THE DANISH E-GOVERNMENT STRATEGY 2007-2010

TOWARDS BETTER DIGITAL SERVICE, **INCREASED EFFICIENCY AND STRONGER COLLABORATION**

The Danish government, Local Government Denmark (LGDK) and Danish Regions June 2007



The Danish E-government strategy, 2007-2010

Towards better digital service, increased efficiency and stronger collaboration
 June 2007

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KEY TRANSLATIONS

Digital signature (Digital signatur)

The digital signature is an authentication service that citizens and businesses can use to self-authenticate when communicating with any different branch of public authorities and also a lot of private companies.

The Citizen Portal (Borger.dk)

The citizen portal is a digital one-stop-shop for easy access to public sector information and the increasing number of citizen-centric digital self-service solutions irrespective of the underlying administrative organization.

MyHome (MinBolig)

MyHome is a subsection of the Citizen Portal clustering all services concerning the citizens' homes such as housing subsidy and tax on real property.

MyChildren (MineBørn)

MyChildren is a subsection of the Citizen Portal clustering services concerning children and related areas; day-care, school, children's health care, etc.

The Business Portal (Virk.dk)

The business portal is a digital one-stop-shop which gathers information and business-centric digital self-service solutions irrespective of the underlying administrative organization.

E-health Portal (Sundhed.dk)

Danish eHealth Portal is a joint portal providing information on and access to all Danish Healthcare Services.

E-Income (eIndkomst)

E-Income is a register containing information on income such as salary, pension, and social benefits. The main purpose is to gain better control of public benefits, reuse of data and secure that data is up-to-date.

E-invoicing (eFaktura)

E-invoicing is an electronic invoicing system. Since February 2005 all government organisations have been required to accept only electronic invoices from suppliers.

Easy Account (NemKonto)

An Easy Account is a normal bank account to which all payments from public institutions are transferred directly. Citizens and companies designate an existing account as their Easy Account.

E-day (eDag)

The E-days provided federal, regional and local government authorities with a general right to demand electronic correspondence with authorities as long as safety standards to protect private information are available. Citizens and business achieved the right to contact the authorities using secure electronic correspondence.

Electronic Health Record (Elektronisk patientjournal, EPJ)

The Danish Electronic Health Record project aims at creating a comprehensive system for secure and efficient electronic handling of patient records.

EasySMS (NemSMS)

EasySMS is a joint public sector project which promotes SMS reminders for appointments with public institutions and authorities such as the doctor's, the hospital and eventually other areas as well.

Joint Public Sector Electronic File and Document Management (Fællesoffentligt Elektronisk Sags- og Dokumenthåndtering - FESD)

FESD is a cross government initiative to standardise the introduction of Electronic File and Document Management systems.

User authorization and authentication management and control system (Brugerrettighedsstyring)

A common public sector system for authorization and authentication to ensure secure access to data.

Steering committee for joint-government cooperation (Styregruppen for Tværoffentlige Samarbejder - STS)

The steering committee for joint-government cooperation is the central decision-making body for E-government in Denmark with joint responsibility for the country's E-government strategy/policy. The Steering Committee is made up of the permanent secretaries from four ministries (Finance; Science, Technology and Innovation; Economy and Business Affairs; Interior Affairs and Health), as well as the Managing Director of Local Government Denmark and the Managing Director of Danish Regions.

Shared Object Types collaboration (FOT-samarbejdet)

The FOT-project aims at ensuring a standardized approach to gathering geographical data.



Digital opportunities must be exploited even better. The public sector must deliver better, more cohesive and efficient digital service to citizens and busi nesses. The e-government strategy will fulfil that ambition.

With the new strategy, the Danish government, Local Government Denmark (LGDK) and Danish Regions will be joining forces for the third time to set common objectives and targets, and to take joint initiatives in a move towards increased and more efficient digitalization of the public sector up to 2010.

E-government has come a long way in recent years. Today digitalization is a natural part of the provision of government services throughout the public sector—and Denmark occupies a leading position internationally regarding e-government development. We need to retain and develop that position.

