FOREWORD

Since the 2005 OECD E-Government Study Denmark has adopted a national e-government strategy - “Towards Better Digital Service, Increased Efficiency and Stronger Collaboration” - covering the period 2007-2010, which generally follows-up on the OECD proposals for action.

This 2010 follow-up e-government country study, which should not be seen as a comprehensive and extended e-government review, aims to assess the progresses made on e-government by Denmark since 2005 as a result of the current e-government strategy and to assess the main challenges and questions to be addressed in order to put forward a number of proposals for action which shall enable Denmark to further exploit its privileged position in terms of e-government development to ensure the delivery of high-quality and cost effective services.

This report focuses on the analysis of a number of key areas that correspond to the main challenges identified by the Danish government in its current efforts to bring e-government development forward, but which are not unique to Denmark. These challenges are in fact shared by the majority OECD countries, as they are increasingly focusing their efforts on broadening the perspective of e-government programs to enhance its value as a driver for efficiency and effectiveness, while sustaining ongoing service delivery improvement. These areas are:

- the impact of e-government on the public sector modernisation and efficiency efforts;
- the impact of the e-government organisational structure and arrangements on e-government development and implementation;
- the need to address issues related to user take-up;
- the assessment of the benefits realisation of e-government projects.

The report was completed in March 2010. It draws on a survey of the Danish central, regional, and local government organisations administered in
September-October 2009, on an extensive review of information about e-government in Denmark, and on a series of interviews with Danish officials and commentators held in October 2009. Peer reviewers from the governments of Australia, the Netherlands and the United Kingdom contributed to the review process and to the drafting of the report. Their participation helped to set Danish initiatives in an international context and to identify lessons for other OECD countries to learn from.

The analytical framework of the report is based on three OECD synthesis reports: The e-Government Imperative (2003), e-Government for Better Government (2005), Rethinking e-Government Services: User-Centred Approaches (2009). 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 within the OECD.

Under the leadership of Christian Vergez and Yih-Jeou Wang, the review was managed and written by Barbara-Chiara Ubaldi, assisted by Carine Tyler and Tara Staub. Special thanks to the three peer reviewers: Ann Steward (Australia), Kees Keuzenkamp (Netherlands), and Bill McCluggage (United Kingdom). The OECD gratefully acknowledges the excellent co-operation of the Danish administration in the preparation of the report.
ASSESSMENT AND PROPOSALS FOR ACTION

Core messages in the four areas of focus

In order to address the challenges highlighted in the report the Danish government could consider the following:

Broadening the vision of the public sector:

- Broadening and strengthening the e-government vision taking into consideration that enabling societal-wide efficiency and effectiveness could realise better use of public resources at large - i.e. to help improve public service delivery, to enable citizens to better access services – without losing sight of the necessary focus on efficiency and effectiveness.

- Defining a roadmap which translates vision into action to: widely promote the top-tier e-government enabled initiatives and ensure that investments are aligned with national strategic goals; prioritise and rationalise efforts; demonstrate interconnectedness and interoperability between projects; set implementation timeframes and expected outcomes; spot and exploit synergies and economies of scale; and secure public trust and support.

- Focusing on a coherent digitisation of government processes rather than singularly on e-government as an individual policy area to reinforce the role e-government plays in the successful delivery of public sector goals (e.g. de-bureaucratization strategy); to ensure e-government is recognised as a core component of other programs; to identify the dependencies and timeframes; and to facilitate the interaction and joint-efforts of different ministries to support the implementation of new projects.

Reinforcing the organisation of the public sector:

- Reinforcing the adopted joint-approach through the strengthening of the existing cross-governmental collaboration and co-ordination structure (e.g. the Joint Committee for Cross Governmental Co-ordination and its sub-bodies - the Domain Boards) providing it with the necessary mandate and management tools (e.g. budgetary and leadership-wise), and through concrete activities and projects (e.g. development of joint solutions in all areas, as appropriate) to sustain an integrated and coherent e-government implementation within and across levels of government.
• Strengthening the engagement with sub-national level organisations to achieve greater use and full exploitation of digital services supported by a joint-collaboration approach to e-government projects across all levels of government.

Enhancing capacities within the public sector:

• Improving data standardisation and the use and flow of public sector information within and across levels of government to better meet the needs of citizens, business or government and improve cross-governmental collaboration by clarifying the primary holder of core data and the conditions for access or reuse by multiple parties (in- and outside government).

