad hoc and do not necessarily cover all parts of Belgium. The lack of a common methodology for evaluation of e-government makes it difficult to compare results from one study to another.*

Key points *(cont.)*

- *The **absence of systematic consideration of knowledge of user needs in the development of e-government services has left Belgian governments with limited possibilities for developing customised e-services for their users**. The lack of a common approach has left customisation of e-services with each of the Belgian governments.*

OECD country experiences have shown that successful services should be based on a deep understanding of users' online behaviour. Adding up to the encountered difficulties in measuring often intangible features (such as user satisfaction), governments simultaneously need to gather knowledge about various user groups: citizens, businesses, and governments. Traditional metrics such as counting website hits and page impressions are not enough. Monitoring and analysing patterns of use, traffic volumes, user likes and dislikes, user satisfaction and attitudes towards data use, seasonal variation, audience breakdown, e-mails and feedback, and use of search terms are all important elements of understanding how users consume electronic services. Such analysis should feed directly into service development and delivery so that services better match user expectations.[1]

Belgian governments are increasingly willing to make attempts to create a flexible and dynamic government that is receptive to the needs of citizens; overall, however, there does not seem to be a clear and consistent approach to the qualitative and quantitative assessment of users' demands, needs, and satisfaction – despite the limited number of citizens and businesses who effectively communicate with governments online.

Monitoring and evaluating user demand, user needs, and user satisfaction are recent concerns in Belgium, especially when it comes to directly involving end-users of e-services in assessments. According to OECD interviews and the survey, governments are, however, increasingly looking into ways of determining e-government demand, and user needs and satisfaction.

With regards to determining demand for online services, most Belgian governments seem to use rather qualitative approaches such as user panels and customer surveys. Such methodologies can support Belgian governments in better identifying features of user demands which are crucial for service design: existing and future service applications need to reflect user demands to ensure take-up. Only Brussels-Capital Region is taking a more quantitative approach towards assessing user demands, mainly relying on government statistics.

Evidence of user demand

The few user studies that directly involve citizens reveal that citizens demand more and better-quality e-government services. Examples include the recent *Fed-e-View/Citizens* survey – to back up its user focus, the Federal Government has expanded its Fed-e-View survey in 2005 to include citizens.[2] The survey focused on four different domains (e-inclusion, e-government, e-society, and e-democracy), and questioned focus groups consisting of both e-government users and non-users, over a period of 15 months. The results emerging from the survey have been shared across the country with the intention to increase the focus on user in e-government development in the Belgian governments. The sharing of results may help detect synergies in the diversity of approaches to user centricity.

According to the *Fed-e-View/Citizen* study on user needs, priorities for Belgian citizens are:

- **Rapidity and flexibility** (in terms of location and time of access). Electronic services are seen as an advantage to Belgian citizens, particularly with respect to the efficiency increases they can bring. However, the convenience of any-time, any-place access needs to be blended with the traditional channels currently available to citizens in order to increase the flexibility of the system.
- **User-friendliness** of electronic services is a key element to citizens, who are willing to use electronic services if they provide an easier alternative to traditional channels. This should also take into consideration digital literacy in general, as many citizens are unfamiliar with the way to use government electronic services.
- **Personalised services** are crucial if the digital channel is to become popular in Belgium. The Belgian citizen is more interested in accessing relevant, personalised services online than having to go through the complexities of the Belgian government to gain accesses to services. In short, they are more concerned with the service itself, as opposed to which government is responsible for it.

Although there are individual efforts taking place to determine the specific needs of users and the evolution of user demand, OECD interviewees cited a lack of shared research methods to track and incorporate user demand, needs, and satisfaction, as well as the perceived lack of marketing and promotion of existing e-services.

Citizen satisfaction findings

Findings on citizen's satisfaction with e-government services reveal the following three conclusions: *Firstly*, 44.1% of respondents had never used an

e-government service. *Secondly*, a large proportion of respondents (39.0%) claimed that they often do not know where to look for information. *Finally*, less than one quarter of the total population use e-government services, but one third of the non-users would be interested in doing so.

Table 6.1. **Barriers for using e-government services**

		% people
Which of the following problems have you found when using electronic services (*e.g.* form-filling, declaration of taxes) from the government on the Internet?	I have not used a service	44%
	No problem	25%
	Have to give my data repeatedly	11%
	It's hard to find the service	10%
	Never find a full solution online, meaning I have to go to the office	10%
	Often don't know where to search	10%
	Possible to request things via Internet, but not action them	10%
	Other	4%

Source: Fed e-View 2006.

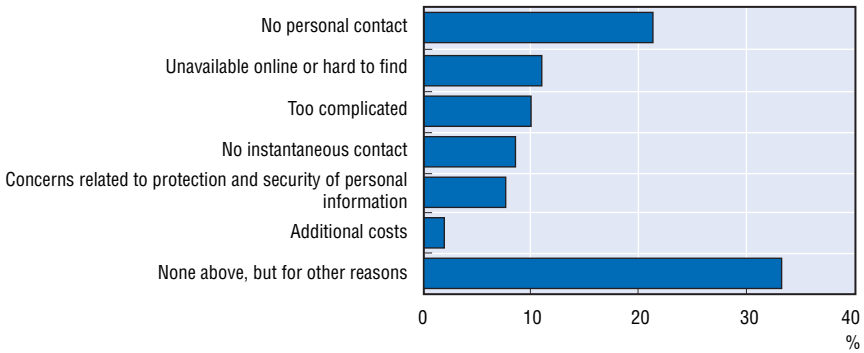
Table 6.1 shows data about problems users have encountered when using electronic services, such as filling in electronic forms, or submitting their taxes. 44% of respondents had never used an e-government service, and 25% of respondents claimed to have had no problems using these services. This raises significant questions concerning demand for e-government services in Belgium. The high percentage of the population not interested in e-government services is a major challenge for Belgium and the Belgian governments. It signals a need for targeted communication activities with the population on the existence of services, and the advantages of using them.

Further research confirms Belgian citizens cultural preference for direct contact when interacting with governments: for all Belgian governments, the main reason for not being interested in e-government services is "no personal contact" (22% of all Internet users who are not interested in e-government, see Figure 6.6). Reasons may include the public sector structure, the high number of municipalities, cultural differences in administrations due to language and region, as well as the high number of public sector staff.

Table 6.2 shows respondents thought of the information that was provided on the sites they had visited. The largest proportion of respondents (39%) claimed that they often don't know where to look for information. Hence, efforts by Belgian governments in developing more user-friendly websites or organising information according to life-cycle events have not necessarily impacted user experience at this stage.

Figure 6.6. **Reasons of Internet users for not being interested in e-government services**

Belgium



Note: Individuals aged 16 to 74 who accessed the Internet within the three previous months.

Source: National Belgian Statistics Institute, *ICT Households Survey*, 2006, *www.statbel.fgov.be*, OECD Compilation.

Table 6.2. **Barriers to information search**

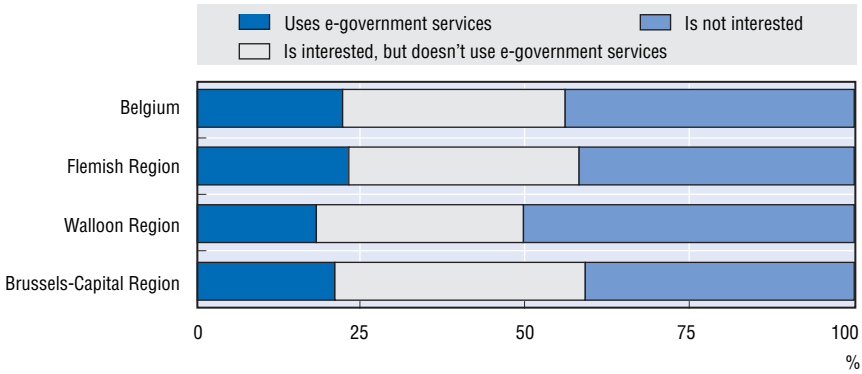
		% people
Which of the following problems have you encountered when searching for information from the government on the Internet?	Don't know where to find information	39%
	No problem	32%
	I never get a full response, and therefore must call or go to the government offices	23%
	I find the information difficult	23%
	Not personally oriented	19%
	The information I require is not online	13%
	Language is too difficult to understand	11%
	Other	4%
	The information is not trustworthy	4%

Source: Fed e-View 2006.

Figure 6.7 shows that there is a high potential for increasing user interest in and usage of e-government services.

Maximising the benefit of investment in e-government is a high priority for Belgian governments. The effective marketing of e-government services and products not only contributes to their successful development, but also helps optimise citizens' level of awareness, acceptance and usage of e-government products and services. The finding that approximately one third of citizens would be interested in using e-government services deserves attention, motivates more effective marketing of e-government services and products.

Figure 6.7. **Interest in using e-government services**
Belgium, Flemish Region, Walloon Region, Brussels-Capital Region



Note: Individuals aged 16 to 74 who accessed the Internet within the three previous months.
Source: National Belgian Statistics Institute, *ICT Households Survey*, 2006, *www.statbel.fgov.be/*, OECD Compilation.

Marketing and promotion of e-government services

Key points

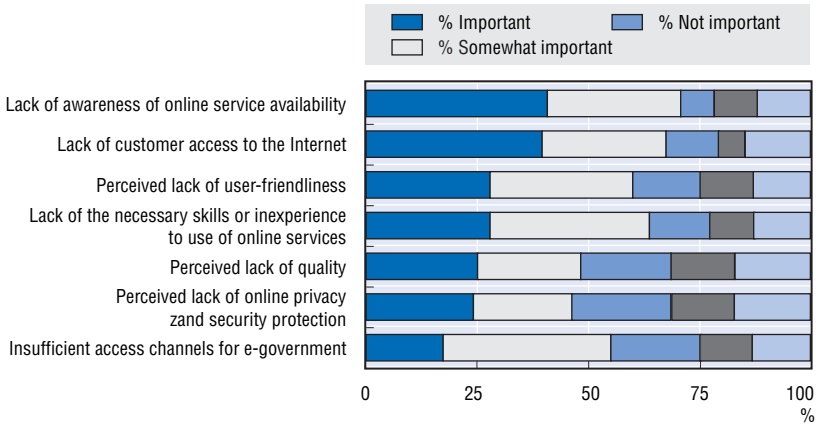
- *The different Belgian governments have in general only* ***limited focus on marketing and promotion of*** *e-government services.*
- *OECD data does not suggest agreement among the Belgian governments on the benefits e-government services can provide to users. A lack of common long-term objectives for e-government implementation is not a barrier for an* ***overall prioritisation mechanism for e-government projects and programmes****.*

The marketing and promotion of e-government services are important to increase the level of visibility and knowledge of the advantages of electronic services. This aspect of e-government development is often underplayed in national e-government strategies and has not sufficiently been considered when developing policy and strategies – even less when implementing and disseminating e-services solutions. Figure 6.8 shows the case for increased and consistent marketing towards users.

Marketing and promotion is often connected to a specific public organisation's wish to implement a pro-active channel management to convince users – whether they are citizens, businesses, or government themselves – to make use of the electronic service channels (*e.g.* wireless access channels, telephone lines, cable, etc.) without regard to interface (mobile phones and other mobile entities, television, computer, etc.).

Figure 6.8. **Perceived challenges to the takeup of e-government services by Belgian officials**

All governments



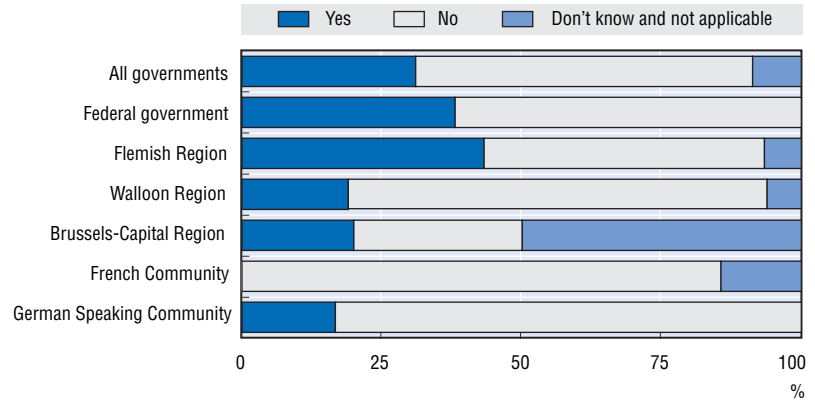
Note: Survey Question 6.10 a): How important are the following challenges in constraining citizen demand for the online services provided by your organisation?

Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

Belgian governments have in general made only limited efforts on marketing and promotion of e-government services. Similarly, other governments are increasingly focusing on improving marketing and communication of their e-government efforts. Benchmarks and indicators are very recent and might help raise political awareness of e-government by catching decision makers' attention, given their tight political agendas.

Figure 6.9. **Marketing strategies for e-services in all Belgian governments**

All governments



Note: Survey Question 3.4 a): Do you have a marketing strategy to market your e-services?

Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

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The OECD survey (see Figure 6.9) shows that the general impression among the governments is that there is a lack of marketing and promotion strategies across the public sector: 60% of respondents answered "no" and only 31% answered "yes" to questions on whether a marketing strategy exists for their own e-services. Respondents in the Federal Government and the Flemish Region seem to be more aware marketing strategies (38% and 43%, respectively, answered "yes") while the Brussels-Capital Region, the Walloon Region, the German-speaking Community, and the French Community are less aware of such a strategy (20%, 19%, 17%, and 0%, respectively, answered "yes").

OECD interviewees pointed to limited clear communication from e-government leaders about e-government benefits, stating that internal and external communications and marketing could be improved. These perceptions were confirmed by the OECD survey, illustrating that only about half of government institutions communicate their e-government goals to citizens and businesses. Also, two-thirds of survey respondents indicated that they currently do not have a marketing strategy to promote their e-government services.

In order to raise awareness of the availability and value of e-services, Belgian governments need to further promote "good practices" and exchange experiences through events like the yearly Belgian E-Government Congress and Awards. During this event representatives of different levels of government exchange ideas and experiences.

Perceived and communicated benefits of e-government services

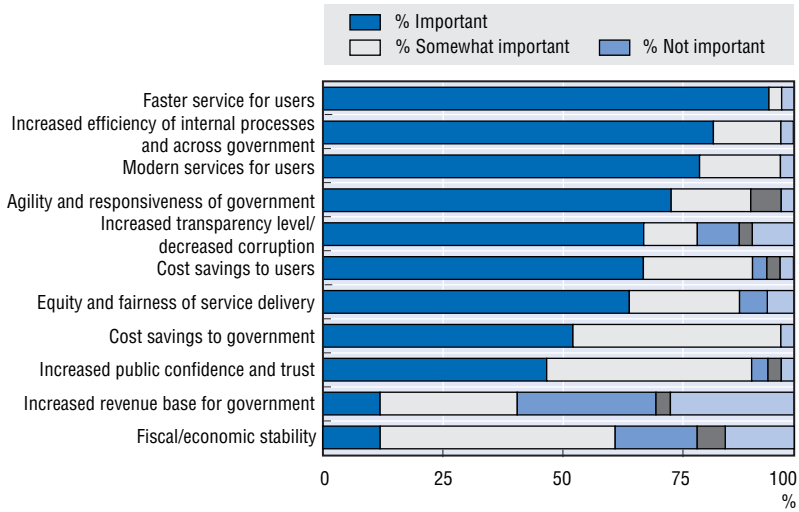
E-Government strategies and action plans of all Belgian governments reflect the emerging political aim of more user-focus by acknowledging the necessity to create seamless services through back-office interoperability laid out in collaboration and co-ordination efforts.

The Federal Government emphasises areas such as: cost savings to government (97%), modern services for users (97%), and increased efficiency of internal processes and across government (97%) (see Figure 6.10). User-focus is also dominant for federal agencies (faster service for and cost savings to users), with a trend towards a main focus on internal efficiency and effectiveness of government businesses.

The **Flemish Region** emphasises areas such as: faster service for users (93%), agility and responsiveness of government (93%), and increased efficiency of internal processes and across government (93%) (see Figure 6.11). In addition to becoming more responsive to user needs, it also aims to harvest efficiency and effectiveness gains within government.