If we are to raise digitalization to a new level, the bywords are prioritization and coordination. The strategy therefore focuses on the gains of digitalization resulting from:

- digitalization focused on creating improvements in the service to citizens and businesses;
- digitalization that enables resources to be transferred from administration to citizen-focused service;
- coordination and prioritization of digitalization efforts in the public sector through more binding, cross-governmental collaboration at all levels.

The strategy supports long-term development towards cohesive and more ef ficient digitalization of the public sector. The strategy will therefore provide the individual authorities with a new framework for digitalization efforts up to 2010.

The Danish government, LGDK and Danish Regions June 2007

BETTER DIGITAL SERVICE, EFFICIENCY AND COLLABORATION

For a number of years now the public sector has used digitalization to improve administration and the services offered. In many ways these efforts have been successful. Today digitalization is a natural part of providing public services throughout the public sector—and Denmark occupies a leading position internationally regarding e-government development.

Large parts of the communication between citizens, businesses and the public sector are currently effected electronically. In many areas, that has meant that the public authorities are delivering services faster and more efficiently than just a few years ago.

At the same time, this development means that ongoing efforts will have to align with the new challenges and exploit the possibilities naturally arising in an increa singly digitalized society. The public sector has only just begun to realize the multiple benefits of digitalization. The continued success-of digitalization requires us to keep building on local, national and international experience in the digital field and simultaneously ensure that such initiatives are combined to make a joined-up public service provision.

Efforts over the next four years will therefore be designed through a national strategy for public sector digitalization with three overarching strategic priority areas: better digital service, increased efficiency and stronger collaboration

The strategy builds on the experience from the two previous e-government strategies. The first e-government strategy for 2001-2004 primarily marked the start-up of joint digitalization cooperation between the municipal, regional and state levels of administration — which is still the basic concept behind the Danish approach to e-government. The second e-government strategy for 2004-2006 added impetus to the development of internal public-sector digitalization. In turn, the aims of the new strategy period raise the level of ambition and set new standards for the development of citizens' services and cohesion across the public sector. The new strategy will entail better and more binding cooperation and emphasizes that implementation of specific digitalization measures will continue to be anchored in the individual public authorities.

The three overarching strategic priority areas correspond to independent main themes, but the priority areas also interact mutually. Correctly imple mented, digitalization will facilitate service and quality improvements alike and free up resources at the same time by enabling tasks to be performed more simply and efficiently.

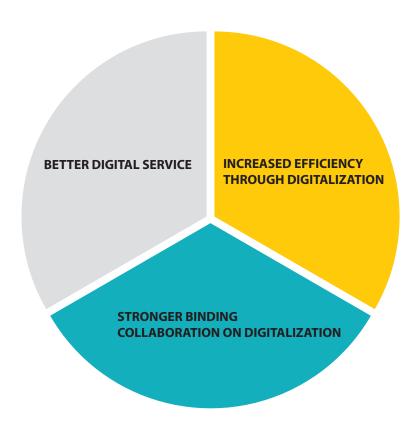
The E-government Project

The e-government project was launched in connection with the 2002 Financing Agreement between the Danish government, the munici palities and the counties. The first joint e-government strategy was drawn up in 2001.

In June 2003 the Danish government and the municipal parties decided to extend the project until the end of 2006, and in February 2004 the second e-government strategy was launched.

In order to ensure a concerted focus on digitalization as an integral part of public modernization policy, the parties decided in 2005 to establish the Steering Committee for Joint Cross-Government Co-Operation with government representatives as well as representatives from municipalities and regions.

The collaboration between the Danish government, the municipalities and the regions on the e-government project was extended up till 2010 as a result of the 2008 Financing Agreement. The project thus follows the same time frame as this present strategy.



OECD recommendations

OECD conducted an evaluation of egovernment in Denmark in 2005. The report concludes that Denmark has come a long way and that the work has been organized properly.

This current strategy presents new answers to the primary OECD recommendations, which included:

- Implementing more citizen-centric initiatives.
- Greater focus on the link between digital and non-digital channels.
- Better use of business cases and systematic monitoring of IT costs.
- Introducing compulsory technical policies and standards, particularly business and IT architectural and data standards.
- Focusing on cross-governmental governance.