• Developing core capacities and skills competencies in the public sector to meet and support the growing demand for project and programme management and design - particularly in the case of large ICT projects – and to support successful e-government implementation, full exploitation and leveraging of e-government projects and advances in the modernisation agenda.

• Further implementing and enhancing the use of the Business Case Model and adopting its use to support more robust investment analysis and strong monitoring of the follow-up of the projects’ implementation to ensure that the benefits - both in terms of traditional efficiency and broader benefits - are reaped throughout the process.

Strengthening citizens and businesses’ engagement:

• Enhancing the public awareness of existing e-government services through a targeted promotion and marketing effort to motivate and increase use.

• Developing a strong and effective channel-management strategy to support e-government initiatives across the whole public sector.

• Incorporating in public service design and delivery the views of citizens and businesses’ in order to reflect their needs and raise the services’ increased effectiveness, quality and responsiveness.
MAIN FINDINGS

Denmark is at the forefront of e-government development and implementation and it holds leading positions in all international rankings. This is the result of the continuous commitment and strategic approach shown by the Danish government in using ICT to strengthen the performance of its public sector in providing high quality public services to its citizens and businesses. In recognition of the instrumental value of e-government to boost the quality, efficiency and effectiveness of the public sector, to foster co-ordination and co-operation across levels of government and thus increase the citizens’ trust in their government, Denmark believes that e-government is a “must”. Pressured by the strong emphasis on efficiency and effectiveness induced by the budgetary and fiscal imbalances brought about by the latest economic recession, Denmark could seek to exploit its sophisticated e-government enabling environment and its advantage of being a “world champion” in using ICT to harvest the broader benefits of e-government.

Key points

Translating the main finding into goals and concrete actions would mean:

- Broadening the e-government vision taking into consideration that enabling societal-wide efficiency and effectiveness might reinforce the potential to better use public resources at large – e.g. to help improve public service delivery, enable citizens to better access services, reach out to the vulnerable parts of the population and foster open government – without losing sight of the necessary focus on efficiency and effectiveness.

In order to attain these goals the Danish government could:

- Leverage the adopted joint approach and strengthen the existing cross-governmental collaboration and co-ordination structures (e.g. the Steering Committee for Joint Cross Governmental Co-operation¹ and its sub-bodies, i.e. the Domain Boards²) to sustain an integrated and coherent e-government implementation within and across levels of government by providing such structures with the necessary mandate and management tools (e.g. budgetary and leaderships-wise).
- Enhance the public awareness of already implemented e-government solutions through a massive promotion and marketing effort to motivate and increase the use of the e-government services already in place. To this end, a strong and effective channel-management strategy also needs to be put in place, and relentlessly pursued by the whole public sector.

- Incorporate in public service design and delivery the views of citizens and businesses’ regarding their needs in order to link the services’ increased effectiveness, quality and responsiveness to the enhanced engagement of the users’ and a sounder knowledge of their needs.

**Key challenges and proposals for action**

The Danish government has asked the OECD to conduct a follow-up country study to the 2005 OECD E-Government Study. Recommendations from this study were largely followed by the Danish government to inform the national e-government strategy covering the timeframe 2007-2010. This report should not be seen as a comprehensive and extended e-government study, but as an attempt to highlight the main challenges and questions to be addressed by the Danish government in 2010 and onward to ensure an optimal use of e-government to make the public administration more efficient, effective and self-sustained. The continuous development of e-government is demanding and resource intensive even for a mature e-government country like Denmark and this report shall assist the Government in its endeavour. This report can guide policy makers who are in the process of taking stock of the progresses made since 2005 with regard to e-government development to inform a new e-government strategy and address the priorities as identified in the Government Work Programme “Denmark 2020 – Knowledge, Growth, Prosperity, Welfare” (“Danmark 2020 – Viden, vækst, velstand, velfærd”).

The sections below highlight the main findings in the areas of focus of the report and put forward proposals for action. As this study presents the richness of initiatives and actions so far adopted by the Danish government on e-government and proposes actions related to areas and challenges which are commonly shared by a number of OECD countries, the intention is to provide a useful tool to support e-government policy-making in Denmark as well as in other OECD countries.

This follow-up study focuses on the analysis of the following areas:
the impact of e-government on the public sector modernisation and efficiency efforts;

the impact of the e-government organisational structure and arrangements on e-government development and implementation;

the need to increase user take-up; and

the benefits realisation of e-government projects.