Figure 6.10. **Perceived benefits of e-government services to users by federal officials**

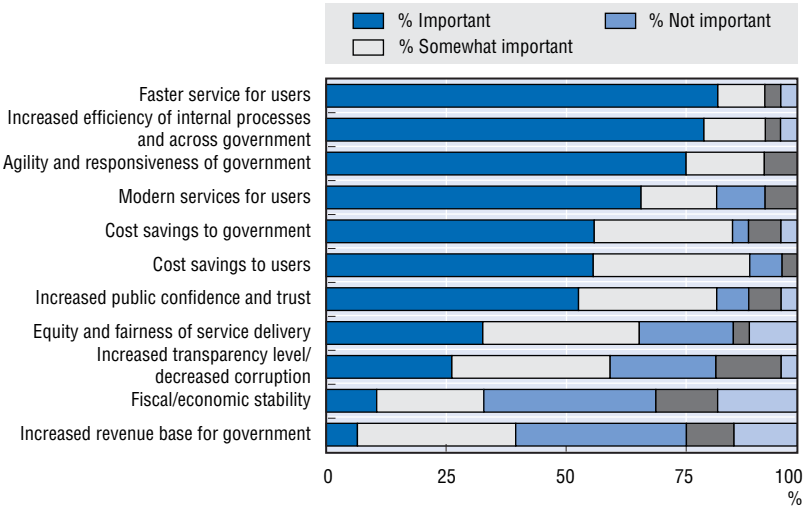
Federal Government



Note: Survey Question 6.4 a): How important is e-government to achieve the following benefits?
Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

Figure 6.11. **Perceived benefits of e-government services to users by Flemish officials**

Flemish Region



Note: Survey Question 6.4 a): How important is e-government to achieve the following benefits?
Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

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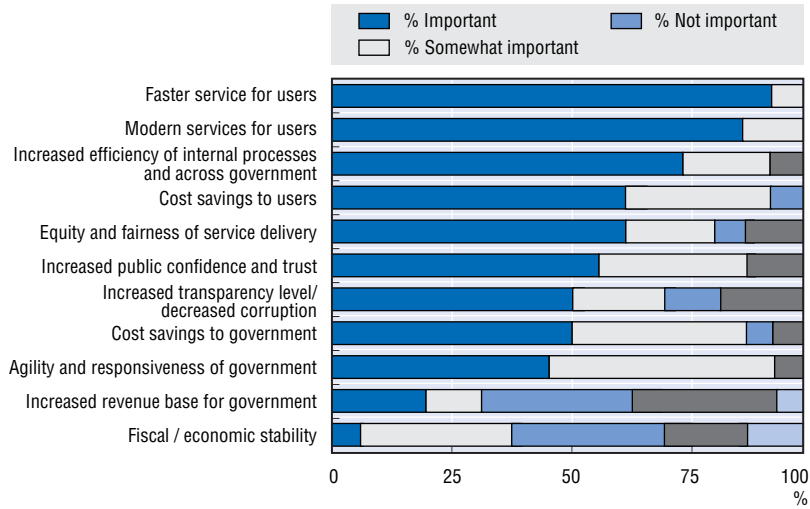
Figure 6.12. **Comparison of Supply and Usage of e-government Services by Citizens (2007)**

Belgium, OECD benchmark countries, EU15



Note: Data of e-government usage for Sweden is from 2005

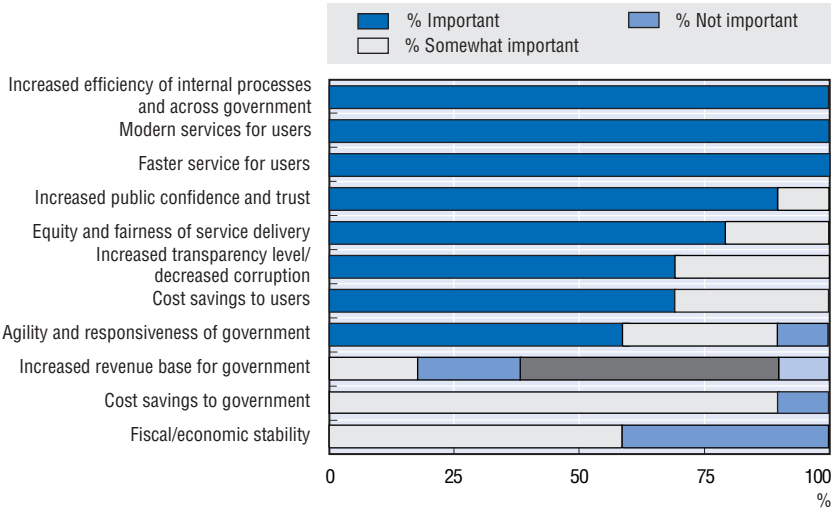
Source: CapGemini Survey, "The User Challenge: Benchmarking The Supply Of Online Public Services – 7th Measurement", prepared for the European Commission, 2007, *http://ec.europa.eu/information_society*, OECD Compilation.

The Walloon Region emphasises areas such as: modern services for users (100%), faster service for users (100%), and increased efficiency of internal processes and across government (94%) (see Figure 6.12). Its emphasis on modernising public services and becoming more responsive to users is significant, while the cost savings to the government (88%) is high but comparatively lower on the priority list according to the survey.

However, OECD data does not suggest agreement among Belgian governments on the benefits e-government services can provide to users. The **Brussels-Capital Region** emphasises areas such as: efficiency of internal processes and across government (100%), increased transparency level/ decreased corruption (100%), and modern services for users (100%) (see Figure 6.13). Significantly, it prioritises user-oriented outcomes like faster services and cost savings for users, and the possibility of improving trust in government. These priorities reflect broadly the main concern among the different governments with regard to becoming more user-focused in e-government development and improving the general trust in government through openness and transparency of government actions.

Figure 6.13. **Perceived benefits of e-government services to users by Brussels officials**

Brussels-Capital Region



Note: Survey Question 6.4 a): How important is e-government to achieve the following benefits?
Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

E-Democracy and participatory government in Belgium

Key points

- *Policy documents increasingly tend to* ***link e-government and e-democracy goals****, although in the past, strategic and operational links have been weak.*
- *Representatives of citizens stressed the current decline in trust in democratic institutions measured, for example, by the Euro-barometer.*[*] *In this context, e-government services were seen as a possible* ***tool to invigorate participation and consultation****.*

* *http://europa.eu.int/comm/public_opinion/archives/eb/eb63/eb63_exec_nl.pdf*, also supported by the statement at the OCED Ministerial Conference: "Strengthening Trust in Government: What Role for Government in the 21st Century" by the Chairman Alexander Pechtold, Minister for Government Reform and Kingdom Relations in the Netherlands, 28 November 2005, *www.oecd.org/document/5/0,2340,fr_2649_201185_35760965_1_1_1_1,00.html*, accessed 28 February 2008.

There is very little history of e-democracy activity in Belgium. By consequence, e-government and e-democracy are handled on a project-by-project basis, with governments mainly having *ad hoc* consultations with different groups in society. Only very few initiatives have been implemented so far. For example:

- There are five regional and community-based parliaments[3] in Belgium. All of the parliamentary Web presences provide good examples of information provision services with access to documents and agenda planning featured prominently on the websites. Little is available in terms of interactivity, such as polling for the general public or more advanced forms of petitioning.
- The Belgian Senate's websites provide a large amount of information about the workings of the body, and include a specific sub-site devoted to democratic activity online.[4] This "Platform for Democracy and Citizenship" attempts to bring in one portal all information relating to Belgian initiatives in the domain of citizenship and democracy.

Drawing conclusions about the current state of e-democracy activity in Belgium therefore remains a challenge, and represents a next step. However, several studies have shown the potential impact of ICT on democratic activity.[5] Four general points can be made about the potential of ICT to transform the democratic landscape in Belgium:

- **Closer contact with citizens, responsive government:** Geography and time limit the amount of work that elected parliamentary representatives can carry out with their constituents. Geography-independent and asynchronous contact with voters through ICT provides a possible solution to these constraints. One potential downside is that representatives can easily get overwhelmed with irrelevant, repetitive, and overabundant information as barriers to communication. This can limit their effectiveness in debates, and can require representatives to be experts in all issues discussed by the Parliament.
- **Greater transparency and accountability:** ICT also provides opportunities for greater transparency and accountability, one of the main goals of a democratic parliament. However, a downside of these opportunities is that more work must be put into ensuring transparency and communicating with citizens; this requires additional resources.
- **Inclusive policy making:** Through institutional incentives and structures, ICT-based tools can encourage deliberation between participants in a debate. A multiplicity of actors – including individual citizens, lobbying organisations, civil society groups, and so-called "experts" – have the opportunity to become involved in the policy-making process through improved consultation, evaluation, and monitoring procedures.
- **Networked government:** ICT can help create different types of collaboration and interaction between political institutions by levelling hierarchies in working methods and patterns. In a complex federal system such as Belgium, interaction between governments is a positive achievement: it is generally by the fact that a proportion of politicians hold positions at different levels of government simultaneously. Technologically

managed networks can increase efficiency in decision making, but they are also expected to enhance networking among actors.

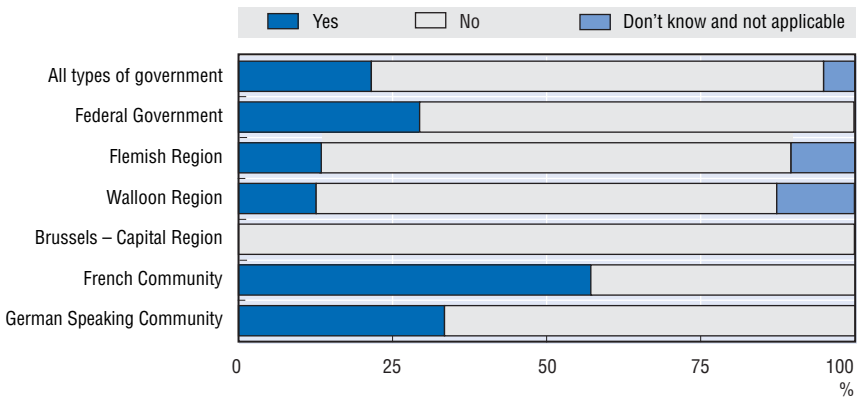
These four issues show how ICT could help bridge the gaps between Belgian institutions and citizens. ICT itself is not a panacea for the problems of engagement with citizens, but it shows potential to facilitate a rapprochement between citizens and elected representatives. If global communications have a role in reviving democratic governance, it is in enhancing democratic practice: "[the] ongoing two-way communication between governors and governed".[6] Until now, however, the focus has been more administrative – organisational pressures to become more efficient in communicating internally have over-ridden concerns related to directly dealing with citizens.

Participatory government

The Internet can make public administration more transparent, involve citizens actively in policy making and reduce the distance between electors and elected officials. Even though OECD interviewees did not mention tools for e-participation as a priority they indicated that they experience increasing, but still mainly *ad hoc* public demand for consultation or participation in the design and delivery of e-government services (see Figure 6.14).

Figure 6.14. **Potential for participative e-government services and development of services**

All governments



Note: Survey Question 6.9 a): Do you seek citizens' input on policy and services online?
Source: OECD Survey of E-Government in Belgium, 2007 (see Annex C on methodology).

Few public sector organisations are taking systematic and proactive steps to include user needs and expectations in creating user-focused e-government, this

may mean that demand for participation is latent, rather than non-existent. It, however, also reflects OECD interviewees' perception that the main driver for their e-government efforts comes from the government or from within their own organisations, rather than from citizens and businesses.

These findings are supported by the second study on the potential of e-democracy in Flanders: *E–Democratie in Vlaanderen: Stakeholdersanalyse*, which was published in April 2007.[7] The stakeholder analysis concluded that the gap between actual and desired levels of participation by citizens in Flanders was large. However, there is a notable lack of interest by citizens in getting involved in higher levels of e-democracy and e-participation activities, such as co-decision-making. This shows that the typical and recurrent issue of supply and demand, also surfaces in debates about e-democracy and e-participation in the Flemish Region. Politicians and midfield organisations claim that there is a greater need for citizen input into the process, yet citizens clearly do not actively seek to get involved in the decision-making process solely for the sake of being involved in the process. In order for participatory mechanisms to gain footing in the lives of citizens, the impact needs to be made clear and of relevance to the individual citizen.

Representatives of citizens stressed the current decline in trust in democratic institutions, measured, for example, by the Euro-barometer.[8] In this context, e-government services were seen as a possible tool to invigorate participation and consultation.

E-Government can help build trust between governments and citizens, which is fundamental to good governance. ICT can help build trust by enabling citizen engagement in the policy process, promoting open and accountable government, and helping to prevent corruption. Furthermore, if limits and challenges are properly overcome, e-government can help an individual's voice to be heard in a broad debate. This is done by harnessing ICT to encourage citizens to think constructively about public issues and assessing the impact of technology on the policy process. However, few expect e-government arrangements to replace completely traditional methods of information provision, consultation and public participation in the near future.[9]

In Belgium, where voting is compulsory for citizens, e-voting is used by 44% of the electorate casting their votes electronically in 2004. Despite the discussion that revolves around the impact on democracy, Belgium is one of the pioneers of electronic voting systems, starting with trials in 1991 and a legal basis for e-voting introduced three years later. This may be, in part, due to the complexity of the traditional voting system, which benefits from the effectiveness of an electronic solution. The procedure, however, remains the same as the traditional paper ballots, with citizens being required to go to a polling station to vote. Discussions of distance voting and electronic

registration have not emerged in the Belgian context, as they have in other countries such as the United States.[10]

ICT use by politicians

The Internet is not used as a tool for promoting democratic activity by politicians in Belgium: in fact, quite the opposite is the case, with a large majority of politicians hardly using the Internet for any form of information gathering, or communication. A study published by Indigov in February 2005,[11] publicises the results of a Belgium-wide survey of federal, regional, and provincial politicians carried out in 2004-2005 to see what relationship politicians had with the Internet. This study was the first large-scale research project concerning politicians and the Internet in Belgium to investigate their electronic communication activities with citizens. It was the result of a questionnaire sent out to all 1 251 politicians with published email addresses at the federal, regional, community, and provincial levels, of which 31% (331)[12] responded. These were the main findings:

- 15.9% of 309 respondents claimed to use e-mail for two hours or more per week, rising to 33.3% claiming to spend between one and two hours responding to or writing e-mails. Only 5.5% of those respondents left emailing to their assistants.
- **Citizens seldom use e-mail to contact politicians:** 34% of 306 respondents to the survey claim to receive between one and 10 emails per week from citizens. Only 9.5% of 306 respondents receive more than 100 e-mails per week from citizens.
- Regarding use of the Internet for information gathering or participation in online forums, only 11.1% of 305 respondents claimed to use the Internet for more than two hours per week.

In comparison, other countries where surveys have taken place show a much higher average usage of ICT by parliamentarians.[13] For example, 80% of Danish parliamentarians spend more than two hours per week using the Internet. Closer to home, 63% of Dutch parliamentarians spend more than two hours on the Internet per week, according to the survey, which was carried out in 2001/2002. This led the authors of the Belgian study to the conclusion that: "the Internet is clearly not a 'Greek agora' for Belgian politicians", and is therefore not used as a space for deliberation or discussion of political issues by politicians. These figures lead to questions about the current demand for e-democracy activity in Belgium, and also about why the demand is so low. At the political level, there needs to be some "soul searching" to see whether there is interest in moving to a democracy that incorporates some of the interactive aspects of ICT.