With the priority area better digital service, fundamental priority-setting will be undertaken so that digitalization takes place in those areas where it will have the greatest impact on citizens and businesses as well as the public sect Digitalization is intended to make public service more readily accessible to citizens and businesses and increase the degree of self-service.

Better digital service thus means that public services will be more customized and cohesive, so as to support individual citizens' and businesses' day-to-day dealings, irrespective of the underlying administrative organization. At the same time, the ser vices must be designed to also ensure that citizens feel secure using digital channels of communication.

Increased efficiency through digitalization is necessary because the public sector's resources need to be concentrated to a greater extent on personnel-intensive, citizen-focused care and service. Basic social conditions call for the public sector to adapt and evolve. Current demographic trends mean that the proportion of Danes of working age will decline during the coming strategy period. At the same time, the public sector will encounter rising expectations for service options, transparency and quality.

It is crucial therefore, that forward-looking digitalization should make a greater contribution to the rationalization of local service provision. The public authorities must work more systematically to realize the gains associated with digitalization projects, inter alia through change management and organizational adaptation. Targets should be set and the use of common solutions and technical standards throughout the public sector will be closely followed. Emphasis will be given to illustrating the utility value of digital solutions once they are in place.

Stronger, binding collaboration on digitalization should be the pivotal factor in fur ther developing the way the public sector organizes its digitalization. Since 1 January 2007 the Danish local-government reforms have resulted in larger and more sustain able units. This in itself has improved the framework for digitalization efforts.

Stronger interdisciplinary commitment and cooperation is needed both within the public sector and between the public and private markets. This strategy qualifies the distribution of responsibilities for digitalization between the individual authorities, new joint digitalization boards for the individual domain areas across sectors, tiers of authority and the national players. In addition the strategy introduces more systematic follow-up and documentation of digitalization effort in the public sector. This applies among other things to follow-up on technological devel - opments, maintenance of common standards and securing of data access for and between the authorities.

Increased collaboration and coordination do not, however, change the fact that the most essential action in relation to the ongoing digitalization feart still lies in the concrete digitalization and modernization initiatives on the part of each individual municipal, regional and government organization. The individual authorities are responsible for ensuring the progress of such initiatives.

In order to secure the best and most cost-effective development of digital solutions, the market must be exploited and included as stakeholders in public sector IT development. Although the public sector as a whole represents considerable demand on the IT market, that potential will not be fully exploitable until there is cooperation and some linkage with developments in the private sector and the global IT market. To the greatest possible extent, the development of e-government should be based on international market-developed, open common public standards.

BETTER DIGITAL SERVICE

Digitalization must make public service more readily accessible to citizens and businesses

Citizens and businesses must perceive the public sector as accessible and service-minded. Communications will take place digitally whenever convenient and in ways which citizens and businesses perceive as valuable and focused. This ambition will be meet once citizens and businesses are able, wherever possible, to serve themselves and track their own cases with ease.

In order to support the greatest possible digitalization of contact with the public sector, it should be possible to conduct all written communications digitally. In or der to make direct contact between citizens and businesses as flexible and efficient as possible, the underlying business processes must be automated or simplified in all areas. Systems must also be able to communicate with one another, where possible, and wherever it makes sense from a service and business point of view.

The Citizen Portal and the Business Portal give citizens and businesses a general overview of their dealings with the public sector and their options by presenting services and information from many public authorities and institutions in a unified and manageable fashion. That overview can be provided both through the por tals and through the individual authority's homepage by integrating content from The Citizen Portal. This creates cohesion in the public sector services, requirements and the options available to the individual citizen and business. During the period 2008-2012 both the Citizen Portal and the Business Portal, in association with a large number of authorities and institutions, will form the framework for a modified, personalized approach to the public sector with a general overview of all outstanding business between citizens and businesses and the public authorities. Thus the portals also serve as leverage for a service-minded architecture, enabling services developed for the portals to be displayed and integrated on other relevant public websites.

Accessibility will also be strengthened by means of flexible communications between the public sector and citizens as well as businesses. Communications will be targeted at users' everyday lives and communication patterns. Among other things, therefore, mobile text message reminders will be introduced in connection with visits to the doctor's, hospital appointments and other relevant contacts between the public sector and its users. With a single click citizens and businesses will be able to opt to receive all correspondence from the public sector digitally.