Area of focus one: The impact of e-government on public sector modernisation and efficiency

The adoption of a holistic approach to e-government development can increase its impact as key enabler for public sector modernisation and efficiency. Placing e-government in the wider context of other public agendas and reform programs can help ensure the effective alignment and coherence of the various policy areas. This, in turn, can facilitate and promote the systematic monitoring and assessment of progress achieved through cross-cutting reforms and programs. Mapping and monitoring the status and results of existing initiatives, in connection with the development of new ones, is an important exercise. It allows the exploitation of synergies and creation of economies of scale, the rationalisation and prioritisation of efforts, the adoption of early corrective actions and reallocation of funds as needed; and ensures the integration and consistency of initiatives. Denmark recognises the instrumental value of e-government as a tool to support public sector reform efforts and sustain other public sector agendas goals such as increased modernisation and efficiency. This is why the Danish government has, over the past decade, focused on using the ICT to enable the efficient, effective and flexible functioning of the public sector and the delivery of modern public services. However, the country study has revealed a number of aspects where the Government’s intervention would lead to important improvements.

Key assessment:

- The Danish Government has made considerable efforts to ensure the alignment of the e-government programme with targeted public sector reform initiatives (e.g. the Quality Reform, De-
bureaucratisation Programme) and the co-ordination of the various governance bodies in charge of their implementation. However, the exploitation of e-government and innovation as means to drive change at times still appears to be siloed. The public sector at large has limited appreciation of the value and impact of e-government across areas and on reform and modernisation efforts. Even though the overall perception on the alignment of the central and sub-national use of innovation and ICT and of the development of specific digital solutions within the framework of the national e-government strategies (e.g. medi-card, Document Box, and digital signatures) is generally positive, the alignment is only partially realised and not yet fully exploited. It is present in some agencies, but not consistently as part of an overall approach. What could be strengthened is a holistic and coherent vision of how e-government and innovation can be used by the country to exploit its opportunities as a digital economy as well as a comprehensive picture of those initiatives that would enable them to fully exploit their potential across the whole public sector. The Danish government has realised that e-government has a key instrumental value to push reforms forward at all levels of government and where it is used it should be clearly integrated. Strengthening the link between the e-government agenda and the various programmes can increase the impact of its strategic potential. The government organisational settings may help bring together the different public sector modernisation efforts (e.g. de-bureaucratisation, reduction of administrative burdens, public management, e-government) as they can foster a greater integration of the agendas and an effective co-ordination of the initiatives.
Proposals for action

To strengthen the alignment between e-government and the different public sector reform agendas, the Danish government could consider the following proposals for action:

- **Developing an e-government vision/statement for the future and a roadmap identifying top priority initiatives**: As many projects are being implemented and others are planned a clear e-government vision/statement indicating Denmark’s goals for the future, outlining the criterion for choosing priority areas and allocating resources could support a strategic selection of key initiatives and improve the possibility that these initiatives deliver the expected outcomes and create the intended value in the Danish public sector. The vision could set the national goals and indicate how the e-government and innovation agendas can help achieve results in specific sectors or across areas, at the central or at the sub-national levels.

  A clear vision for the future could ensure that e-government and innovation are embedded in the strategic thinking whereas the definition of a roadmap could foster the reconciliation of innovation-led and efficiency-led approaches through specific initiatives and projects. The roadmap, to be structured in line with such a vision, could also ensure that the selected initiatives meet the achievement of the goals set in the vision - within single sectors or across areas at the central or sub-national levels of government – and that the use of ICT is well integrated in the policy areas. The roadmap could be tied to a cross-agency priority system and more clearly identify the dependencies and timeframes holistically and provide all parties with a more consistent and targeted pathway for the future.

  **Mapping out, agreeing upon, linking and promoting widely the top-tier initiatives is a critical exercise.** The roadmap for the realisation of the strategic vision allows the prioritisation of initiatives, the rationalisation of efforts, as well as the demonstration of the interconnectedness between projects, implementation timeframes and expected outcomes to spot and create synergies and avoid overlaps.
This would foster the consistency of systems design and development and the exploitation of synergies and economies of scale to jointly develop operations, and facilitate the reallocation of funds as needed.

**Consultation with internal and external stakeholders** (e.g. various segments of the population including trade unions, business representatives) as part of the mapping exercise would enable early action to be taken to stop any work that is not aligned, and to reallocate resources accordingly. The mapping could further improve the digitisation of the public sector both in the citizens-oriented and business-oriented areas, could facilitate a renewed framework for targeted investments aligned with the national strategic goals as well as a consistent reporting on progresses and a framework for cohesive decision making and increased public trust.