Outputs and Outcomes – Proposals for Action

- Belgian governments could consider strengthening the strategic and operational linkage between administrative simplification and e-government activities. Even though some Belgian governments are in the process of organizing themselves in that direction, the governments need to jointly decide whether the necessity indeed exists to combine these areas in order to achieve higher user awareness and satisfaction. The focus on administrative simplification could eventually result in a simpler and more transparent Belgian public sector.
- Belgian governments could jointly agree on and implement a common concept for monitoring and evaluation of user needs including how this information can be systematically considered in the design, development, and implementation of e-government services by the government. As part of a joint concept for monitoring and evaluation, a common "user charter" could be developed and used as a tool for dialogue, as well as the basis of a framework for monitoring and evaluation activities; this could include becoming the foundation for a broader value-based discussion among e-government responsibles within the public sector as a whole.
- Belgian governments could consider to acquire a systematic basis on knowledge of user needs and channel this knowledge into the design and development of targeted e-government services, with the purpose of making these services more attractive to users and more adapted to their true needs. This would also strengthen communication with users and make them aware of the services and how they can benefit from using them.
- Belgian governments could consider whether strengthening electronic participatory initiatives could be an incentive to provide an e-government service that engages citizens and thus contributes to an increase in user take-up of other e-government services. A participatory approach could also be an alternative and more sustainable communication channel with politically engaged citizens, and a way for governments to broaden the possibility of informed dialogue with citizens.
- A joint and co-ordinated e-government communications and marketing effort by all Belgian governments together could help increase awareness in the Belgian population and motivate citizens to use e-government services provided by the different public authorities in each of the Belgian governments. Likewise, a targeted e-government communications and marketing effort could be considered within each of the Belgian governments to ensure that common visions, strategies, and values for e-government are effectively communicated in the public administrations themselves.

Notes

1. OECD (2005), *e-Government for Better Government*, Paris.
2. Le secrétaire d'État à l'informatisation de l'État (2005), *Fed-e-View/C*, Brussels.
3. These are: Parliament of the Flemish Community and Region, Parliament of the French Community, Parliament of the German-speaking Community, Parliament of the Walloon Region, The Brussels Regional Parliament.
4. *http://democratie.senat.be/*, accessed 28 February 2008.
5. See, for example: C. Alexander and L. Pal, *Digital Democracy – Politics and Policy in the Wired World*. (Ontario: Oxford University Press, 1998); B. Barber, "The New Telecommunications Technology: Endless frontier or the end of democracy?" *Constellations*. Vol. 4, No. 2 (1995), pp. 208-28; D. Barney, *Prometheus Wired: the hope for democracy in the age of network technology.* (Chicago: University of Chicago Press, 2000); K. Laudon, *Communications Technology and Democratic Participation* (New York: Praeger, 1977); R. Tsagarousianou, D. Tambini, and C. Bryan, *Cyberdemocracy: Technology, cities and civic networks.* (London: Routledge, 1998)
6. P. Hirst, "Democracy and Governance", in J. Pierre, ed., *Debating Governance: Authority, Steering and Democracy* (Oxford: Oxford University Press, 2000), p. 13.
7. Roland Van Gompel, Jo Steyaert, Hugo Kerschot (2007) E-democratie in Vlaanderen: Stakeholderanalyse, vIWTA, available at *www.viwta.be/files/viW TA_E-democratie_Eindrapport%20stakeholdersanalyse_drukversie.pdf*, last accessed 28 February 2008
8. *http://europa.eu.int/comm/public_opinion/archives/eb/eb63/eb63_exec_nl.pdf*, also supported by the statement at the OCED Ministerial Conference: "Strengthening Trust in Government: What Role for Government in the 21st Century" by the Chair Alexander Pechtold, Minister for Government Reform and Kingdom Relations in the Netherlands, 28 November 2005. *www.oecd.org/document/5/0,2340,fr_2649_201185_35760965_1_1_1_1,00.html*.
9. OECD (2005), *E-Government for Better Government*, Paris.
10. De Vuyst, B., A. Fairchild (2005) "Experimenting with Electronic Voting Registration: The Case of Belgium", *Electronic Journal of E-Government*, 3(2): 87-90.
11. Steyaert, J., R. Van Gompel (2005), "Het Internet, klikt het met de Belgische politici? De resultaten van een onderzoek naar de houding tegenover en het gebruik van Internet door politici op federal, regional en provincial niveau." Indigov: Leuven. *www.indigov.be/attachments/1176976656042/Indigov_Research_Reports_Politici_en_Internet_02_2005.pdf,* accessed 28 February 2008.
12. Research was launched on 9 December 2004, finished on 10 January 2005. In total, 331 politicians participated in the research (64% male, 36% female; 68.6% Dutch-speaking, 31.4% Francophone). The questionnaire was delivered by email to the 331 respondents.
13. Hoff, J. (2004), "Members of parliaments use of ICT in a comparative European perspective", Information Polity, 9(1-2), pp. 5-16.

CASE STUDY 1

National Digital Inclusion Framework in Belgium

All Belgian governments have recently launched a national, collaboratively agreed action plan to address the digital divide challenge. This 2006-2010 National Action Plan defines 28 actions corresponding to three action lines (awareness, training, and access). The underlying policy goal is the reduction of the digital divide by one-third by 2010.

To reduce the digital divides in Belgium and to increase take-up of Internet at home, all Belgian governments have actively diffused technology to individuals, households and businesses. Strategies of the different governments appear to tackle the issue of the digital divide in different ways, with each activity being monitored for success, and possible replication in different governments.

For example, the Flemish government has set up a region-wide project, *eFl@nders*, to stimulate the use and acceptance of ICT by both individuals and businesses, through various **action projects and campaigns**.

The Government of the Walloon Region has launched **training programmes** to improve diffusion of ICT to people aged 50 and over. It also introduced the "Digital Public Spaces" programme, which enhances municipalities' efforts in providing free Internet access in public locations such as town halls.

The French Community has launched a **computer and Internet equipment plan for schools** for the coming five years. The federal level has wider range of actions aimed at raising awareness and promoting access to and usage of ICT; these include the "Internet for All" initiative, which offers financial incentives for buying computers, facilitates access to computers and the Internet in public places, and the re-use of outdated computers from the public administrations.

The Brussels-Capital Region has placed the emphasis on **providing computers and Internet connections in schools** and has recently investigated

the possibility of implementing a **freely accessible wireless network** throughout the region, starting with a pilot project on the Brussels university campuses. In addition, the Brussels-Capital Region's "Plan Multimédia" has been underway for a few years. The plan's main aim is to equip all school in the region with broadband Internet connections via Irisnet. In addition to infrastructure, the "Plan Multimédia" covers Internet connections and their instalment, the technical equipment needed for broadband (*e.g.* modems), payment of broadband fees during three years, and a helpdesk.

At the federal level, there are also several activities taking place:

- Belgian citizens can buy an "Internet-for-All" computer package. The price of EUR 850 includes a PC, card reader, software, four hours of training and a year's worth of broadband Internet access. In addition, those who buy the package will get back the Value-Added Tax (a maximum of EUR 147.50 for a PC and EUR 172 for a laptop) via a tax credit.[1]
- The national "Gingelom project" addressed recycling of computers in Belgium. This voluntary co-operative agreement between local companies and primary schools enables children to borrow refurbished computers for one year, in order to develop their computer skills.[2]
- The Minister of Employment's "Euthenia", plan proposes future co-operation between the federal government and the ICT sector. Its aim is to raise awareness among young people, parents and teachers about ICT professions and the role of ICT as an economic enabler. Euthenia proposes: internships in ICT departments of administrations, presentations by ICT experts in schools, and visits of school classes to ICT companies.[3]
- In order to use many e-government services, an eID card reader is necessary; yet in October 2006, only 15% of internet-using eID card holders have a reader at home.

Impacts of digital inclusion policies

Sixty per cent of Belgian households have access to the Internet at home, according to Eurostat data from 2007, compared to 50% in 2005.[4] It has been estimated by the Federal Government that 20% of the increase in Internet use at home has been made possible by the 'Internet for all' package, described above.

The success within the realm of Digital Inclusion efforts by the Belgian governments can be attributed to the following factors.

Critical success factors: Successful activity at the national level, with stimulation from the European and international arenas

The Digital Divide has been a high political priority across most of the world, notably with the discussions surrounding the World Summit on the

Information Society at the turn of the century. Furthermore, in the European Union, member states signed up to the Riga Declaration on e-Inclusion in 2006. Belgium has taken this debate onboard, and has included many of the global objectives in their 2005 National Action Plan.

Critical success factors: Use of bottom-up initiatives

The French Community and the Flemish Government, as well as the Brussels-Capital Region have supported the Internet Days. These are just one example of how local initiatives have been supported by the regional and community governments, with positive effects on introducing and improving beginners' knowledge of the Internet and other ICTs.

Furthermore, the National Action Plan is monitored by an independent and external Group of Experts as well as a Committee responsible for following the implementation of this plan: this Committee is comprised of local actors, including associations and local governments, who are able to submit their opinions on the process of countering the digital divide.

Critical success factors: Clear framework

The National Action Plan has been based on three specific fields of Awareness, Training, and Access. The clarity of this framework has enabled success to be monitored and evaluated in these different areas. This has also enabled international comparison to take place.

Lessons learned:

The key lessons learned with respect to digital inclusion in Belgium are:

- Clear political support at the highest levels is important to the successful implementation of national and regional action plans for digital inclusion.
- Partnerships between business, civil society organisations and government in the different areas of awareness, training, and access need to be developed.
- Regional and community governments have been able to find the most culturally appropriate methods for defining their own actions in the field of digital inclusion, whilst drawing on the benefits of action at the federal level.
- There have been challenges relating to the promotion of digital inclusion in general in Belgium, which are notable due to the lack of sufficient co-ordination of publicity at the national level, which is again related to the exclusivity of mandates.

Table CS1.1. **Selected digital inclusion policies according to policy priorities: awareness, training and access**

	Awareness	Training	Access
Federal government	Colloquium "pratiquer l'e-inclusion" to prepare the national action plan to reduce the digital divide	N/A	PC privé (tax exemption for employees acquiring PCs via their employers Public Access Points EPN "easy-e-space": offering free Internet access to the general public on re-used Pcs ADSL Light (broadband at low price initiative) Pingo project: promotes free software in public services
Flemish government	Action plan "Digital eFl@nders" including the awareness campaign "Hallo Vlanderen" and the newsletter "Kenniswijzer eFl@nders" on latest ICT developments Centralised data collection on the "Information Society" for digital-divide-related information *Cultuurweb.be* provides free access to cultural information to the general public	Networks of regional ICT expertise for teachers, regrouped in the centre of expertise "REN Vlaanderen" Action plan of the VDAB for the development of ICT competences for professional use Basiceducatie program offering, among other trainings, basic ICT training for target groups with low levels of education	Investment in digital television through TV Vlaanderen (digital satellite TV), Belgacom (through telecommunication system), Telenet and Interkabel (via traditional cable) and VRT (via airwaves) Free software for schools: programme "Klascement"
Walloon Region	Creation of the Walloon Agency for Telecommunications (AWT) regularly launching communications campaigns on access to and use of ICT "Citoyens d'Internet" project of the Walloon Region aiming at increasing e-democracy and e-participation	Cyber-classes and cyber-schools projects "Plan mobilisateur TIC" for *job seekers* Minitic: basic ICT courses provided by the FOREM Creation of four competency centres open to the general public Pedagogical CD-ROM for seniors provided by the AWT	"Employment busses" equipped with ICT circulate in the provinces of Luxembourg and Namur Recycling of the public administration's PCs Promotion of Public Internet Access Points (EPN)
Brussels-Capital Region	Plan AFECT (Accessibilité, formation, emploi et économie sociale, culture citoyenne et technologie durable): a strategic tool to reduce the digital divide	Collaborations with more than 130 partners (CPAS, training providers, etc.) REP (Réseau bruxellois des Plates-formes locales pour l'emploi) electronically links employment platforms that provide support for online job applications	So-called "i-pillars" (kiosks) are being installed throughout Brussels to provide Internet access and access to e-government and other information services and enable users to print out job offers Plan Multimédia for schools Recycling of the public administration's PCs
French-speaking community	Portal *Culture.be* provides free access to cultural information to the general public Equipment for youth centres and libraries and the project "quartiers libres" aim at awareness raising among youth	"Animatuer medias" training provided by the Audiovisual Centre of Liège	Strategic plan on integration of ICT in schools

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Table CS1.1. **Selected digital inclusion policies according to policy priorities: Awareness, training and access** *(cont.)*

	Awareness	Training	Access
German-speaking community	N/A	Participated in "cyber classes" Information server "learn box" provides for online support to school teachers in ICT-related matters	Recycling of the public administration's PCs
Collaborative actions	French-speaking community, Walloon Region and federal government: yearly awareness-raising event "Fête de l'Internet"		Federal government and federated entities: project I-line offers low-price Internet access for schools, libraries, hospitals

Table CS1.2. **Actions of the national action plan against the digital divide by policy priority: awareness, training and access**

Awareness

- Awareness-raising campaign using traditional media
- Development and distribution of an awareness-raising DVD including basic training opportunities
- Paper-based ICT guides for the general public
- Awareness campaigns around the themes of security of and confidence in ICT
- Creation of a dynamic database on all digital divide initiatives

Training

- "Zero tolerance" for digital divide in schools
- One-PC-per-15-students target
- Strengthened ICT educational networks for teachers
- Development of an auto-training tool (such as the DVD, point 2)
- Exchange of training experiences and good practices
- Generalisation and intensification of ICT trainings for job seekers
- Implementation of an ICT competencies tool for the recognition of competences

Access

- More Public Internet Access Points (PIAPs)
- Cartography of PIAPs
- Promote the "Pack EPN" solution of ICT equipment for PIAPs
- Encourage the creation of an "Internet for All" package (including a PC, easy-to-use software, security programmes, broadband connection, a card reader and ICT training)
- Further promote the use of home PCs among employees
- Favour multi-channel government, especially exploiting digital television opportunities (IDTV)
- Stimulate creation of citizen-focused online services
- Recycle the PCs of public administrations

Transversal actions

- Inform population about dis/advantages of different software
- Maintain traditional channels of service access
- Pay specific attention to each target group in the digital divide barometer and conduct other monitoring
- Undertake detailed study of the causes of first and second grade digital divide in Belgium
- Support third parties' efforts to reduce the digital divide
- Create a best practices guide on ICT access for handicapped people
- Generalise the BlindSurfer label
- Creation of a support fund for specifically targeted actions to reduce the digital divide

Notes

1. Accenture (2006), "Leadership in Customer Service: High Performance in Government", *www.accenture.com/xdoc/en/industries/government/acn_2006_govt_report_FINAL2.pdf*, p. 65, accessed 28 February 2008.
2. Accenture (2006), "Leadership in Customer Service: High Performance in Government", *www.accenture.com/xdoc/en/industries/government/acn_2006_govt_report_FINAL2.pdf*, p. 65, 20 August 2007, accessed 28 February 2008
3. Ministre de l'Emploi (2007), "Note de politique générale 2007: Partie informatisation", *www.belgium.be/eportal/ShowDoc/kabinet_egov/imported_content/pdf/Note_strategique_de_l_informatisation_2007.pdf?contentHome=entapp.BEA_personalization.eGovWebCacheDocumentManager.fr*, p. 11/1220 August 2007, accessed 28 February 2008.
4. Eurostat data, *http://epp.eurostat.ec.europa.eu/*, accessed 28 February 2008.

CASE STUDY 2

The Crossroads Bank for Social Security (CBSS)

The social security system in Belgium is complex, involving over 2 000 public sector bodies that deal with collecting contributions, delivering benefits (such as unemployment, holiday pay, health care reimbursement, old age pensions) and determining supplemental benefits. These institutions are spread across all types of governments – federal, community, regional, provincial and municipal.

This large system was suffering from the lack of a well-co-ordinated service delivery and information management process, resulting in significant administrative burden for agencies and users, a low level of service to users, sub-optimal social protection for citizens, and higher possibilities for fraud.

In 1989, the Belgian government launched a major overhaul of the social security system, combining a re-organisation and integration of back-office processes with user-focused e-services. The goal was to implement one-time data collection from employers and citizens, reduce administrative burdens and allow users to access integrated services from a single point of entry. This was achieved through the creation of a network that links and integrates agency back offices, permitting social security actors to share information and simplify transactions.

A main component of the re-organisation was implementation of a communication model to pool information available throughout the many social security agencies. All structural information processes related to social security have been assigned to a co-ordinating body, which keeps a directory of which agencies possess what information and routes information requests to the proper source – rather than collecting and storing data itself. It also provides common formats for data and information, to ensure that all queries and responses are compatible and can be handled quickly. This agency is the Crossroads Bank for Social Security (CBSS).