Public institutions have a special responsibility to ensure that websites and services are accessible to everyone. The Internet offers many groups of the population new possibilities for communicating and interacting with the public sector on their own initiative. The blind, motor-disabled and other groups will be able to access public websites and use digital services with the help of simple aids.

Borger.dk

The Citizen portal Borger.dk is the common public digital service channel for citizen.

With the expansion of the Citizen Portal and the authorities' development of digital services at the portal, citizens will experience a boost in digital services. This will make digital self-service more attractive and more widespread, thereby paving the way for taking a considerable strain off administrative staff and achieving savings in municipalities, regions and government authorities.

The Citizen Portal is a framework and catalyst for better cross-cutting collabo ration on citizen service between authorities in the public sector.

Virk.dk

The Business Portal Virk.dk is the common public service channel for businesses.

Here businesses can do all their reporting to the public sector and obtain relevant information about public services.

The aim of The Business Portal is to enable businesses to quickly and easily perform their reporting.

The Business Portal is intended to give businesses concrete administrative relie in their day-to-day work.

This will free businesses time for the essentials, i.e. to run a business.

A new and improved version of The Business Portal will be launched in early 2008.

Cohesive services with citizens and businesses at the centre

Citizens and businesses are the focal point for the public sector work. The citizen and business-oriented service therefore needs to be manageable and available wher ever the citizen or business interfaces with the public sector. The municipal citizen service centres and the cross-cutting citizen and business portals have a crucial role to play in this respect.

A core objective of the e-government strategy is develop public portals further, to make them central contact points between citizens, businesses and the public sector.

Accessibility of data across authorities and administrative tiers is a prerequisite for public authorities' ability to deliver a cohesive and attentive service. During the strategy period, therefore, a project will be initiated on essential citizen and busi ness flows intended to improve service provision, data utilization, rationalize the case-handling and simplify existing rules. In the same way targeted work will be done to ensure that the exchange of data between authorities is conducted digitally.

The objective is that citizens and businesses, wherever possible, should supply information to the public sector only once. As far as possible, therefore, provision should be made for the public sector to recycle data across sectors and tiers of au thority. In this respect better access must be provided for extracting common public key data. This additionally entails consolidating efforts in terms of cross-govern mental standards to ensure uniformity and transparency in public data.

Focused and targeted communication with citizens and businesses

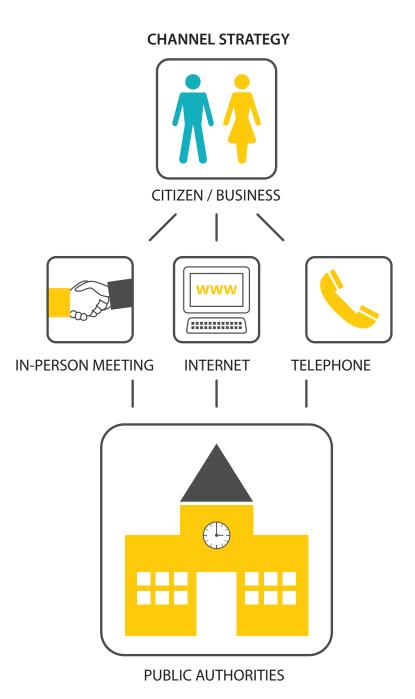
During the strategy period ahead the public authorities will work strategically to focus the channels of communication with citizens and businesses. Wherever possible, citizens and businesses must experience clarification or settlement of their case on first contact with the public sector. In addition, users must be incentivized to use those channels which are cheapest for the public sector.

In this context it is important, in specific areas with many transactions, to identify objectives for service delivery via the various channels (attendance in person, letter, phone, text message, e-mail, transaction over the Internet, system-to-system etc.) and to regularly evaluate the use of the various forms of communication.

In order to support the greatest possible use of digital channels, the public sector must cooperate in enabling all relevant written communication with citizens to take place digitally by 2012 at the latest. In the business domain the objective is for communications with businesses to be effected digitally from 2012.

In order to keep citizens and businesses using digital services, the use of digital communications will require constant follow-up, partly to improve the service and partly to pick up on new needs on the part of the users.