- **Focusing on government processes rather than on e-government as an individual policy area to provide a stronger connection:** The government could consider re-examining the various streams of work within the central government as well as the linkages to the activities undertaken at the sub-national levels, which relate to e-government. This approach could assist in the clear identification of dependencies and timeframes based on a whole-of-government approach as laid out in the work on enterprise architecture and the provision of a more consistent and targeted pathway for the future. In addition, this would assist in providing a stronger line of sight over the importance and validity of the work in accordance with the above-mentioned e-government vision statement and roadmap and would support cooperation between and across ministries. *This approach could reinforce the ties between e-government and other public sector goals (e.g. de-bureaucratisation strategy) to ensure e-government is recognised as a core component. It could also facilitate the interaction and joint efforts of different ministries to support the implementation of new projects.* To strengthen this interconnection the roadmap could foresee the development of joint solutions on common problems whenever possible. Such an approach would also go some way to address points raised during the study concerning the need for better co-ordination in specific government processes (e.g. public registers and public procurement). Building on this the
Government could consider extending this approach to all business areas whenever possible.

- **Developing, adopting and implementing a common approach/vision embracing a broader vision of e-government:** The government could consider a change in perception - and in practice - of e-government from being primarily an instrument for better administration and efficiency gains in the back-office to being a means to deliver more effective and improved services and support other policy goals. This could imply focusing on the use of e-government not just to increase efficiency of administrative services but to support improved service delivery in the primary/core service areas like health, social care and education, etc., where better does not necessarily – or not only – mean more efficient processes. Clearly, as the improvement of services comes at a cost the need to achieve economic efficiency gains while improving service delivery needs to be taken into account. The focus may shift to an outcome-oriented one (e.g. more effective education) rather than being administrative efficiency-gains driven. Restoring the link between e-government and better services delivery could also increase the political focus on e-government.

*Strengthening the link between e-government and the further improvement of service delivery could forge* a vision and an understanding of how e-government can contribute to a wide range of policy areas and societal gains rather than focusing solely on budget related ones. A robust analysis of the ICT requirements needed to support this approach would be necessary to secure a choice of applications based on a comprehensive set of criteria. This could also lead within specific areas (e.g. in the education area) to a further improvement of the e-government solutions through a more demand-driven development. This would imply a certain level of co-design based on the involvement of the users.
Area of focus two: The governance framework for e-government development and implementation

Particularly in a period of fiscal and financial constraints, which partly are the consequences of the economic recession experienced by OECD countries in 2008-2009, OECD countries are increasingly trying to transform their operations and services from “doing more and better with less” to “do the same with even less”. Achieving this result through public sector modernisation, reduction of administrative burdens and improved service delivery to citizens and businesses via a number of e-government initiatives in a multi-agency set-up requires collaboration and co-ordination across levels of government to ensure coherency and integration.

A system of strong governance that reflects a strategic vision of a whole-of-government approach for coherent e-government development and implementation will drive an enhanced integration and/or sharing of information, data and systems, and setting of priorities. This approach is likely to deliver co-ordination and co-operation across the levels of government. Easy access to and sharing of, information and data perceived as public value increased transparency and openness of government’s operations, enhanced capacity to listen to and involve the citizens - facilitated by the use of Web 2.0 technologies among other things - are pivotal requirements for the fostering of an efficient, open and responsive government. This may on the one hand require upfront investments in setting-up, but on the other hand in a medium- to longer-term perspective provide a platform for contributions to new economic growth. Securing the continuous support of the political leadership, centrally and sub-nationally, taking full ownership of and responsibility for the e-government agenda is vital to the successful implementation of the national e-government programme. These are the key challenges shared by most of OECD members and tackled through national e-government strategies.

Key assessment

- The Danish government has focused on the establishment of frameworks and structures to engender multi-level collaboration and co-operation across levels of government to foster co-ordination across functional areas and support an efficient and effective development of e-government. Although the current governance
frameworks have led to the achievement of considerable e-government progress it could benefit from further strengthening. Specifically, renewed organisational structures supporting public sector co-operation across levels of government to agree and provide common solutions to shared problems would overcome the continued silo-based activity. Likewise, continuous involvement and support at the political level would provide visible sponsorship and a more direct connection to national priorities to make cross governmental co-operation work better (e.g. in the area of children’s care, how does the Government ensure that all ministries and levels of government co-operate to provide common solutions?).