The Crossroads Bank for Social Security (CBSS)

The Crossroads Bank for Social Security was created in 1990. The CBSS helps social security actors offer services effectively and efficiently with minimal administrative burden, improving both processes and relationships among the different actors. CBSS promotes information security and privacy protection among social security institutions, and handles all policy initiatives aimed at improving social security policies and processes. CBSS offers a secure network utilising unique identification keys for citizens to manage 185 e-services (which have replaced nearly all paper-based information and data exchange).

The CBSS system interconnects the back-office applications across the many government agencies responsible for providing social security services in Belgium, utilising a publicly accessible and jointly agreed data model to collect, manage and exchange information and data in a standardised format.

The CBSS network is based on agreed formats on four levels: technical and organisational standards, authentication process standards, used notions, and instructions. By setting standards and gaining agency buy-in at the earliest stages of the process – and by making one agency responsible for setting and managing standards from the beginning – the CBSS created a system that is seamless and allows for easy information and data re-use.

Box CS2.1. **The Crossroads Bank for Social Security in figures**

- The Crossroads Bank for Social Security manages about 185 e-services (which have replaced nearly all paper-based information exchange).
- The social security system maintains more than 15 million citizen dossiers, each linked to an average of 8.02 social security agencies.
- Over 500 million messages were exchanged on the CBSS network in 2006, and the cost of the transactions was less than EUR 0.5 per message.
- 50 social security forms have been removed due to the CBSS.
- Response time for inter-agency information requests has been reduced from weeks to seconds.
- In 2006, enterprises communicated 17.8 million declarations to social security actors electronically (which accounts for 98% of all declarations made).
- Eranova is consulted about 15 000 times per month and has significantly reduced burden on civil servants.
- According to a study of the Bureau Fédéral du Plan, administrative burden for enterprises has been reduced by an annual amount in excess of EUR 1 billion with implementation of the CBSS.*

* CBSS (2007), E-Government Program of the Belgian Social Security: Crossroads Bank for Social Security.

The Reference Register

The CBSS Reference Register is the key tool for routing all messages to the proper social security authority, based on agreed definitions and access authorisations across the social security sector. The Register includes three tables: available data (which agency holds data, and for what purpose); access authorisations (who can access what information); and directory of persons (which agencies have dossiers on individuals, and for what time period). The combination of information in these three databases allows each query to be routed to the appropriate agency, and eligibility for social services to be quickly determined.

Main components of the Reference Register are its unique approach to data modelling, information management system for once-only data collection, rigorous validation of data accuracy and quality, and information sharing of "first-source" information among agencies. Once this information has been collected and verified, it is stored electronically in the agency that has collected it and/or will be the principal user; electronic information exchanges are then initiated by other agencies, working through the CBSS system.

The Belgian Social Security Portal

The Belgian Social Security Portal[1] offers e-transactions, information about the social security system and available benefits, and a personal page for each employer in Belgium. The portal serves two target groups – individuals participating in the social security system and employers – and aims to provide users with personalised services.

Services for employers

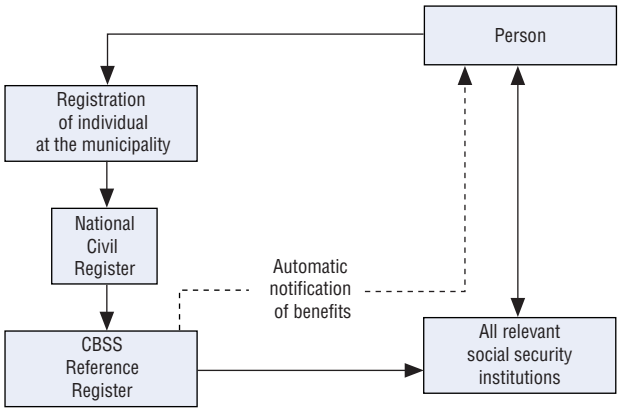
Belgian employers are required to declare hirings, staff changes, retirements, and other business "life events" each trimester; since 1990, they have been able to do so online through the social security portal. This has reduced administrative burden and errors for government agencies, allowing many staff within the social security sector to be re-assigned from data entry to other tasks.

In 1999, the DIMONA system was introduced on the portal; it allows employers to electronically notify social security actors at the beginning and end of employment relationships, reducing burden for both businesses and government. Finally, a multi-channel service support centre, Eranova, is integrated into the portal and available 24 hours per day, seven days per week. It accepts queries via phone, e-mail, or fax, and tracks all queries. Frequently asked questions are then posted on the portal.

CBSS workflow

The following example of a CBSS workflow demonstrates how an individual's rights to benefits from the different social security institutions at the local, regional, or federal levels in Belgium are determined. After an individual registers at the municipality level, their information is entered into the national civil register, and then updated in the CBSS Reference Register. A message is then submitted to all relevant social security institutions to ensure that the information they hold is correct and timely. The CBSS system then automatically notifies individuals of the benefits they will receive.

Figure CS2.1. **Example CBSS workflow**



Impacts of the CBSS

The CBSS has had a major impact on improving service delivery to both public officials and citizens in Belgium. It has increased efficiency, and reduced costs due to once-only information collection, fewer contacts required for execution of services, task-sharing, reduced administrative burdens, and faster processing of queries and service requests. The overall level of social protection has been improved, with citizens being informed directly of benefits they are entitled to when their situation changes. Because the reference database cross-checks the information collected by different agencies, there is less room for errors in the system. This has increased the level of fraud protection.

The success of CBSS can be attributed to the following factors.

Critical success factors: Legal framework

The CBSS was created with a **very strong legal mandate** at an early stage of Belgian e-government development, in the early 1990s. The same law that

created CBSS mandated electronic data transactions. The principle of "deliver once, use multiple times" and the use of authentic sources were also required by law.

The CBSS is led by a **board of stakeholders** comprised of its own users – the federal social security institutions. The board-like governance structure of the CBSS was defined in the law that created the institution in 1991. The board of stakeholders was successful in ensuring user focus throughout the Belgian social security landscape by ensuring that BPR (Business Process Re-engineering), administrative burden reduction and service development happen as parallel processes.

Critical success factors: Privacy and security

Trust and confidence in the privacy and security mechanisms of the CBSS have been key aspects in the CBSS's success. With regards to **privacy**, a flexible authorisation mechanism has been put in place (*régime d'autorisation*). The sectoral committee for the CBSS of the Belgian Privacy Commission authorises data exchanges and ensures that the principles of finality and proportionality are respected.

With regards to **security**, the eID provides secure identification and authentication for e-enabled social security applications. Importantly, the CBSS does not store any data itself, but only saves information in its Reference Register. Further, every transaction goes through an *ex ante* control of legitimacy.

Critical success factors: Budgetary framework

The Belgian federal government has two main budgets for social security: the federal budget itself, and the social security budget collected through membership fees.

Funds are allocated to the CBSS according to a contractual arrangement (*contrat d'administration*) between the CBSS stakeholder board and the federal government. The contract sets clear priorities for financing and provides significant autonomy to the CBSS as long as these priorities are respected. Hence, the CBSS is free of "political" interference in its operations. The development of applications is co-financed by participating entities, but data exchanges are provided for free.

Critical success factors: Integrated assessment and monitoring

The work of CBSS is continuously monitored through integrated indicators that measure message integrity, content appropriateness, exchange speed and performance, service availability, and security of

operations. A data warehouse system records 136 indicators, which are used to improve systems and performance, and for resource allocation decisions.

Future directions

The future goals of CBSS are to:

- Integrate more private organisations involved with social security service provision and more government agencies into the system.
- Provide a forum and data exchange platform in the system for information exchange between individuals and employers (rather than only between citizens and government, or employers and government).
- Increase use of electronic channels.
- Develop new services and more precisely target existing services.
- Integrate use of CBSS systems for electronic tax declarations.
- Develop a better-organised e-workspace that facilitates workflow between agencies.
- Foster and increase collaboration among levels of government to ensure that e-solutions are useful for all, and to implement data exchange among levels of government.

The impact of the eID card

By 2009, all Belgian citizens are expected to receive an electronic ID card containing a chip that will provide access to their data electronically. Through eID, different citizen data can be coded using different keys, ensuring that affected agencies have access only to appropriate data for their purposes; for example, health providers will be able to access medical information, but not information about citizens' employment histories. Widespread penetration of the eID card will enable more users to make use of the facilities provided through the development and enhancement of the CBSS.[2]

Lessons learned

Working with a clear mandate from the national government, the CBSS has successfully reinvigorated the Belgian social security system. Given the complexities of the institutional framework, the establishment of an electronic infrastructure to deal with the Belgian social security system was challenging; however, all parties co-operated in implementing a solution that works effectively across all governments and agencies.

- Clear political support at the highest levels was important to the successful implementation of CBSS.

- CBSS developed a long-term vision, including a strategy of "quick wins" to maintain political support across electoral and budgetary cycles.
- The ownership of the entire process was given to one specific organisation, which provided accountability and ensured that inter-agency discussions did not delay the implementation procedure.
- The codification of the CBSS vision in regulation and legislation provided the crucial framework for co-operation among agencies, and also between agencies and citizens and businesses.
- The CBSS has also been successful because it uses existing systems, rather than developing new ones.

Notes

1. *www.socialsecurity.be/*, accessed 28 February 2008.
2. Further cases can be examined at *http://eid.belgium.be/fr/navigation/documents/45826.html*, last accessed 28 February 2008.

CASE STUDY 3

Administrative Burden Reduction in the Governments of Belgium

Reducing administrative burdens has been a central goal of many countries' e-government programmes, as administrations seek to use e-government and other ICT to help reduce costs for government, businesses, and citizens.

All governments in Belgium have made efforts towards administrative burden reduction.

Federal Government

In 1998 the Belgian Administrative Simplification Agency (ASA) was created as a new federal institution under the responsibility of the Prime Minister, with the mandate of reducing administrative burden by 25% within four years. Several programmes have been launched to help achieve this goal, including:

- The Copernicus programme was established in 1999 to carry out the objectives of the ASA. It involved a large-scale restructuring of the ministerial architecture in the federal government. This was completed in 2003, and succeeded by Kafka.
- The Kafka project followed a different approach than Copernicus. The Belgian government launched *www.kafka.be* in December 2003 to serve as a focal point "where citizens, businesses, organisations and civil servants can suggest projects and ideas for cutting red tape".[1] The website was open until 31 March 2004; it received over 3 800 proposals and was visited 220 000 times.[2]

Since the end of the Kafka project, administrative burden reduction efforts at the federal level have resulted in total estimated savings of over EUR 200 million.[3] Administrative burden reduction efforts at the federal level are focused on the following processes:

- Starting up a business.

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- Re-use of information.
- Reduction of administrative burdens for the road freight sector.
- Development of the Standard Cost Model for measuring administrative burdens.
- Creation of an "e-depot," where transactions via a notary can be processed electronically.[4]

After the success of the Crossroads Bank for Social Security (see Case study 1), the Belgian government launched the Crossroads Bank for Enterprises which provides a reference database for information in the register of businesses in Belgium. Established by law in 2003, the Crossroads Bank for Enterprises gave each business in Belgium a unique reference number which enables different administrations to gain access to information concerning the businesses. This eliminates of the need to submit data multiple times. The following data is referenced in the Crossroads Bank for Enterprises:

- The registration number.
- The name of the business.
- The legal form.
- The registered addresses.
- The legal situation.
- The creation and/or cessation date of the business.
- Information about the founders and key individuals.
- The economic activities carried out by the business.
- Other identification data required by law.
- Details concerning licenses and authorisations accorded to the business.
- Reference to documents concerning the legal entity registered with and annual accounts submitted to the Belgian National Bank.[5]

A website containing information about all the administrative burden reduction efforts at the federal level can be consulted at *www.simplification.be* in French and *www.vereenvoudiging.be* in Flemish.

The Flemish Region

The Flemish Government has prioritised the reduction of administrative burden, creating a unit devoted to "cutting red tape". This unit (*Dienst Wetsmatiging*) has seven main tasks: policy support, co-ordination, sharing expertise, quality control, enhancing participation, motivating and encouraging development, and establishing a channel for providing feedback to the public administration.

Sixty-two projects have been executed since the creation of the unit, 40 of which were directly concerned with reducing administrative burden for the public administration, citizens, and businesses. Other projects have dealt with legal simplification, and Regulatory Impact Assessment.

Since 2005, the Flemish government has applied a "compensation rule", which mandates that any increase in administrative burdens due to new policies must be countered by a corresponding decrease in a different area. This measure aims to ensure that the general cost of administration does not increase across the board in Flanders.

The Walloon Region

In 2002, the Walloon government established the *Commissariat à la Simplification Administrative*, which was charged with reducing administrative burden in the government. This was merged in 2005 with the *Wall-on-line* programme to create the *Commissariat à l'E-Administration et à la Simplification*. EASI-WAL established an Action Plan for 2005-2009, which covers 22 themes with 180 proposed actions.[6]

Notable examples of administrative burden reduction in the Walloon Region include *http://formulaires.wallonie.be/*, a portal for online forms that enables users to create a username and password to log in to their own personal space, and to check on their history and the progress of forms being processed.

The Walloon government Action Plan also provides for a high level of communication, such as promotion of some activities through publicity spots on the radio. Throughout 2006, the regional government also provided training sessions for interested citizens and, more importantly for ABR, public administration employees on subjects ranging from designing effective websites to creating effective forms. Regular workshops are also presented to help public administration officials become accustomed to the administrative simplification process.

The Walloon government has also created five methodological guides intended for use by public administration officials, and two best practice guides.

The administrative burden reduction efforts in the Walloon Region have resulted in:

- The simplification of 79 of 454 forms available online.
- The creation of 89 interactive forms, 11 of which are completely integrated into the back office and one fully transactional form.
- The integration of some information from the region on the websites of the Marche, Gesves and Houyet municipalities, and the Province of Liege.

The Brussels-Capital Region

In the Brussels Region, the Brussels Region Informatics Centre (BRIC) has acted as a central point for all 19 municipalities in the region, facilitating the deployment of administrative documents online. Through the NOVA project, citizens can follow urbanisation permits through an online channel. The regional administration has also made efforts to simplify the application and awards process for grants for renovating housing in Brussels.

The Brussels Region also has the Brussels Enterprise Agency (BEA)[7] which assists companies in starting up in the region. Two services – one concerning economic subsidies, and the other concerning the promotion of industry and innovation in technological domains – were merged to create the BEA in 2002.

In summary, administrative burden reduction has been one of the key elements of the Belgian e-government programme, across all governments. This has concentrated on three key areas:

- Simplifying the number of forms that exist for services.
- Developing initiatives aimed at improving the communication of these simplified services to citizens, businesses, and civil servants.
- Ensuring that legislative and regulatory activity is in line with administrative burden reduction developments.

Impacts of administrative burden reduction

The impacts of these efforts have resulted in an overall reduction of administrative charges of EUR 1.7 billion in Belgium, with 214 laws and regulations either simplified or eliminated by March 2007.[8]

The success of the ABR efforts by the Belgian governments can be attributed to the following factors.

Critical success factors: Interaction between different levels of government

Kafka, and similar initiatives have been able to work across different levels of government, due to the political mandate given to the initiatives. The "Kafka Test", developed at the federal level, has been applied to all documents submitted to the Walloon Region Government for first reading.[9]

Reducing Administrative Burden has been a priority across all levels of government, and therefore interaction between the levels was easy to achieve.

Critical success factors: Clear measurement techniques

The ability **to measure the reduction in administrative burden** in quantitative terms has provided of benefit to the entire project.

Measurements have been carried out by different governments, and have enabled tracing of the positive benefits of these reductions in administrative burden. The Flemish government's use of Regulatory Impact Analysis (RIA) has also proved beneficial in their particular context.

Critical success factors: Clear identification of issue areas

Through the Kafka initiative, the Belgian Federal government invited individuals to submit areas where "Kafkaesque" situations arose; this enabled the government to easily identify the issue areas and undertake changes where possible.

Lessons learned

There has been substantial monitoring activity in the field of Administrative Burden Reduction in Belgium, in the Flemish and Walloon Regions, as well as at the Federal level. Lessons learnt have included the following:

- Many solutions for administrative burden reduction involve the use of electronic means of communication.
- The various initiatives that have been put into action at all levels of government in Belgium are continuous and ongoing.
- Although the ownership of the tasks concerning ABR are divided across the governments, work to reduce administrative burdens is being done where it is most necessary.