The joint public channel strategy aims to ensure focused communication



A new cross-governmental strategy is being prepared for the design of the public service offer to citizens and businesses (a channel strategy). The new Citizen Portal, the Business Portal and the local-government reform vision of the municipalities as the main gateway to the public sector will be essential components of this. Within the framework of the overriding channel strategy the objective for the years ahead is to draw up specific strategies in relevant domains for the best and most efficient ways of delivering service to citizens and businesses.

Furthermore, more targeted work needs to be done to make digital communications and digital solutions compulsory in specific areas. Particularly in the business area, the considered view is that measures can be implemented to substitute digital for existing forms of analogue communication.

The scope for compulsory digital communication also needs to be investigated in the citizen area, for example in the field of education, by examining whether the use of digital self-service solutions can be made obligatory when applying for educational grants.

User-driven service development

Only in close contact with citizens and businesses is it possible to roll out relevant service offers so as to fulfil the most essential requirements.

Only 16 percent of digital services are currently being developed in collaboration with citizens and businesses. Experience from innovation in the private sectorowever, shows that an in-depth knowledge of users' needs and wishes is central to succeed in formulating services perceived as generating benefits.

The various traditions between the private and public sectors of involving citizens and businesses is one of the reasons greater use is being made of private digital services. While banking, booking trips, Internet commerce and exchange of special interests have all enjoyed a decisive breakthrough, there is still a limited supply and demand for public digital services.

Users' needs and wishes should be taken on board to a greater extent in developing public digital solutions. This can be done by asking selected focus groups, resorting to user panels and involving users in the development of digital services etc.

Safe and secure data handling in the public sector

Citizens and businesses generally place great trust in the Danish public sectoris crucial to maintain and expand this trust during the present radical digitalization-of the Danish welfare society. Information and services must be accessible and securely protected, in order for everyone to have confidence in the material being correct, reliable and subject to the requisite confidentiality.

Consequently, safety and security issues will continue to constitute an altogether central part of the Danish digitalization effort. In implementing new initiatives, the rules governing good data-processing practice must continue to provide citizens with the requisite confidentiality, just as a joint standard for handling IT security (DS 484) will be disseminated to the entire public sector. This must be implemented in a manner which allows the authorities to continue providing citizens and businesses with efficient, joined-up service. In addition, a cross-governmental working party will be set up in order to continue to promote considerations of privacy in the development of public administration.

Citizens' and businesses' trust should be further bolstered by providing greater oppor tunity to access and inspect own case files and get an overview of their entire records in relation to the public sector. Citizens and businesses will therefore be able to keep abreast of the way their own cases are being handled digitally and see the information on which the case is based.

In addition, the objective is to spread an improved and user-friendly solution for digital signatures during the strategy period to citizens and businesses, and to make it fully serviceable in the public digital service offering. The baseline situation is good. Even in 2006, 98 percent of the public authorities were already capable of receiving and sending e-mail signed with a digital signature, and as at mid-2007 more than a million digital signatures have been issued.

The Act on Processing of Personal Data

The Danish Act on Processing of Personal Data sets out a number of rules for data-processing of personal information, so that citizens and busi nesses can be confident that sensitive personal data submitted to the public sector will be treated correctly and with the requisite confidentiality.

New digitalization initiatives concerning the processing of data will be formulated in accordance with these rules so that there is still a sound foundation for the population's trust in public systems.

Security standard

In order to strengthen IT security in the public sector, IT security standard DS 484 has been chosen as the basis for the work on security.

DS 484 has contributed to strength ening the level of security in the public sector and giving the authori ties an effective tool for handling the security aspects flowing from public sector digitalization.

Objectives and initiatives aimed at ensuring better digital service

Citizens and businesses must experience an accessible and service-minded public sector

- Under the auspices of the Steering Committee for Joint Cross-Government (STS), an action plan will be drawn up for how to increase the share of immediate settlements when using online self services by at least 15 percent* by 2010.
- From 2008 citizens and businesses will be able to receive text-message reminders about appointments with the public sector.
 - The Citizen Portal is a common public digital service channel for citizens. The Citizen Portal will also
- form a framework for developing cross-governmental standards and principles of digital citizen service at all authorities. In 2010 all digital self-service solutions should be completely integrated into the Citizen Portal. In 2012 the Citizen Portal will be fully evolved, with all digital self-service solutions being fully integrated
 - The Business Portal is the common public service channel for businesses. In 2009 businesses will be able to access all central and local government business-oriented digital reporting solutions via the Business Portal through a single digital-signature sign-on. In 2010, 75 percent of businesses' reporting will be done digitally.
- Website accessibility will be promoted, for instance by introducing compulsory accessibility requirements in connection with compulsory use of open standards in the public sector.