The Steering Committee for Cross Governmental Co-operation (STS)’s mandate is neither sufficiently clear nor authoritative. Conceived to ensure co-ordination across areas and the with support of the political leadership to push through the broad e-government agenda (e.g. public sector reforms and improved service delivery), its focus on technical related-matters has outbalanced the space devoted to the discussion and decision making on the national vision and future strategic priorities. Additionally, the established Domain Boards could be more effective in bringing forward e-government development in the single areas, as originally envisaged and in informing the discussions made within the STS. Currently the Domain Board’s effectiveness is being hindered by their structure reflecting that of the STS, the lack of a specific mandate and the management tools to implement such a mandate (e.g. a budget), and a focus that is neither political, nor fully technical.

The fragmentation of responsibilities and the absence of a visible champion charged with driving the implementation forward, has also resulted in the value and role of e-government and of its strategic and economic advantages for Denmark not being clear to the political leadership. The Structural Reform of the Danish public sector has also contributed to this position sometimes resulting in a fractured approach “state-regions-municipalities” in the co-ordination and power-sharing between the central government, the regions and the municipalities. There is at times an imbalance and a limited alignment between the priorities as seen by the central government and those
perceived at sub-national levels. This reinforces the case for having a more effective central focal point to co-ordinate the setting of the direction/vision, to set and agree priorities, interdependencies and timetable for achievements.

Proposals for action

In order to tackle the above issues the Government could consider the following actions:

- **Revisiting and strengthening the organisational structure and co-ordination mechanisms** to enhance the effective co-ordination between the ministries sitting in the STS, as this could help to **bring about the required political leadership** and lighten the strong focus of the e-government agenda on the economic and financial perspective. This implies several actions:

  - **The Government could consider strengthening the role and responsibilities of a co-ordinating body such as the STS as a political driver for e-government development.** This could be achieved by vesting the existing STS with powers to set priorities, providing it also with the necessary mandate, access to funds and with reporting obligations to the government on progress made (*i.e.* formally report to government and be accountable on achievements). Empowering such a co-ordinating body would mean enabling it to support visionary cross-governmental projects such as those pushing for integration (*e.g.* ensuring the adoption of standards and establishment of a common ICT architecture) and taking responsibility particularly for big ICT projects as drivers for innovation. A sharper link between the political and strategic discussions in high-level co-ordinating meetings of the STS (*e.g.* STS with political representation) supported by more technically-oriented ones with representation of various ministries (*e.g.* the participation of high-level senior civil servants with the required technical knowledge) could provide more efficient and effective discussions and decision-making. The revised structure could better facilitate the identification of shared outcomes, resolve common problems, provide the right focus and content of
the discussion given the type and level of representation attending
the meetings, and facilitate the proper level of buy-in to support
the development of common solutions/systems. The focus would
move to be not only on efficiency but also on the support of
policies as well as the improvement of processes and
implementation.

- **Revisiting the role and competencies of the Domain Boards** to
  increase their effectiveness. Subject to any change to the STS as
  mentioned above, the organization, competencies and mandate of
  the domain boards would require revisiting. The Domain Boards
could be more effectively used to inform decision-making at the
STS level, *e.g.* the Domain Boards could be obliged to function as
initiative-taking bodies, *e.g.* presenting proposals to the STS on
how to better use e-government to support improved service
delivery within their sector, identify potential solution to common
problems.

- **Improving the cross-governmental collaboration through concrete activities and projects** (*e.g.* the law on geospatial data is a
good example). The speed of development of joint solutions in all
areas could be increased (*e.g.* the principle of sharing of data and use
of information should be promoted and increasingly used as it will
help to break down the silo approach and foster collaboration). The
adoption of a new vision (*e.g.* a new e-government strategy)
sufficiently robust for the next five years to enable the sharing of data
and integration of services could be promoted and the collaboration
idea/partnership approach could be more strongly sustained: the new
vision would thus support a stronger affirmative approach towards the
principle of collaboration across levels of government.

- **Strengthening the sub-national level:**

  - Since the Structural Reform, the municipalities appear to have
    strengthened their desire towards collaboration, for instance by
    engaging in creating joint-solutions. This should be encouraged
    and extended in order to achieve a greater use of digital services
    supported by a joint-collaboration across all levels of government.
This would ensure that e-government is brought back to, and discussed in, the political agenda of the municipalities and that its full potential is exploited. Mapping what the local government is doing in relation to the implementation of the various initiatives could enable the public to gain insight into the municipalities’ performance and increase their accountability and transparency. This could make it easier to highlight local successes and potentially facilitate a re-assessment of the role of the local government in relation to electronic service delivery and to the development of a joint channel strategy.