Notes

1. Cordova-Novion, C. and S. Jacobs (2004), *Regulatory Management and Administrative Simplification in Belgium and Flanders*, 29 May, p. 24, *www.regulatoryreform.com/pdfs/regmanadminsimpbelgflan.pdf*, accessed 28 February 2008.
2. Industry Canada (2006), "Paperwork Burden Reduction Initiative – Regulatory Burden: Reduction and Measurement Initiatives", 30 August, *http://strategis.ic.gc.ca/epic/site/pbri-iafp.nsf/en/sx00072e.html*, accessed 28 February 2008.
3. *www.simplification.fgov.be/showpage.php?iPageID=649*, accessed 28 February 2008.
4. *www.simplification.fgov.be/showpage.php?iPageID=2982&sLangCode=*, accessed 28 February 2008.
5. *http://mineco.fgov.be/enterprises/crossroads_bank/Faq_fr.htm#P23_1765*, accessed 28 February 2008.
6. Région Wallonne (2007), "The Walloon Experience: Administrative Simplification and e-Government Workshop", 22 February 2007, Lisboa. Accessed: *www.oecd.org/dataoecd/22/26/38301395.pdf*, 31 July 2007. See also *http://easi.wallonie.be/easi/col_gauche_niveaux_fr/e-gouvernement-simplification-et-lisibilite/contexte-en-region-wallonne/index.html?LANG=fr*, accessed 28 February 2008.

7. The Brussels Enterprise Agency, *www.abe-bao.be/Start.aspx*, accessed 28 February 2008.

8. Kafka (2007), "Kafka does work", *www.kafka.be/doc/1173428418-9504.pdf*, last accessed 29 January 2008.

9. *http://easi.wallonie.be/easi/col_gauche_niveaux_fr/la-wallonie-vous-simplifie-la-vie/chiffres-cles/index.html?LANG=fr#65_tests_Kakfa_r%E9alis%E9s_depui*, last accessed 29 January 2008.

CASE STUDY 4

Electronic Identity Card

One of the essential building blocks in e-government is the possibility of establishing an individual's or a judicial entity's identity electronically. Different OECD countries have approached this key problem in different ways: an increasing number of European countries like Finland, Estonia, and Portugal have national programmes issuing electronic ID cards using secure chip card technology; other OECD countries like Denmark and Sweden issues digital signatures based on "soft certificates".[1] Belgium has decided to issue a chip-card technology-based national electronic ID card solution – *an eID card* – with the aim of providing all Belgian citizens above the age of 12 with such a card within period of 2005 – 2009. This Case Study will describe the Belgian eID project and the experiences gained.

Context

The Belgian Electronic Identity Card (eID Card) programme was launched in October 2002 and from the beginning, the Belgian approach was to roll out the eID card in order to drive demand for electronic services before developing concrete applications. As of today, about 5 million eID cards are in circulation; all citizens over 12 years old (over 8 million people) are expected to have eID cards by 2009.

In many OECD countries, simple but well-known methods (such as user ID and password and PIN codes) were introduced for electronic authentication and identification first. By consequence, user identification often remained a barrier to communication and transaction services, although evidence also showed that once more sophisticated methods were employed (such as digital signature or smart cards), they were often rated as just as easy to use as the more well-known methods.

The owner of the card is free to activate the digital signature certificate on his new ID card. Like it is the case today, it is the municipalities that verifies the identity and issues the new ID cards.

Actors

The eID is currently operated and maintained by Fedict and the Federal Ministry of the Interior. The eID is an example of the Belgian approach to build on previously developed best practices: an authentication system based on unique identification keys originally developed in the National Register is now used as a generic e-authentication key throughout the Belgian public sector.

Drivers and challenges

Benefits of the eID cards for both users and public administrations are that data collection is done at the source in one process, and is thus quicker and more accurate and that the total time for processing information decreases. Despite the constitutional challenges for developing and implementing e-government within a common public sector framework, the implementation strategy of Belgian governments of offering concrete e-government components or building blocks like an ICT security infrastructure supporting a common public sector eID card has though not yet paid off in an increase of user takeup of e-services provided by public authorities. Also, currently available applications have not yet generated the expected awareness and demand around e-services (see also Chapter 6).

In creating the eID card programme, special attention has been given to security and integrity of information exchange.[2] For example, the use of the private key portion of the eID card can only be accessed with a PIN code, and the physical card stores only a minimum of personal information to protect the holder's privacy in the event that the card is lost or stolen.

Another key issue for implementing the eID card programme was to create the appropriate legal and regulatory framework to allow data sharing and use of the electronic identities in online transactions; the Belgian governments adopted EU Directives to its national context where they existed, and created Belgium-specific measures in the absence of EU regulation. The ADAPID (Advanced Applications for electronic Identity cards in the Flemish Region) project officially started 1 July 2005, was aimed at making the next generations of Belgian eID cards more compatible with the privacy rights of citizens. The eID programme includes a significant communication focus. Through the design and implementation process, the federal government has constantly communicated with citizens, businesses, and government officials at all levels and types of government. A key tool has been the eID programme website.

Services

The eID card provides citizens with an electronic identity that allows them to access a number of government and private-sector services, utilising

e-authentication and digital signatures using an ICT security infrastructure or *Public Key Infrastructure (PKI)*. By enabling e-authentication and digital signatures the eID card enables transparent and secure access to e-services offered by many levels of government, and facilitates e-commerce and legally binding online transactions. Examples of services that can be accessed using the eID card are online filing of income tax returns, scheduling medical appointments, e-voting, applications at municipality level and the opportunity to register vehicle online.

In Belgium, eID cards contain both visible and electronic data. Visual information includes: national identification number, basic identification data, address, photograph, written signature, period of validity, place of issue. eID cards integrate an embedded chip that performs basic cryptographic operations, and is protected with a PIN code. Information on the chip includes: national identification number, identity card number, serial number, address, photograph, a private key that can be used for electronic authentication (with a PIN number), and a private key that can be used to deliver a legally binding electronic signature (also with a PIN code). In developing the eID card, the government was careful not to create the impression of a "big brother" card that could be used to gather information on individuals.

The eID card's functions are threefold:

- **Efficient consultation and transfer of identity details:** by inserting the card in a card reader the party consulting the details has faster and easier access to them; also, the details are guaranteed to be correct.
- **Authentication:** for every application or website for which a user needs to prove his or her identity, the eID is a universal way to do so in a secure way. Authentication via the eID is PIN code protected to ensure high security standards, even when the card is lost.
- **Electronic signature:** the eID card enables the cardholder to put a legally valid signature under electronic documents. As with a written signature it gives the document authenticity (*i.e.* it is actually the cardholder who signed it), integrity (*i.e.* nothing has been changed in the document since the cardholder signed it) and irrefutability (*i.e.* the card holder cannot deny that he or she was the person who signed the document).

When citizens take advantage of e-services using their eID cards, their personal information is available for exchange among government agencies; this allows once-only data provision by users of government services. In creating the eID card programme, special attention has also been given to security and integrity of information exchange. For example, use of the private key portion of the eID card can only be accessed with a PIN code, and the physical card stores only minimal personal information, to protect the holder's privacy in the event that the card is lost or stolen.

The portal *eid.belgium.be* offers information for three key user groups of the eID card: citizens, businesses, and municipalities.[3] The website is available in Dutch, German, French, and English (limited content). The home page includes a number to call in the event of a lost or stolen eID card, and a twice-yearly newsletter with information about the programme.

The citizens section contains all information that will be useful to citizens in using their eID cards. The site explains how citizens can use the card to prove their identities, both in person and online, and describes applications for which the eID can be used – such as requesting and sending information, creating e-signatures, and accessing e-services. It describes advantages of using eID including the ability to transact with the government 24 hours per day and 7 days per week and to fill in online forms. Practical information includes procedures for using eID cards – which are valid for five years and renewed automatically – and how to set up a home computer for eID use. There is a section including frequently asked questions.

The businesses section focuses on how to develop applications using eID, and provides statistics about eID takeup and advantages of participating in the system. It includes frequently asked questions, privacy and security information, and technical details about how to develop applications. Online toolkits are also available. Concrete examples are provided, such as how to use eID to replace or supplement face-to-face client service, for client contacts, and for physical and online access to information. Targeted business sectors include car and tool rental, banking, ticketing, direct client contact, and teleworking.

The municipalities section offers information to help municipalities fulfil their main roles regarding eID – verifying citizen data and delivering eID cards. The site details the progressive distribution process for the cards: signature of a "covenant" between the municipality and the federal government, adaptation of existing networks and applications, pilot testing, training for municipal officials and civil servants, and full implementation. It includes instructions for distribution of the cards and for e-authentication and digital signature processes. Toolkits and technical specifications are also included.

One notable example of an application for sharing data and documentation is available at the federal level. *Digiflow* is an application that has been developed at the federal level to provide access to the federal base registers and databases. It is also used to facilitate document retrieval. The role of this application is to integrate data management concerning the base registers and authentic databases offered at the federal level. It provides the back-office support to the Belgian federal government's portal *www.belgium.be*, and is accessible to civil servants through that portal. Four

different levels of security provide different types of access to the application, ranging from public access to full access (requiring use of the eID card).

In 2006, this application has started to be rolled-out to regions and communities, with the aim of expanding use of it to municipalities. The Flemish Region has decided to adopt Digiflow to facilitate its access to the base registers and databases provided at the Federal Government.

International comparisons

The eID card in Belgium is the largest smart-card-based identity card programme in Europe; it is widely viewed as the benchmark for such programmes. The Belgium government has taken the lead in addressing international interoperability issues for eID cards; this includes respecting the sovereignty and technological choices of all member states.

Austria

The Austrian approach to electronic identity cards is quite different. Austria has defined a concept for electronic ID cards based on framework descriptions which only define the minimum requirements – and not a specific card or type of card. All kind of cards which fulfil these minimum requirements can be used as an identity card. These minimum requirements are based on legal framework in the Austrian Signature Act and E-Government Act, in the area of the data security, and the integration of the ZMR number5 for an unique identifier. Citizen cards must meet exactly the same criteria as all other cards, which are used in the framework of secure electronic signatures.

The breakthrough of the concept took place in the beginning of 2005 with the enrolments of new bank cards and new electronic cards for social security.[4] Because both of these cards are prepared for the use as Citizen Card, practically all Austrian citizens have a citizen card. The card reader is subsidised by the government so the cost for the citizens to get a card reader is low compared to the market price. According to the technology neutrality of the concept for citizen cards, there is another type of electronic identification which complt the authorised citizen card concept: a digital signature generated by an authorised high security IT centre to be downloaded on a mobile phone.

Estonia

To realise real savings from the implementation of e-services, both in terms of time and money a national ID card project was initiated in Estonia in 1998. A smart card-based ID card was introduced. The functions of it was twofold: personal identification and digital signatures. In 2001, the Parliament

established the electronic ID card as a compulsory identity document. The implementation of it actually meant establishing a new nation-wide ICT security infrastructure (Public Key Infrastructure – PKI) in Estonia in which the electronic ID card was a component. The structure included a *certification service provider* issuing certificates, and a *catalogue service provider* taking care of making these certificates available for everyone.

Because of the concept of the Estonian ID card, according to which the smart card itself does not contain any other information than that necessary data for the identification of a person, there is no longer need for a special health insurance card. A person will be identified with his/her ID card, while the information about his/her insurance will be maintained in respective databases. Another very popular e-service is the ID ticket for the public transport in Tallinn and Tartu. In Tallinn, 90% of users of public transport started buying ID tickets within a few months. At the same time, the number of people using ID card doubled.[5]

Another successful implemention of digital signatures is the Ministry of Justice and the entire Estonian court system. On 12 June 2003 an important decision was adopted in the Tallinn: The Circuit Court and for the first time in the court practice digital signature was regarded as equal to handwritten signature on paper.

The lessons learned and the future

Future directions for the eID card programme include integrating more information into eID cards – such as a digital driving license and all features of the previously existing social security card – and full distribution of eID cards to all 8 million Belgium citizens over the age of 12.

Two new cards will be tested, piloted, and launched:

- The childrens' ID card – the *Kids-ID*.
- The foreign residents card.

The Kids-ID is a card for Belgian citizen under the age of 12.[6] The card is not mandatory, but can be used in case a child leaves the country together with its parents. Technically the card is the same as the standard eID but the digital signature certificate has been revocated. Children can use this card to get access to secured websites by logging in with their eID.

The Belgian government has announced in 2006 an open competition for young people to help raise awareness of the great potential of the electronic identity (eID) card in all kinds of areas. The competition was designed to encourage young people to think about what kind of services they would like to see developed, and open their eyes to the potential of this new technology.

The Foreign Residents card is also technically the same card as the Belgian eID, but targeted to foreigners living in the country.

A "PKI-environment" will allow public authorities to issue and to maximally use electronic ID cards in a strongly secured manner (also with regards to civil servants) and to secure the traffic of electronic data (identification, authentication, encryption and the electronic signature).

Notes

1. A "soft certificate" is an electronic software-based identity component in an ICT security infrastructure (a *Pulic Key Infrastructure*) supporting the usage of digital signatures. A Public Key Infrastructure – or PKI – is an ICT security infrastructure supporting digital authentication such as verification of digital signatures.
2. CSC Consulting case studies, *www.csc.com/solutions/security/casestudies/2410.shtml*, accessed 18 January 2008.
3. Belgium eID website, *http://eid.belgium.be/fr/navigation/12000/index.html*, accessed 18 January 2008.
4. The Role of Electronic Signatures in the Austrian Federal E-Government-Strategy with Special Focus on the Educational Sector, Thomas Menzel, ICA round table report 2005.
5. Estonia e-government country report 2005, ICA (International Council for IT in Government Administration).
6. Belgium e-government Country Report 2006, ICA, (International Council for IT in Government Administration)

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ANNEX A

Belgian E-government Indicators

	BELGIUM		OECD30		EU15 (* Eurozone)		BELGIAN REGIONS		
	2000	2005	2000	2005	2000	2005	Flemish Region	Walloon Region	Brussels-Capital Region
Background information									
Population (thousands)	10 251	10 446	1 128 560	1 168 530	376 517	385 792	6 043	3 396	1 007
GDP growth (%)	3.7	1.7	1.2	2.6	3.8	1.7	1.6	1.4	2.8
GDP growth (%) for 1995-2000, 2000-2005	14.2	8.2	17.5	10.8	14.5*	7.3*			
Share of GDP in 2005	N/A	100	N/A	N/A	N/A	N/A	57.3	23.4	19.3
GN per capita (ppp, in $)	27.542	32.077	24.868	29.849	25.148	29.843			
Debt to GDP ratio	113.4	94.2	69.6	77.6	75.1*	76.9*			
Unemployment rate (% of labour force)	6.9	8.4	6.2	6.7			5.4	11.8	16.3
Number of households (thousands)		4 402					2 480	489	1 433
Average Income per capita (€)		13 665					14 483	12 807	11 550
ICT infrastructure									
Public Tele-communication investment per capita ($)	92.93	113.34	215.08	136.35					
Public telecommunication investment as a percentage of telecommunications revenue	13.1	8.8	30.6	15.3					
ICT in total value added (% in 2001)									
– Business services		3.3		3.6					
– Manufacturing		3.4		6.5					
Total communication access paths = (analogue lines + ISDN lines + DSL + cable modem + mobile subscribers) per 100 inhabitants		149.2		130.6					
Cellular Mobile Penetration, 2G subscribers per 100 inhabitants		88.72		79.62					
Internet access and usage									
Internet subscribers to fixed networks per 100 inhabitants	11.2	20.8	13.9	22.5					

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	BELGIUM		OECD30		EU15 (* Eurozone)		BELGIAN REGIONS		
	2000	2005	2000	2005	2000	2005	Flemish Region	Walloon Region	Brussels-Capital Region
Broadband access per 100 inhabitants		19.3		15.3					
Households with Internet Access (%)		50				53	56	41	48
Households with broadband connection (%)		41				25	46	32	38
Share of population using the Internet (%)									
– Within last three months		58				55	60	51	65
– Once a week in past 3 months		53				46	55	46	59
– Every day		38				32	40	32	44
– Few times a week		15				15	15	14	15
– More than a year ago or never		40				37	38	47	33
Share of population having used the Internet in the past 3 months for (%)									
– At home		47				45	52	38	44
– At work		18				23	20	13	22
– In an Education Environment		5				8	5	4	5
– At someone else's home		5				11	4	6	5
– In other places		3				7	2	3	9
Share of population having used the Internet in the past 3 months for (%)									
– Online banking activities		23				21	26	18	25
– Ordering/ buying goods and services for personal use		11				20	11	11	17
– Sending or receiving e-mail		49				45	52	40	58
– Online gaming, listening or downloading music		17				19	17	16	16
– Searching information in relation to healthcare		19				N/A	22	14	22
– Searching information on goods and services		43				41	46	35	52
– Read/download newspapers and magazines		13				N/A	13	10	22

	BELGIUM		OECD30		EU15 (* Eurozone)		BELGIAN REGIONS		
	2000	2005	2000	2005	2000	2005	Flemish Region	Walloon Region	Brussels-Capital Region
Share of businesses with access to the Internet in 2006		95				94			
Share of businesses having a website/homepage in 2006		69				66			
E-Government indicators									
E-Government availability – Supply side		47				56			
Share of population having used the Internet in the past 3 months for interaction with public authorities		30				26			
– For contacting public authorities		18				N/A	18	16	30
– For obtaining information		16				21	16	13	27
– For downloading forms		8				11	7	7	12
– For sending forms		4				5	4	4	6
Share of businesses having used the Internet for interacting with public authorities		59				64			
– For obtaining information		57				50			
– For obtaining forms		44				49			
– For returning filled in forms		33				31			
– For full electronic case handling		15				20			

Source: OECD Statistics Database; OECD (2007), *Communications Outlook*; Eurostat: Information Society Statistics; Direction Générale Statistique et Information Economique de la Belgique: Chiffres Clés (2007), *Apercu statistique de la Belgique et Indicateurs T.I.C. chez les ménages*, (2005).