The public sector must offer cohesive services and place citizens and businesses at the heart of their task-solving

- Digital citizen clusters (such as "My Home" and "My Children") are to be developed in all major service areas by 2009 at the latest.
- In 2008 a solution will be implemented for digital geographical maps on the Citizen Portal and the Business Portal in order to give citizens and businesses a visual service and facilitate access to data across authorities.
 - In 2007 an analysis will be implemented of the potential for and the legal challenges associated with joint operation of select public registers. The purpose is to ensure more efficient use of resources and better recycling of data.

The channels of communication between the public sector and citizens and businesses must be targeted and strengthened so as to promote digital channels as much as possible

- From 2010 citizens and businesses can opt to receive all letters etc. from the public sector in a digital document box on the Citizen Portal and the Business Portal.
 - In 2010, 25 percent* of the transactions currently effected as ordinary reporting from businesses to the public sector are to be performed as system-to-system solutions.
 - The possibilities of making digital self-service solutions compulsory for IT-ready groups will be investigated. Initially, consideration will be given to the compulsory use of digital solutions for educational grant applications, businesses' reporting of absence due to sickness, registration of new business information with the authorities and founding of private limited companies.

The public sector must make a targeted effort to involve citizens and businesses in the development of digital solutions

- In 2007, the ten most essential business flows will be selected with a view to optimizing those flows by means of digitalization, rule simplification, recycling of data etc.
- 30 essential municipal, regional and state digital citizen services will be fully integrated into the Citizen Portal in 2008.
- Models for involving citizens and businesses in the development of digital services will be made accessible to public authorities.

Continued safe and secure data handling in the public sector must be guaranteed

- The digital signature will be refined. By 2009 at the latest, citizens and businesses will be able to use the digital signature in all solutions where the user needs to be able to self-authenticate.
- A national standard and/or solution to register digital consents to access and handling of data will be launched in 2009.
- A solution for giving citizens and businesses an overview of their files in public sector electronic file and document management systems is to be launched in 2010.
- A cross-governmental working party is to be set up with a view to continuing to promote
 considerations of privacy in the development of public administration. One of the points of
 departure for this work will be the existing Privacy Forum and IT security panel's recommendations.

 $^{^{\}ast}$ Before the final percentage is determined, the current status needs to be identified.

→ DIGITALIZATION WILL FACILITATE INCREASED EFFICIENCY

From administration to citizen-focused care and service

The Danish public sector must be among the best in the world at exploiting technology to improve the efficiency of its task handling. This is vital in order to satisfy the growing requirements being made of the public sector as increased prosperity creates individual and hence also diverse needs. As a result of demo graphic developments, the number of public-sector employees will not rise in the years ahead.

In this context an essential goal is to continue making public administration more efficient and provide a basis for better control and organization of more person nel-intensive service areas, so that a larger proportion of public-sector employ ees' time can be spent on citizen-focused service. At the same time, the ways in which public service is generated must be constantly developed.

Increasingly, the authorities are already experiencing that digitalization projects free up resources and are instrumental in simplifying their working routines.

Provision will be made to automate or simplify as many of the administrative routines as possible. At the same time, more of citizens' and businesses' enqui ries, applications and so on to the public sector will be able to be handled and decided digitally, as soon as the public sector has received the necessary information.

In parallel with this the digitalizing and streamlining of internal work processes in the public sector will continue. In this context, it will be in vestigated whether any areas would gain from a higher degree of shared digital solutions to the administrative processes.

The lynch-pin will be the organizational changes

The greatest gains will only be achieved where digitalization initiatives are viewed in the context of implementing organizational changes and modified work procedures. This calls for a great effort from the public sector's politicians, leaders and employees, just as it presupposes methods and means of creating the basis for that change – for instance, development of new skills, work process restructuring and an efficient communications strategies towards citizens, businesses and public-sector employees.