**Area of focus three: Towards a more citizen and business-centric approach**

Ensuring the availability of a technically skilled labour force within the public sector, a high level of broadband penetration and citizens’ ability to access and use the services and information provided electronically are prerequisites for a society to exploit the opportunities offered by e-government and to facilitate increased user take-up. Improving the dialogue and forging connections between the government and users in the co-creation of policies and in the co-design of services is a feature of leading governments worldwide. The availability of new technologies (e.g. Web 2.0, tele-presence), the increased demands from citizens, third sectors, business and others for services to be made available in the way that best suits their needs, places increasing pressure on the public sector to remain up-to-date and proficient in the necessary ICT skills.

**Key assessment**

- A focus on smarter, better and cheaper use of technology can free up resources to be devoted to higher national priorities. Defining government processes from the citizens’ perspective (users vs. providers), also strengthening the use of Web 2.0 technologies, could further help achieving most value for money. This could also help highlighting the focus on the core public policy and service areas and not narrowly on the administrative side. In the educational area, for instance, while solutions have been built and enhanced to make the administrative processes more efficient, more attention could be
given to educational content development and to the provision of new educational methods realising the potentials of digitisation.

- In general, the Government has not maximised the use of available ICT platforms for service delivery to citizens. In most cases the platforms are in place but the existing channel management strategy does not match the platform development level. The national e-government strategy covering the timeframe 2007-2010 was actually foreseen as a cross-governmental channel management strategy. Thus, even though the individual authorities were expected to be responsible to develop their channel management strategies, the Domain Boards were supposed to play a more active role in the definition of the channel management strategy for services delivered across agencies. The need to have a channel management strategy did not receive the attention originally indicated, and a new channel management strategy is needed, supported by a refreshed communication strategy. These could help to improve awareness, both internally and externally, and to fully exploit existing opportunities. The roles of the citizen portal and business portal in the service delivery to citizens and business should be clarified. A stronger dialogue and co-operation between the government and businesses and government and the citizens for joint initiatives and projects is needed. Listening to the needs of business practitioners and citizens while designing service design would have a positive impact across the public and private sector. This could include more direct involvement of representatives of the various segments of the population in the designing of services to better understand how e-government can respond to special needs.

The structural reform has resulted in local government in Denmark becoming the first point of contact in many instances between the citizens and the public authorities, and while not all elements of the reform have fully settled in practice, there are areas where further efficiency can be leveraged including by creating centralised shared services for processes that can be managed electronically (i.e. completely rule based, without human interference). From the central point of view, however, shared services are seen as a technical discussion about efficiency, whereas from the local governments’
perspective it is perceived as a loss of autonomy and reduction of decisional power which is particularly relevant in cases requiring special attention

Proposals for action

In order to tackle the above challenges the Government of Denmark could consider the following actions:

- **Developing a cross governmental channel management strategy**
  The choice of fostering the use of online channels, or adopting mandatory solutions, to enable the delivery of services to the more e-ready groups (e.g. students) could be pursued and sustained by the use of incentives as appropriate (e.g. monetary incentives, as well as in-kind incentives). Emphasis could be placed for example on advantages associated only with the online delivery of services which could not be offered in connection with offline delivery (e.g. faster turnaround time, higher service levels or administration fees).

- **Developing a new marketing/communication strategy** to ensure that users are aware of the services available on-line.

- **Adopting an approach that prioritises end-users’ needs and** aims at realising the potentials of digitisation to improve citizens’ life (e.g. providing new kinds of services which are capable of fulfilling new personalised requests). The government could strengthen its capacity to assess users needs (both citizens and businesses) and involve users groups through the use of Web 2.0 technologies to listen to the citizens, engage them in the design of services and in the co-production of policies and to forge collective initiatives and interaction. In addition, the Government could consider strengthening the application of the principles on public consultations in order to make them an integral and systematic part of the process of public services design and delivery - including at the political level. This could be done particularly with regard to content development, so that stakeholders’ views could be taken into account when policy and digitisation of services is being developed. Limiting the discussion only to the various government levels can be counterproductive in
terms of user up-take. By enlarging the public consultation and involvement the Government could ensure that the development walks on two legs: meeting the citizens where they are using ICT to make services more efficient while keeping in mind the more vulnerable groups that cannot access the services online (i.e. the “meeting the citizens where they are” approach). Ways could be envisaged for instance to increase the participation of young citizens, on the co-design of services.