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ANNEX B

Belgium's Political and Administrative System

Political history and structures

Belgium became a sovereign unitary state in 1830 while proclaiming its independence from The Netherlands. Belgium became a federation in 1993 as the result of a decentralisation process towards federalism started in the 1970s. (See Table B.1 for an overview of the public governance structure in Belgium.)

Creating a federal state structure was an attempt to carefully craft a power balance between the centre (the federal level) and the decentralised levels (such as regional, provincial and/or local governments). The reason for this is many-folded but has its roots in the historic deep conflict between especially the two major language groups in the country (the French-speaking and the Dutch-speaking population) besides a number of ideological and socio-economical conflicts dating back to the 1950s with an industrial prosperous Walloon Region, and a less economically developed Flemish Region. These historical roles shifted in the 1960s where the Flemish Region's per capita GDP overtook that of the Walloon Region.[1]

These carefully divided jurisdictions are in a constant search for equilibrium which creates an environment for constant political – sometimes sensitive – discussions over responsibilities between the centre and the decentralised levels. In Belgium, the federal state of Belgium of today is in comparison with other federal states like Canada, Germany, Switzerland, and the USA a young federal state.[2]

An incremental federalisation – the main steps

Federalisation is an ongoing process in Belgium. From 1970 onwards, federalism has been built step by step in an incremental process. The different major steps have been the following:

- **1970**, creation of communities and regions: two articles of the Constitution were amended: *i)* article 59 bis created the three Belgian communities and implemented cultural autonomy with a definition of the competencies of the communities; *ii)* article 107 quarter created the three regions and established the principle of regional autonomy.
- **1980s**, the communities evolve: A special law from 1980 created the regional institutions of the Flemish Region and Walloon Region. The cultural communities became the current communities, with extended powers focusing on the needs of individuals (health and social matters). The Court of Arbitration (which in some aspects can be compared to a constitutional court in other federal states like the USA and Germany) was founded to settle conflicts between regions and communities. Immediately following these reforms, the Flemish Community merged with the Flemish Region to build a single institutional framework called the Flemish Community. A special law of 1988 provided extended competencies to regions and communities. In particular, the communities were given responsibility for education. In 1989, Brussels-Capital Region became a region with its own government and parliament. The community competencies in Brussels-Capital Region are handled by three specific bodies, since the Brussels-Capital Region is bilingual and thus overlaps different linguistic areas: *i)* COCOM – Joint Community Commission; *ii)* COCON – Flemish Community Commission; *iii)* COCOF – French Community Commission.
- **1993**, a federal state: The Constitution was revised and Belgium became a federal state, with constituent autonomy provided to sub-national entities. Parliaments of the sub national entities – are now elected directly. Also, the French Community's competencies were allowed to be transferred to the Walloon Region and to the COCOF.
- **2001**, several changes: In 2001 several additional competences were transferred, especially the transfer of agriculture, external trade and development cooperation to regions. Furthermore, constitutive autonomy was attributed to local government (provinces and regions). A reform of the Brussels-Capital Region institutions was achieved – especially in the area of language.

Finally, sub-national entities' financing schemes were revised with the transfer of a series of taxes to regions and increased resources to communities. This 2001 reform (called the Lambermont agreements) appeared as a trade-off between the Flemish Government's wish to increase its fiscal autonomy and

the French Community's desire to receive increased grants to solve its deep budgetary deficit and refinance its education policy.

Government actors

The Belgian federation is characterised by the twofold basis of the federalisation process: non-territorial entities (the Flemish-speaking Community, the French-speaking Community and the German-speaking

Box B.1. **Overview of Belgian state reforms**

The State of Belgium was founded in 1815 at a Congress in Vienna where the Southern Netherlands and the Northern Netherlands were united, but it was first in the second half of the 20th century that federalisation of the Belgian State took off as a result of a serious of political and economic crises and conflicts mainly rooted in the different cultural and socio-economic conditions of the different Belgian regions.

The first state reform came with the revision of the Constitution in 1970. It created three cultural communities which were given certain autonomy with regard to culture. The reform was mainly a response to the wish of cultural autonomy of the Dutch-speaking part of the population. The work on the first state reform laid the ground for setting up the territorial division into formal regions.

The second state reform in 1980 formalised the cultural communities into: the Flemish Community, the French Community, and the German-speaking Community. The communities were setup with a governance structure consisting of a Council (or Parliament) and a Government exercising executive powers given by the Constitution. The state reform established also the Flemish Region and the Walloon Region as territorial entities. They were governed also setup with a Council and a Government. The Flemish Region and the Flemish Community merged their institution into one joint governance structure consisting of a Flemish Parliament and Government executing jointly the authority of both the community responsibilities and regional responsibilities given by the Constitution. The question of the bi-lingual Brussels was pending from this state reform.

The third state reform in 1988 – 1989 formally created the Brussels-Capital Region with a parallel setup of governance structure as the Flemish Region and the Walloon Region. Further transfer of responsibilities from the Federal Government to mainly the communities was implemented.

Source: See *www.belgium.be*, accessed 1 July 2007; Wilfried Swenden, Marleen Brans, and Lieven De Winter: *The politics of Belgium: Institutions and policy under bipolar and centrifugal federalism*, West European Politics, Vol. 29, No. 5, pp. 863-873.

Community) and territorial units (the Flemish Region, the Walloon Region and the Brussels-Capital Region). Two main structural elements have determined the incremental construction of the Belgian federation: and *i)* a territorial and economic interests and *ii)* linguistic differences, at the source of the creation of the communities in the 1970s, at the source of the creation of regions.

Belgian regions

Across Belgian regions, nearly 58% of Belgians live in the Flemish Region, 32% in the Walloon Region and about 10% in the Brussels-Capital Region (for further information on the governance structure of Belgium see the information given below).

Table B.1. **Belgium and its regions in 2004**

		Belgium	Flanders	Wallonia	Brussels-Capital
Land area	km^2	30 528	13 522	16 844	162
Population	Million	10.396	6.016	3.380	1.000
Population density	Inhabitants/km^2	341	445	201	6 172
GDP	Billion EUR	283.8	TBC	TBC	TBC

Sources: OECD compilation based on the Federal Ministry of Economy, Small and Medium-sized Enterprises, Self-employed and Energy, Statistics Division, and *Main Economic Indicators*, OECD, Paris, July 2005.

Linguistic communities in Belgium

In 1932, the official language of the Walloon Region was declared to be French; in the Flemish Region, Dutch was declared to be the official language; the Brussels-Capital Region was declared to be bilingual. During the 1960s three linguistic laws were adopted in order to guarantee the continuity of linguistic regions (Gilson laws). In 1989, specific constitutional amendments were adopted to guarantee the protection of the Flemish linguistic minority in Brussels-Capital Region.

This history has led to equal rights for both communities and to the creation of four distinctive linguistic regions which still exist today and are embedded in the Constitution. The language partition does not correspond to the territorial regional partition. There are four main linguistic areas:

- The Dutch-speaking region/community (57.8% of the population, 6 058 368 inhabitants);
- The French-speaking community except 9 municipalities of the Liège province (31.8% of the population, 3 329 349 inhabitants).

- The bilingual territory of Brussels Capital (9.6% of the global population, 1 012 258 inhabitants, but only 0.53% of the total area of Belgium).
- The German-speaking community, encompassing the 9 communes composing the Liège province (0.7% of the population, 72 875 people).

Foreign nationalities account for about 10% of the Belgian population (of which more than two thirds are of European origin; other non-nationals have mainly emigrated from African countries such as Morocco and the former Belgian colony Democratic Republic of Congo).[3]

Belgium also comprises of ten provinces and 589 municipalities.

Table B.2. **Public governance in the Belgium**

Public governance specifics	Description
Form of government	**Constitutional monarchy:** For federal fields of competence, legislative power is held by a bicameral parliament made up of a Lower House (Chamber of Representatives) and an Upper House (Senate). The Chamber of Representatives has 150 members, directly elected by popular vote on the basis of proportional representation to serve four-year terms. The Senate has 71 members (40 directly elected by popular vote, 31 indirectly elected), serving four-year terms. The current Belgian Constitution was adopted in 1993. All the other governments have their own parliament, however the parliament size differs as well as the election cycles. The Monarch is the official Head of State and plays a ceremonial and symbolic role.
State structure	**Asymmetric federal state**: The asymmetric federalism[1] practiced in Belgium provides additional complexity to the governance of the state. Executive and legislative power is divided between the federal government, 3 regions (the Flemish Region, the Walloon Region and the Brussels-Capital Region) and 3 communities (Dutch-speaking, French-speaking, and German-speaking). Each region and community has its own legislative and executive powers in its field of competence. Furthermore Belgian regions are subdivided into 10 provinces (Antwerp, Flemish Brabant, Walloon Brabant, West Flanders, East Flanders, Hainaut, Liège, Limburg, Luxembourg, and Namur) and 589 municipalities.
Brussels-Capital Region	The Ministry of the Brussels-Capital Region is the administrative body of the Brussels-Capital Regional Government. However, apart from this administration, the Brussels-Capital Region often entrusts public utility missions to a variety of pararegional bodies, and non-profit making organisations of regional interest.
Federal Government	Executive power at federal level is held by the **Federal Government**, headed by the Prime Minister, and consisting of ministers and secretaries of state. The number of ministers is limited to 15 and they have no seat in Parliament. Ministers head executive departments of the government.
Flemish Region and Flemish Community	The joint Flemish Parliament and Flemish Government exercise the legislative powers of the Flemish Region and the Flemish Community. The Flemish Parliament consists of all the Council members directly elected in the Flemish Region and the six Dutch-speaking members of the Brussels-Capital Parliament. These six directly elected Flemish members of the Parliament, together with the 118 council members constitute the 124-members large Flemish Parliament.

Table B.2. **Public governance in the Belgium** *(cont.)*

Public governance specifics	Description
French Community	The **French Community** has 94 members of Parliament with a 5 year mandate. They are though not elected directly. The Walloon-Brussels – French Community Parliament consists of the 75 members delegated from the Walloon Regional Council and 19 members delegated from the Brussels-Capital Regional Council.
German-speaking Community	The **German-speaking Community** exercises competencies in the German-speaking municipalities, all of them being located in the province of Liège. The legislative power is exercised by a Council and a Government. The Council of the German-speaking Community consists of 25 members. One of them is delegated to the Senate. The members of the Council of the German-speaking Community are directly elected. The Council of the German-speaking Community votes decrees. The executive power is exercised by the Government of the German-speaking Community, consisting of a Minister-President and two Ministers.
Walloon Region	The **Walloon Region** administration consists of two ministries: the Ministry of the Walloon Region and the Walloon Ministry of Equipment and Transport. In addition, a number of enterprises and public bodies of regional interest are vested with specific missions.
Centralisation/Decentralisation	**Vertical decentralisation:** Belgium public governance culture is characterised by highly autonomous and loosely coupled governments with a vertical formal division of competences. The different types of governments have complete responsibility and authority within their area of competences covering local, territorial, and international issues.
Administrative culture	**Consensus-oriented:** Belgium has a formalised consensus-seeking administrative culture by necessity due to its federal state structure. As a result of the autonomy of each Belgian government, political awareness and debate on issues are often strongly influenced and constrained by the formality of government competences.
Diversity of policy advice	**Formal autonomy and the coherent force of "grey-zones":** The formal procedures based heavily on consensus building and judicial formalities could paralyse decision-making and severely jeopardise the possibility of moving forward on policy development and implementation. Practicing leadership is therefore often based on informal dialogues and discussions between responsible public authorities and individuals in order to reach informal and operational agreements on issues at hand. OECD interviewees referred to this as operating in the "grey zones" where practical and operational discussions can be taken and informally decided upon outside the formalities of the public governance structure and administrative procedures. Exercising e-government leadership is no exception, and OECD interviews confirmed that practical collaboration and co-operation was mainly done by operating within the "grey zones".

1. The asymmetric federalism is due to existence of non-congruent public governance organisations mixing territorial principles of portfolios (the regions) and non-territorial and cultural bound principles of portfolios (the communities) which have territory-wise overlapping authorities – though within specific defined areas of responsibilities according to the Constitution.

Notes

1. Wilfried Swenden and Maarten Theo Jans (2006), *"Will It Stay or Will It Go?" Federalism and the Sustainability of Belgium*, West European Politics, Vol. 29, No. 5, pp.877 – 894, November, p. 878 ff.
2. Wilfried Swenden and Maarten Theo Jans (2006), *"Will It Stay or Will It Go?" Federalism and the Sustainability of Belgium*, West European Politics, Vol. 29, No. 5, pp. 877-894, November.
3. Wikipedia (2004), *http://fr.wikipedia.org/wiki/D%C3%A9mographie_de_la_Belgique*, accessed 28 February 2008.

ANNEX C

Methodology

The review is structured around the notion of a policy cycle in which e-government goals, strategies and initiatives are developed and diffused by the federal, regional and community governments, and individual e-government projects are initiated and implemented by different agencies of these governments. As the first step in a country review, the OECD Secretariat develops an agreement with review country authorities concerning the objectives, analytical framework and timeline of the study. The terms of reference set out and structure the areas to be studied, providing an overarching view of e-government implementation and impacts.

Definition of the analytical framework

The methodology used for this peer review was developed by the OECD over the period 2002-04. The methodology is based on the OECD framework for examining e-government that was developed in *The E-Government Imperative* (OECD, 2003), and takes into account the work that went into the OECD publication *E-Government for Better Government* (OECD, 2005). The methodology was tested in a pilot review of e-government in Finland, which led to the publication of th+e report *OECD e-Government Studies: Finland* (OECD, 2003). In 2004, the OECD e-Government Project adopted the OECD methodology for its peer reviews, following the protocols laid out in *Peer Review: An OECD Tool for Co-operation and Change* (OECD, 2003). Using this analytical framework, the OECD has conducted reviews of Mexico (2005), Norway (2005), Denmark (2006), Turkey (2007), Hungary (2007), and The Netherlands (2007).

The methodology has been expanded and amended for this review to address the specific issues and additional complexities involved in assessing e-government in a federal country.

The development of the OECD e-government peer review methodology is an ongoing process, but the general framework will be preserved to allow for

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comparability among countries. In the development of the methodology, the OECD has kept in mind that:

- The OECD should assign great importance to statistical rigour and quality when measuring and describing variables.
- Comparable descriptive characteristics of variables are necessary for building an international classification of e-government experiences.
- The OECD E-Government Project should compare its approach to those of other OECD directorates, and collect lessons learned for future reference and sharing.

Inputs

The Belgium study is primarily qualitative in nature, presenting a combination of observations, analysis and judgements gleaned from reports and official documents, survey responses, and interviews. The study has four main inputs:

- Reports and official documents.
- The OECD e-government survey.
- Interviews with government officials.
- Peer review meeting with OECD members.

Reports and official documents

The study drew upon a wide range of documents across governments, sectors and functions, which provided insight into the way that public management and e-government polices, strategies and initiatives are planned, co-ordinated and implemented in Belgium. Information was also drawn from recent relevant reports and reviews of Belgium from the OECD and other international organisations, consulting firms, and other sources. The study also drew on academic research and journal articles on public management reform, e-government, and the Information Society in Belgium. This approach was based on the notion that e-government cannot be addressed in isolation, but should be observed from a wider public management perspective.

OECD survey of e-government in Belgium

The OECD survey of e-government was originally developed in 2002 and revised in 2003 based on the experience of the country study of Finland. A revised version of the survey was presented to the OECD Steering Group on the Complementary Areas of Work on E-Government at a meeting in Paris in December 2003. Comments from the Steering Group were incorporated into

the final version of the survey. The survey has been adapted to reflect the institutional and administrative framework, and multi-government structure in Belgium.

In December 2006/January 2007, the OECD conducted the survey with the following institutions in Belgium:

- Governments at the federal, regional and community levels.
- Local governments (10 provinces plus the Brussels-Capital Region, and 589 municipalities).
- Other institutions (government agencies and other bodies).

The survey was targeted at officials with responsibilities relevant to e-government, who were asked to present their organisations' responses to the survey, rather than respond in their capacity as individuals. The survey sample was jointly selected by the OECD and the Steering Group representing all Belgian governments.

The OECD worked with the Steering Group to define a survey sample that would reflect the complexity of the Belgian state structure, ensuring adequate representation of the Federal Government, the regions and the communities. For example, while the Federal Government consists of ministries for each policy area, the regions and communities have one/few ministries, which are divided into several departments addressing specific policy areas and/or government services. Table I.1 shows the number of government institutions, and ministers and state secretaries at the federal, regional and community levels in Belgium.

Table C.1. **Governmental institutions, ministers and state secretaries at the federal, regional and community levels**

	Federal level	Flemish community/ Flemish region	German-speaking community	French-speaking community	Walloon region	Brussels region	**Total**
No. of Institutions	14 + 4 + 2*	8*	5*	6*	11*	6*	56
No. of ministers	15 + 6	10	4	6	9	5+3	58

Notes:
* Ministries;
** Departments.

The OECD survey treated ministries as the unit of analysis for the federal government, and departments as the unit of analysis for regional and community governments; all federal ministries and community and regional departments received the survey (all 56 institutions referenced in Table E.1). At the municipal level, a sample of the 589 institutions was selected based on population and geographic location. Municipalities were also randomly

selected, aiming to include municipalities offering e-services at different maturity levels (even possibly those that do not offer e-services at all).

Survey responses were weighted according to the following principles: in order to collect information at similar levels of responsibility, the OECD has treated ministries as the unit of analysis for the Federal Government, and departments as the unit of analysis for regional and community governments. As suggested by the Belgian Steering Group, all types of government will receive equal weight, independently from the number of respondents and response rates.

Table C.2. **Responses to the OECD Survey**

	Target sample	Responses	Response rate
Federal	65	34	52%
Flanders	58	30	51%
Brussels	23	5	43%
Wallonia	28	16	69%
French-speaking community	14	7	50%
German-speaking community	9	6	66%
Federal + Region + Community	197	103	52%

The survey asked government representatives for their opinions regarding e-government challenges, barriers and priorities. It should be kept in mind that the data results are qualitative and subjective, implying no possibility of performing tests of significance from which definitive conclusions can be drawn.

Interviews with government officials

The review team conducted two sets of interviews with Belgian government officials and other agencies and groups. All interviews were scheduled by Fedict, with the approval from the OECD. The mix of organisations and interviewees was selected to show a broad and representative insight into the main issues and problems regarding e-government in Belgium.

The first set of interviews, which took place on 3-5 October 2006, involved exploratory discussions designed to help the OECD understand the key elements of e-government in Belgium. The OECD team met with 16 senior officials and their staffs. These exploratory interviews were intended to assist the OECD in developing an understanding of areas that merited further research.

The second set of interviews took place on 21-26 January 2007. These in-depth interviews were carried out by four members of the OECD Secretariat and three peer reviewers from OECD member governments: Mr. John F. Kootstra

(The Netherlands), Mr. Yvan Lauzon (Quebec, Canada), and Mrs. Hanna Muralt Müller (Switzerland). The interview team undertook 24 interviews and moderated four focus groups. Interviewees included Belgium government officials and stakeholders from all types and levels of government, academia, relevant interest groups, ICT industry associations, and citizen representatives.

All interviews, which were strictly confidential, followed a structured set of questions, covering each of the main themes of the report. The interviews focused on the issues that could not be captured through the online survey.

Peer review meeting

In the assessment phase of an OECD peer review, the main findings of the review are discussed in a plenary meeting of the body responsible for the review. The examiners lead the discussion, but the whole body is encouraged to participate extensively. Following discussions, and in some case negotiations, among the members of the body – including the reviewed country – the final report is adopted or noted by the whole body. Generally, approval of the final report is by consensus, unless the procedures of the particular peer review specify otherwise (see *Peer Review: An OECD Tool for Co-operation and Change*, OECD, 2003).

The OECD Peer Review of E-Government in Belgium has been presented to, and discussed by members of the OECD's Network of Senior E-Government Officials in October 2007 in Paris. Country delegates have had an opportunity to use their own expertise in e-government to provide insightful commentary on the review. This discussion was intended to provide important input for the finalisation of the report.

Independence, neutrality and verification of inputs

Within a framework agreed with the Steering Group, the OECD conducted this study with its own staff and independent peer reviewers. The study was conducted with guidance and financing from Belgian governments, which did not bias the study or influence the final conclusions in any way.

The report was drafted by the OECD Secretariat with the input of the three peer reviewers from The Netherlands, Switzerland, and Quebec, Canada. The OECD regularly briefed the Belgian Steering Group for the review on its progress. The text benefited from fact-checking, considerations and feedback by the Steering Group; it also verified the survey results and interviews findings.

List of interviewees

- Jean-Luc Albert, IBM
- Hans Arents, CORVE, Flemish-speaking Community

- Marie-Julie Baeken, Cabinet, Wallonia
- Jean-Louis Boogaerts, Chef de Cabinet du Secretaire d'État à l'Informatisation, GOV
- Jean-Marie Cadiat, JOB, Inspector Finance, Federal
- Herman Callens, VVSG, Flemish Municipalities
- Michel Chapel, JOB, French-speaking Community
- Geoffrey de la Violette, JOB, French-speaking Community
- Dominique de Boever, CISCO
- Frank de Saer, Director of ICT, Federal Public Service
- Andre Delacharlerie, IT Manager AWT (Agence Wallonne des Télécommunications)
- Jan Deprest, Chairman, FEDICT
- Erwin Depue, Administrator, Agency for Administrative Simplification, Federal
- Ronny Depoortere, Vice President, ZETES
- Willy Derette, Sales, STERIA
- Dirk Desmet, Deputy Chief of Cabinet, Ministry for Budget, Brussels Region
- Koen Devos, ICT Advisor, Brussels Region
- Henri Dineur, Chief of Cabinet, Brussels Region
- Hugues Dorchy, eID Project Manager, FEDICT
- Herve Feuillen, General Manager of CIRB, Brussels Region
- Christian Fieremans, Ministry of Education, GOV
- Wouter Gabriels, Chancellery, Prime Minister Office
- Maurice Havet, Director of Informatisation and Administrative Simplification, French-speaking Community
- Bruno Hick, Director of the Informatics Service, German-speaking Community
- Alain Huet, Manager of Security, FEDICT
- Xavier Huysmans, University of Leuven
- Samoura Jacobs, FEDICT
- Hugo Kerschot, Indigov
- Frank Leyman, Manager of International Relations, FEDICT
- Olivier Libon, eID Expert, FEDICT
- Christine Mahieu, Federal Cabinet Office
- Geert Mareels, Manager of E-Government for CORVE, Flemish Region

- Arnaud Martens, JOB, FSP Finance, GOV
- Mieke Van Gramberen, Cabinet Office, Flemish Region
- George Monard, Secretary General of the Department of Personnel and Organisation, Federal
- Peter Neirinck, JOB, FSP Finance, GOV
- Arthur Philips, CIPAL
- Yves Poullet, University of Namur
- Frank Robben, General Manager, Crossroads Bank for Social Security
- Wim Roggerman, Manager, Internet Services Providers Association
- Patrick Slaets, Economic Advisor, AGORIA (association of ICT companies)
- Ben Smeets, Departement of Personnel and Organisation, Federal
- Paul Soete, Chairman, AGORIA
- Jo Steyaert, Indigov
- Peter Strickx, Director General for Architecture and Standards, FEDICT
- Fanny Taildeman, HR Director, SMALS
- Beatrice van Bastelaer, Commissioner of EASI-WAL, Wallonia
- Karel van Eetvelt, Chairman, UNIZO
- Eric van Heelvelde, Chairman, BIPT
- Marc van Hemelrijck, SELOR
- Peter van Velthoven, Minstr of Work and Informatisation, GOV
- Patrick van Vooren, Cabinet Office, Brussels Region
- Luc Vanneste, Director General of the National Register, Federal
- Rudy Vansnick, Chariman, Blind Surfing
- Eduard Vercruysse
- Christophe Vergult, Insites
- Jean-Paul Verie, ICT Security, Wallonia
- Stijn Verplaetse, General Manager, CERTIPOST
- Frank Verschaeren, General Direction Statistics and Economical Information (FPS Economy)
- Kris Vervaet, Sales Director, Belgacom
- Dominique Volon, Director General for Service Delivery, FEDICT
- Jos Vrancken, Accenture
- Patrick Wauters, CapGemini
- Luc Windmolders, HRM, FEDICT

ANNEX D

Glossary

This glossary was compiled for the purpose of this study, and describes how the following terms are used in this report.

Authentication: A security measure for checking users' identities before they are allowed access to an online information system or application.

Back office: The internal operations of an organisation that support its business processes and are not accessible or visible to the general public.

Enterprise architecture: describes the structure of an organisation's processes, information systems, personnel and organisational sub-units, with a view to aligning them with the organisation's core goals and strategic direction.

External barriers: Obstacles to e-government that require specific actions (*e.g.* modification of laws by legislature) in order to be overcome. They often concern breakdowns, missing components or lack of flexibility in the government-wide frameworks that enable e-government. The result is often the inability to achieve effective e-government implementation.

Channels: Means of accessing government services, such as the Internet, telephone, or a visit to a government office. Different types of customers use different service access channels.

E-Government: The use of information and communication technologies (ICTs), and particularly the Internet, as a tool to achieve better government.

Front office: "Government as its constituents see it" – the information and service providers, and the interaction between government and both citizens and businesses.

Information and Communication Technology (ICT): Any equipment or interconnected system (or subsystem) of equipment that includes all forms of technology used to create, store, manipulate, manage, move, display, switch, interchange, transmit or receive information in its various forms. Such forms can include: business data; voice conversations; still images; motion pictures; multimedia presentations and others not yet conceived. Communication

refers to a system of shared symbols and meanings that binds people together into a group, a community, or a culture. The word communication was added to ICT to make a network of the usage of Information Technology. ICT refers to both computer and communication technology.

Information Management (IM): Operations which develop and maintain the information resources and processes of an organisation.

Information network: A system of ICT, hardware and services which provides users with delivery and retrieval services for a given set of information (*e.g.* electronic mail, directories and video services).

Information network infrastructure: The whole system of transmission links, access procedures, legal and general frameworks, and the basic and supportive services of the information network.

Information Society (IS): A society which makes extensive use of information networks and ICT, produces large quantities of information and communications products and services, and has a diversified content industry.

Information Technology (IT): The hardware, software and methods used for electronic processing and transfer of data.

Interoperability: Organisations' ability to share information systems and/or data, generally based on using common standards.

Middleware: Software that integrates services and distributed applications across the Internet or local area networks, and may provide a set of services such as authentication, messaging, transactions, etc. Middleware allows government organisations to share data between front-office service delivery channels and back-office applications and processes, both within and across organisations; it is increasingly perceived as a technology for delivery of joined-up e-government services.

Online government services: Services provided by, but not necessarily supplied by, the public administration to citizens, businesses and organisations (including other government organisations) through information networks.

Portal: A website that co-ordinates and presents information and services from a variety of providers, with the content presented in accordance with criteria related to users' needs.

Public Key Infrastructure (PKI): A method for authenticating a message sender or receiver and/or encrypting a message. PKI enables users of an insecure public network, such as the Internet, to securely and privately exchange data through the use of a cryptographic key pair obtained and shared through a trusted authority. It provides for use of digital certificates that can identify an individual or an organisation, and directory services that can store, verify and, when necessary, revoke the certificates.

Selected Bibliography

Accenture (2006), *Building the Trust*, New York.

Accenture (2003), *eGovernment Leadership: Engaging the Customer*, New York.

Agoria (2007), *Agoria, la Fédération de l'industrie technologique*, *www.agoria.be,* accessed 28 February 2008.

Alexander, C. and L. Pal (1998), *Digital Democracy – Politics and Policy in the Wired World*, Oxford University Press, Ontario.

Allen, A. and R. Ergec (1994), *La Belgique fédérale après la quatrième réforme de l'État de 1993*, ministère des Affaires étrangères, du Commerce extérieur et de la Coopération au développement.

Barber, B. "The New Telecommunications Technology: Endless frontier or the end of democracy?", *Constellations*, Volume 4, No. 2 (1995), pp. 208-228.

Barney, D. (2000), *Prometheus Wired: The hope for democracy in the age of network technology*, University of Chicago Press.

Belgian Federal Public Service, Foreign Affairs, Foreign trade and development cooperation (2005), *www.diplomatie.be/en/belgium/belgiumdetail.asp?TEXTID=49019*.

Belgium government (2005a), *BELGIF: The Belgian Interoperability Framework*, *www.belgif.be/index.php/Main_Page*, accessed 28 February 2008.

Belgium government (2005b), *.beID*, *http://eid.belgium.be*, accessed 28 February 2008.

Belgium government (2006a), *The Belgian Stability Programme*, *http://stabilityprogramme.belgium.be/en/Stability_programme_2006_2009_Belgium_Cabinet_Finance_20051219_EN.pdf,* accessed 28 February 2008.

Belgium government (2006b), *National action plan for eInclusion*, *www.belgium.be/eportal/application?origin=searchResults.jsp&event=bea.portal.framework.internal.refresh&pageid=indexPage&navId=45237*, accessed 28 February 2008.

Belgium government (2007), *Tax-on-Web,* accessed 28 February 2008.

Brans, M., C. De Visscher, and D. Vancoppenille (2006), "Administrative reform in Belgium: Maintenance or modernisation?", *West European Politics*, Vol. 29, No. 5, November.

Bureau federal du Plan (2006), *Les charges administrative en Belgique*, Brussels.

Capgemini (2006), *Online Availability of Public Services: How is Europe Progressing?*, Brussels.

Carayon, B. (2005), *A armes égales*, *http://lesrapports.ladocumentationfrancaise.fr/BRP/064000728/0000.pdf,* accessed 28 February 2008.

CBSS (2005), *e-Government Program of the Belgian Social Security*, *www.bcss.fgov.be/documentation/En/UNO-CBSS.pdf,* accessed 28 February 2008.

CBSS (2006), *E-government in the Belgian social security sector co-ordinated by the Crossroads Bank for Social Security*, *www.bcss.fgov.be/En/CBSS.htm#Publication,* accessed 28 February 2008.

Centre d'Informatique pour la Région Bruxelloise (2001), *E-Government*, Brussels.

Centre d'Informatique pour la Région Bruxelloise (2002), *E-Communes pour la Région de Bruxelles-Capitale*, *www.cirbcibg.irisnet.be/site/component/Library_fr/Documents/1024653114.66/doc_cahier21.pdf,* accessed 28 February 2008.