Strengthening the dialogue with businesses and citizens would raise the level of public awareness and recognition of the government’s initiatives aimed at improving service delivery adding value through e-government. This would help to focus on the development of more demand-driven applications with the greater involvement of users, including co-production thereby realising overall benefits of improved service delivery and increased efficiency. As a result the public buy-in and use of e-government services could increase.

- **Benchmarking and monitoring the efforts and improvements made by the various agencies/ministries to digitise processes and operations** could help increase the level of transparency and improve public visibility. The identification of champions at all levels of government, particularly in relation to the implementation of e-government initiatives and user uptake, could help demonstrate the various ministries’ involvement and performance with regard to digitisation, which would be a strong driver in the long term. The transparency and public visibility of the recognition could function as incentives for continuous improvement. Resources could be utilised to better showcase – and thus support and facilitate – central as well as sub-national successes.

**Area of focus four: e-government benefits realisation**

An overall assessment of the effective realisation of e-government benefits requires, among other things, an analysis of the business case models and methodologies used to measure and evaluate the achievement of specific benefits and the impact of e-government projects. In order to achieve the full benefits of e-government any government should consider how to use
e-government to enable better performance in all core business areas (e.g. healthcare, education and better decision making) where "better" does not solely mean more or cutting costs. This implies a wider notion of both efficiency and effectiveness, whereas increased effectiveness is measured in terms of e-government contributions to support and advance broader societal goals of political prioritised policy areas. A systematic and consistent use by all levels of government of a business case methodology driven by a broader view can lead to increased efficiency gains also in wider societal terms. Adopting a funding mechanism and establishing a governance model that require investments to be made based on sound business case, clear outcomes and benefits to be achieved can also help demonstrate the benefits and value of e-government.

**Key assessments**

- There is a risk factor for large ICT projects linked to an inadequate availability of competencies and skills in the public sector (e.g. inadequate capability and maturity of experience to undertake particular projects and to understand certain risks related to the implementation process, to manage procurement especially for large ICT projects, to assess programs’ costs profiling, to manage business case processes). There is not a comprehensive view of the core competencies and skills in place across the public sector, or of those that will be required in the future to support the broader public sector reform objectives of the government. In addition, civil servants do not seem to fully value the importance of project management skills. This situation has a negative impact on the benefits realisation and on programme success in the public sector. For instance, it leads to delays in the implementation of large projects, to costs blow outs, failure to deliver expected benefits and to a situation where the government institutions do not always have the capacity to fully harvest the full value of existing e-government projects.

- The business case model used by the Ministry of Finance is based on international standards for ICT projects and business cases. It delivers a financial overview and allows the users to compare the planned value and objectives to the estimated costs and investments. However, it is perceived as being used with a main focus on the
efficiency of administrative processes. This narrower focus may not enable the Government to harvest the full efficiency gains from e-government projects and use this tool as an effective driver for necessary changes of processes and work habits. Additionally, it places limited attention to the impact on citizens and businesses and to the prerequisites for increased user take-up when choosing the most adequate e-government solution. The business case is mandatory at the state level for projects with a larger budget than 10 million DKK. One main limitation is however, that the business case model is precise and detailed regarding the financial measurements and requirements but less detailed regarding how to follow-up on the realisation of the more societal, qualitative and policy oriented benefits.

Taking into account pure efficiency-gains related concerns (*i.e.* cost reduction, possible savings) is widely recognised and endorsed; however, the focus on savings may have an impact on e-government initiatives at large, as the broader benefits of e-government and the role of innovative technology deployment in support of improved public services may implicitly be overshadowed by the overarching fiscal driver. The current focus of the business case model while relevant should not be the only driving aspect. A revised business case model could be used to enhance a more effective management across the government, including breaking down stove-piped working habits.