Centre d'Informatique pour la Région Bruxelloise (2004a), *Un atout pour la Région de Bruxelles-Capitale*, Brussels.

Centre d'Informatique pour la Région Bruxelloise (2004b), *Les technologies de l'information en Région de Bruxelles-Capitale 2004-2009*, Brussels.

Christopher, C. and B. Bouckaert (2004), *Public management reform. A comparative analysis*, expanded 2nd edition, Oxford University Press, Oxford.

Commission de la protection de la vie privée (2007), *www.privacycommission.be/fr,* accessed 28 February 2008.

Committee for National Vulnerability Study (2004), *National Vulnerability Study*, *www.brs.dk//dokumentarkiv/rapport/default/htm,* accessed 28 February 2008.

Communauté Française de Belgique (2004), *Simplification Administrative et Gouvernement Électronique: Stratégie 2005-2010*, Brussels.

Communauté Française de Belgique (2006), *Les institutions communitaires et régionales*, Brussels, *www.cfwb.be/acceuil/pg004.htm,* accessed 28 February 2008.

CSC Consulting case studies (2006), *Digital ID Card Promotes Security Online for Business and Government*, *www.csc.com/solutions/security/casestudies/2410.shtml,* accessed 28 February 2008.

Datanews (2006), *La France entend suivre l'exemple ODF belge*, *www.datanews.be/fr/90-57-12674/la-france-entend-suivre-l-exemple-odf-belge.html,* accessed 28 February 2008.

DG Deutschsprachige Gemeinschaft Belgiens (2006), *The German-speaking Community of Belgium*, Brussels.

Direction Générale Statistique et Information Économique (2006), *Chiffres Clés 2005: Aperçu statistique de la Belgique*, Brussels.

DuVuyst, B. and A. Fairchild (2005), "Experimenting with Electronic Voting Registration: The Case of Belgium", *Electronic Journal of E-Government*, Volume 3, No. 2, pp. 87-90.

Empirica (2007), *Digital Literacy and ICT Skills*, Bonn.

European Commission ICT Skills Monitoring Group (2002), *Synthesis Report: E-Business and ICT Skills in Europe*, Brussels.

European Commission (2004), *European Interoperability Framework v1.0*, *http://europa.eu.int/idabc/en/document/3782,* accessed 28 February 2008.

European Commission (2005a), *Good Practice Case: Social Security Benefits for Citizens in Belgium*, *www.egov-iop.ifib.de/downloads/GPC_IOP_in_soc_sec_in_Belgium.pdf,* accessed 28 February 2008.

European Commission (2005b), *Architecture Guidelines*, *ec.europa.eu/idabc/en/document/2317/5644*, accessed 28 February 2008.

European Commission (2005c), *EuroBarometer 6304:Spring 2005*, *http://ec.europa.eu/public_opinion/archives/eb/eb63/eb63_exec_nl.pdf,* accessed 28 February 2008.

European Commission (2005d), *Belgium re-engineers its tax management system*, *www.epractice.eu/document/929,* accessed 28 February 2008.

European Commission (2006a), *National actions to implement Lifelong Learning in Europe*, Brussels.

European Commission (2006c), *EuroBarometre 66:Automne 2006*, Brussels.

European Commission (2006d), *Cross-border sharing of e-procurement software development*, *http://ec.europa.eu/idabc/en/document/5473/5584,* accessed 28 February 2008.

European Commission (2007a), *eGovernment Factsheet – Belgium – Country Profile*, Brussels, *ec.europa.eu/idabc/jsps/documents*, accessed 28 February 2008.

European Commission (2007b), *eGovernment Factsheet – Belgium – National Infrastructure*, Brussels, *www.epractice.eu/document/3287,* accessed 28 February 2008.

European Commission (2007c), *eGovernment Factsheet – Belgium – Actors*, Brussels, *www.epractice.eu/document/3285,* accessed 28 February 2008.

European Commission (2007d), *eGovernment Factsheet – Belgium – eServices for Citizens*, Brussels, *www.epractice.eu/document/3288,* accessed 28 February 2008.

European Commission (2007e), *eGovernment Factsheet – Belgium – eServices for Businesses*, Brussels, *www.epractice.eu/document/3289,* accessed 28 February 2008.

European Commission Enterprise and Industry Directorate General (2006), *European Trend Chart on Innovation: Innovation Policy in Belgium*, *http://trendchart.cordis.lu/tc_country_list.cfm?ID=2,* accessed 28 February 2008.

European Interactive Advertising Association (2006), *Mediascope Europe*, *www.eiaa.net/Ftp/casestudiesppt/EIAA%20Belgium%20Mediascope%202006.pdf,* accessed 28 February 2008.

European Survey of Information Society Projects and Actions (2001), *www.eu-esis.org/script/form_simple.cgi,* accessed 28 February 2008.

Eurostat (2006), europa.eu/rapid/pressReleasesAction.do?reference=STAT/06/166&format=HTML&aged=0&language=EN&guiLanguage=en; accessed 28 February 2008.

Eurostat (2007), *Europe in Figures: Eurostat 2006-2007 Factbook*, Brussels.

Facultes Universitaires Notre-Dame de la Paix Namur (2003), *SSTC-privacy study*, *www.fundp.ac.be/recherche/projets/page_view/en/02925303/*, accessed 28 February 2008.

FEDICT (2003a), *Architecture of the e-government platform*, Brussels.

FEDICT (2003b), *E-government: the approach of the Belgian federal administration*, Brussels.

FEDICT (2004), *A propos de Fedict …*, Brussels.

FEDICT (2005a), *Un terrain fertile pour un e-governement convivial*, Brussels.

FEDICT (2005b), *Rapport d'activités 2001-2005*, Brussels.

FEDICT (2006), *E-Government Country Report: Belgium*, Brussels.

FEDICT (2006), *Fed-e View Citizen*, *www.belgium.be/eportal/ShowDoc/fed_ict/imported_content/pdf/Cp_Fed-eView_FR_02042007.pdf?contentHome=entapp.BEA_personalization.eGovWebCacheDocumentManager.fr,* accessed 28 February 2008.

Flemish Government (2002), *VLIMPERS*, *http://aps.vlaanderen.be/sgml/largereeksen/1569.htm,* accessed 28 February 2008.

Flemish Government (2007a), *Access Control Management for the Flemish Government*, *www3.vlaanderen.be/e-government/projecten_ACM.html*, accessed 28 February 2008.

Flemish Goverrnment (2007b), *www.flanders.be/NASApp/cs/ContentServer?pagename=MVG_FL_Html_Detail&cid=1061902912794&p=1053963211306,* accessed 28 February 2008.

Flemish Government (2007c), MAGDA, *www.corve.be/producten/magda-diensten/index.php,* accessed 28 February 2008.

Flemish Government (2007d), *www.corve.be/english/geo.php,* accessed 28 February 2008.

Flemish Minister of Administrative Affairs, Foreign Policy, Media and Tourism (2007), *E-Government and Regulatory Management. Cooperating on simplification and quality*, *www3.vlaanderen.be/e-government/docs/e_gov_reg_management.pdf*, accessed 28 February 2008.

Gennotte, J-P, *The BE federal e-procurement plan*, presentation from ABA, 21 December 2005.

HIVA (2006), *Education and lifelong learning*, Leuven.

Hoff, J. (2004), "Members of parliaments' use of ICT in a comparative European perspective", *Information Polity*, Volume 9, No. 1-2, pp. 5-16.

IBBT (2006), *Identity Management for E-Government*, Brussels.

IDABC (2006), *www.epractice.eu/index.php?page=document.factsheets&cntr=2* accessed 28 February 2008.

IDC (2005), *Networking Skills in Europe: Will an Increasing Shortage Hamper Competitiveness in the Global Market?*, *www.cisco.com/edu/emea/general/pdf/IDC_Networking_Skills_Shortage_EW_Europe_FINAL_5_Oct.pdf,* accessed 28 February 2008.

IDC (2006), *Information Society Index*, *www.idc.com/groups/isi/main.html*, accessed 28 February 2008.

Idea Group (2007), *Encyclopedia of Digital Government*, London.

Insight (2007), *Pan European survey on ICT use at school*, Brussels.

InSites (2005), *Key figures about Internet adoption & e-government in Belgium*, Gent.

International Telecommunications Union (2005), *ICT indicators*, *www.itu.int/ITU-D/ict/informationsharing/index.html*, Geneva.

Jockmans, J. and P. Strickx (2004), *Directives et recommendations pour l'usage de standards ouverts et/ou specifications ouvertes dans les administration fédérales*, FEDICT, Brussels.

Joint Electronic Public Procurement Website, *www.jepp.be/home.aspx,* accessed 28 February 2008.

Kubicek, H. (2005), Social *Security Benefits for Citizens in Belgium*, eGovernment Interoperability Observatory, *www.egovinterop.net/Res/5/Social%20Security%20Benefits%20for%20Citizens%20in%20Belgium.pdf,* accessed 28 February 2008.

Laudon, K. (1977), *Communications Technology and Democratic Participation*, Praeger, New York.

Mabille, X. (2003), "La faille du compromis", *A l'enseigne de la Belgique nouvelle*, Université de Bruxelles, Brussels.

Millard, J. and J.S. Iversen (2004), Reorganisation of government back offices for better electronic public services – European good practices: Final report to the European Commission, Danish Technological Institute, Århus.

Ministre de l'Emploi et de l'Informatisation (2006), *Déclaration de politique 2007*, Brussels.

Ministry of Administrative Affairs, Foreign Policy, Media and Tourism (2004), *Building Trust*, Brussels.

Ministry of Administrative Affairs, Foreign Policy, Media and Tourism (2007), *E-Government and Regulatory Management*, Brussels.

Nauwelaers, C. (2006), *Strategic Evaluation on Innovation and the Knowledge Based Economy in relation to the Structural and Cohesion Funds*, *ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/evalstrat_innov/Belgium.pdf,* accessed 28 February 2008.

Norwegian Parliament (2001), *A Vulnerable Society*, Oslo.

OECD (2003a), *The E-Government Imperative*, OECD Publishing, Paris.

OECD (2003b), *Peer Review: An OECD Tool for Co-operation and Change*, OECD Publishing, Paris.

OECD (2004a), *Develop Highly-Skilled Workers: Review of Belgium*, OECD Publishing, Paris.

OECD (2004b), *OECD e-Government Studies: Finland*, OECD Publishing, Paris.

OECD (2005a), *IT Outlook Policy Questionnaire*, OECD Publishing, Paris.

OECD (2005b), *OECD e-Government Studies: Norway*, OECD Publishing, Paris.

OECD (2005c), *OECD e-Government Studies: Mexico*, OECD Publishing, Paris.

OECD (2005d), *Economic Survey: Belgium*, OECD Publishing, Paris.

OECD (2005e), *E-Government for Better Government*, OECD Publishing, Paris.

OECD (2006a), *Factbook*, OECD Publishing, Paris.

OECD (2006b), *OECD Preliminary Outlook: Belgium*, OECD Publishing, Paris.

OECD (2006c), *OECD e-Government Studies: Denmark*, OECD Publishing, Paris.

OECD (2007a), *ICTs and Gender*, OECD Publishing, Paris.

OECD (2007b), *OECD e-Government Studies: Turkey*, OECD Publishing, Paris.

OECD (2007c), *OECD e-Government Studies: Hungary*, OECD Publishing, Paris.

OECD (2007d), *OECD e-Government Studies: The Netherlands*, OECD Publishing, Paris.

Pechtold, A. (2005), remarks at the OECD Ministerial Conference: "Strengthening Trust in Government: What Role for Government in the 21st Century?", 28 November.

Presidenza Italiana del Consiglio dell'Unione Europea (2003), *Study on Central-Local Relationship in EU in the Field of Electronic Government*, Rome.

Raes, L. (2007), *Infosessie Vlaamse Integratie Projectin VIP 2007*, *www3.vlaanderen.be/e-government/documenten/2007_VIP-oproep.ppt,* accessed 28 February 2008.

Région Wallonie (2004a), *Wall-on-Line: Le Projet Wallon d'E-Gouvernement: Vision stratégique et plan d'action*, Brussels.

Région Wallonie (2004b), *Guide des Bonnes Pratiques: E-Gouvernement et Simplification Administrative*, Brussels.

Région Wallonie (2004c), *Plan d'inclusion numérique*, *http://easi.wallonie.be/xml/page.html?IDC=&IDD=19072&LANG=f,* accessed 28 February 2008.

Région Wallonie (2006a), *Plan d'Action Simplification Administrative, E-Gouvernement et Lisibilité 2005-2009 du Gouvernement Wallon*, Brussels.

Région Wallonie (2006b), *QualiGuide*, Brussels.

"Résolution sure l'égovernment intégré rn exécution du 2e accord de coopération intergouvernemental en matière d'e-government", Ministerial declaration, Conference on E-Government, 6-7 November 2006, Brussels.

Robben, F. and P. Maes (2004), *La Banque Carrefour de la Securite Sociale en 2005*, *www.bcss.fgov.be/Fr/documentation/publication_home.htm#publication_3,* accessed 28 February 2008.

Robben, F., P. Maes and E. Quintin (2007) "E-Government Program of the Belgian Social Security", *Encyclopedia of Digital Government,* A. Anttiroiko and M. Mälkiä, Idea Group, Hershey, PA, USA.

Le Secrétaire d'État à l'Informatisation de l'Etat (2005), *Some proposals from the Belgian Federal government for e-government objectives I2020*, Brussels.

Smals, *EGOV A.S.B.L.*, *www.smals.be/site_fr/components/file/statutenegov.pdf,* accessed 28 February 2008.

Steyaert, J. and R. Van Gompel (2005), *Het internet; klikt het met Belgische politici?*, *www.indigov.be/attachments/1176976656042/Indigov_Research_Reports_Politici_en_internet_02_2005.pdf,* accessed 28 February 2008.

Swedish National Vulnerability Study (2001), *Security in a new era*, Stockholm.

Swenden, W. and M. T. Jans, "Will It Stay or Will It Go? Federalism and the Sustainability of Belgium", *West European Politics*, Vol. 29, No. 5, pp. 877-894, November 2006.

Tsagarousianou, R., D. Tambini and C. Bryan (1998), *Cyberdemocracy: Technology, cities and civic networks*, Routledge, London.

Van Tilbourgh, L., *Digiflow: attesten vooropenbare aanbestedingen. Presentatie voor de Vlaamse Gemeenschap*, PowerPoint presentation, 8 September 2006, *www.corve.be/english/digiflow.php,* accessed 28 February 2008.

The White House (2001), *National Strategy for Homeland Security*, *www.whitehouse.gov/homeland/book/nat_strat_hls.pdf,* accessed 28 February 2008.

The White House (2003), *National Strategy for the Physical Protection of Critical Infrastructures and Key Assets*, *www.whitehouse.gov/pcipb/physical_strategy.pdf,* accessed 28 February 2008.

Wikipedia (2004), *fr.wikipedia.org/wiki/D%C3%A9mographie_del_alBelgique,* accessed 28 February 2008.

World Economic Forum (2006), *Global Information Technology Report 2006-2007*, *www.weforum.org/en/initiatives/gcp/Global%20Information%20Report/index.htm,* accessed 28 February 2008.

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OECD e-Government Studies

BELGIUM

E-Government in Belgium is clearly positioned to deliver user-focused services, as Belgian citizens want the look and feel of a single public sector entity and the provision of integrated e-government services customised to their needs rather than to have to understand the complex division of responsibilities. E-Government is recognised as a tool for wider public-sector reform.

Belgium already has internationally recognised examples to show: most importantly the transformation of the social sector administration through e-governance tools, and more recently the link of e-government services to administrative-burden reduction. Future transformation will be enabled by the common electronic identity card (eID) that has been adopted by all governments.

This report shows that the development and provision of the next generation of user-focused services will require the maximisation of synergies between the federal, regional and community governments and local authorities in Belgium.

It addresses the following issues:

- Monitoring of user needs and user satisfaction.
- Refocusing of e-government to serve the entire public sector's interests and goals.
- Marketing and promotion of e-government.
- Concentrating on seamlessness, equity and responsiveness.
- Creating a coherent framework for legislative challenges.
- Improving the implementation capacity.

This report is available in English only. French and Dutch translations of the Assessment and Proposals for Action are available separately.

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