The government is not fully exploiting the opportunity of using e-government to share citizens’ information, while complying with privacy and security obligations. Better use, and flow, of public sector information within and across levels of government is needed as well as a stronger clarity on who is the primary holder of core data across the government and on how it can be accessed or reused by multiple and endorsed parties to better meet the needs of citizens, business or government. The need for data standardisation (*e.g.* health, environment), together with the definition of ICT standards, is also seen as an issue by many stakeholders that requires attention to improve the communication between systems.
Proposals for action

To tackle the challenges listed above the Danish government may wish to consider:

- **Focusing on developing capacities and competencies to ensure full exploitation and leverage of e-government projects.** The Government could place a stronger focus on competencies and skills renewal, which would mean developing core competencies and skills to meet and support the growing demand in the public sector on project and programme management and design related issues, particularly in the case of large ICT projects. This would enable the Government to match the capacities available within the public sector with the ICT demands, to ensure support for e-government implementation as well as advances in the modernisation agenda. This could be undertaken in the context of the overall roadmap as described earlier in this document. The need to develop specific skills could be integrated in the career paths of civil servants. Having on the job training and ICT professionals that are also recognised practitioners could be an additional option. To address the scarce availability of the required competencies the Government could also oblige public agencies to streamline services, simplify and consolidate the systems as much as possible with a preference for “reuse” rather than build separately. This could help ensure that the core capabilities internally needed would be the most common ones and in the rare cases of need for specialised ones they could be outsourced.

The Government may also wish to pursue a *Centre of Excellence model* to serve as a shared service centre for the entire public sector (e.g. with civil servants responsible for projects with an ICT component). These, or similar actions, could establish a level of proficiency within the government as a basis for sustained public sector capability and could ensure the availability of experts according to needs and thus balance the demand and reliance on external expertise.
• **Better ensuring the full exploitation and leverage of e-government projects** - such as the citizen and business portals - and of the associated capabilities at all levels of government. The Government could for instance identify and prioritise future ICT enabled requirements and strategic and tactical investments - including seed funding of ICT initiatives - particularly those that are cross-agency. This could provide the opportunity to target economic benefits, even when this means moving from big contracts to smaller pilot projects.

• **Improving information and data management through:**
  
  - The adoption of an information policy covering major areas concerning public information management (e.g. the governmental creation and dissemination of information; the development, regulation, and usage of information infrastructure, the institutional and legal infrastructure).
  
  - The improvement of the structure and arrangements for data identification and management through the nomination of lead agencies responsible for retaining and managing those elements of data that will facilitate a measurable improvement in service delivery and a greater reuse across the government, be that for citizens, businesses or for the functions of government administration. This would enable the public sector to separate services from data ownership (e.g. having a leading institution would support shared services - for example in hospitals).

Applying the principle of sharing information and data could mean that re-use could be promoted and applied increasingly and lead to the abolishment of siloed approaches, thus avoiding duplication of unnecessary data storage within different government institutions. Adopting the full policy goals behind European Commission’s “Public Sector Information Directive” as a basis for assisting in better management and use of data across the government and the private sector would unlock government data to enable others to identify and extend its economic value by creating new and innovative products and
services that are not bound by the functions of a single entity or agency.

- **Revising the business case model and the benefits realisation tools:**
  
  - The Government could develop, adopt and apply a business case model that better takes into account a broader set of criteria that sustain the selection of projects supporting a whole-of-government perspective. The aim would be to bridge the gaps between citizen and business interests on one side and the government’s view in the choice of the digital solutions on the other. Such a business case model could also provide for taking input from end-user consultation into consideration, as appropriate, and for the identification of what needs to be integrated in order to reap the benefits of projects, both in terms of traditional (administrative) efficiency and broader efficiency and effectiveness considerations. A revised business case model could also help in putting more emphasis on the ICT standards and on the working procedures (definition and description of processes and tasks). This could help to achieve a real cross government approach and get shared services across governments. Such a business case model could lead to the selection of smaller project, where it could be possible to use for instance standard software components. The requirement specifications could be more process oriented, increasing the emphasis on having to show how things are done as opposed to solely proving narrow administrative savings potentials.

  - Increasing the use of benefits realisation tools (*i.e.* benefits profiles, benefits maps, benefits realisation plans) to identify the distinct outcome and benefits from projects. This implies being more disciplined in using ex post assessment tools for a coherent monitoring, evaluation and follow up on projects. The revision of the business case model could address this need and foresee its stronger use to monitor the follow-up of the projects’ implementation to ensure that the benefits are reaped throughout the process.
With the launching of the National E-government Strategy the Steering Committee for Joint Cross-Government Co-operation (STS) had to set the managerial parts of the work to support the implementation of the national digital agenda. In order to ensure that work would be done four Domain Management Boards were designated in selected domains (i.e. well-defined public businesses/areas). Each Domain Management Board was conceived as a co-ordination forum for mandatory co-operation across authorities within a specific sector.