Efficient digitalization, which creates a basis for greater value for money, requires constant managerial alertness. Thus targeted change management is an altogether crucial proviso for realizing the full potential of digitalization. Digita lization will therefore be a central component of the public organizations' overall strategies for quality and rationalization work.

The municipalities' digital strategy

The municipalities' digital strategy determines the framework for prioritizing digitalization efforts in the municipalities, so that digital initiatives create solutions where the impact on citizens, businesses and the municipalities' use of resources is greatest. The munici palities must formulate standards for task management and IT, and concentrate their purchasing power so as to present the suppli ers on the market with a collective municipal demand. The standards will enable more IT suppliers to develop and maintain IT solutions for the municipalities.

The regions' digital objectives

Danish Regions has initiated the formulation of overriding regional principles and visions for e-govern ment in close interaction with the regional parties. The document will help to ensure best possible compliance with both specific regional objectives and cross-governmental objectives. The electronic patient (EPJ and the E-health portal will be developed further as part of the project.

In their managerial development the municipalities will direct particular focus on where and how executive management stipulates and follows up digitalization projects. The municipalities' digital strategy thus highlights the need for this.

The new regions will draw up new digitalization objectives, which will be normative for regional digitalization and the regional contributions to common public cooperation in future.

In the field of centralized government, digitalization will be made a new mini mum requirement for future rationalization strategies. Clear, measurable targets will be set for digitalization, and the outcomes followed up among authorities, as well as performing proper project monitoring and control. The baseline situation for this is good: Today 77 percent of government authorities have an IT strategy that has been updated within the past two years.

The requirement to focus on the rationalization potential offered by digitalization is being added to the list of requirements generally facing public-sector employ ees at present—including being able to handle constant readjustment, creating links to other parts of the public sector and providing attractive jobs in order to recruit and retain employees.

The Gains must be quantified and documented

A pivotal point in this strategy period is laying down goals and following up digitalization through well-documented impact assessments and the systematic use of project control methods. Continued support for modernization through digitalization requires the individual digitalization initiatives to be worthwhile in the form of better service and/or cost reductions.

Better digital service and increased efficiency demand a well-underpinned decision-making with regard to economy, risks, privacy issues etc.— as well as a close follow-up on key targets through systematic project management methods. For this reason, knowledge of project management and systematic business case methodology will be disseminated as a central part of the e-government strategy.

Economic aspects can make up the whole or parts of the Business case methodology that will be a determinant in prioritizing digitalization efforts. Strategic considerations, IT infrastructure objectives, administrative importance to citizens and businesses or qualitative improvements can also form the basis for decisions to implement new initiatives, so that impact assessment methodology can be used offensively to promote digital development of the public sector. Whatever the purpose, however, the requirement must be that the effects are documented.

Objectives and initiatives aimed at facilitating efficiency gains

Managerial commitment and focus on digitalization must ensure that the public sector is amog the best at realizing the gains of digitalization

- At least 75 percent of all digitalization projects every year must free up resources.
 At least 25 percent must do so to a great extent.
- In order to direct the managerial focus on digitalization, it will be made a compulsory priority area in the 2007 guideline for public authorities' efficiency strategies.
- In 2007 LGDK will conduct the "Digital management" project, focusing on ensuring that management in the municipalities is focused on demanding documentation of the impact of digitalization.
- The new regions have put the spotlight on digitalization by appointing IT managers among executive management in all regions. The aim is to strengthen digitalization, both strategically and organizationally.

Consistent impact assessment and documentation of digitalization efforts must target public digitalization initiatives

- In 2007 common public business case tools will be devised. These tools must be used by state level authorities and is recommended to the regions and municipalities. There will be systematic follow-up to the application of the tools.
- In all large-scale digitalization projects all public authorities must deploy systematic project management methods. The application of such tools will be subject to systematic follow-up.
- A communications drive aimed at public top executives will be mounted on the use of systematic project management methods and training of project leaders.

STRONGER COLLABORATION WILL CREATE DIGITAL COHESION

A common direction calls for more joint decisions

The public sector is characterized by a high degree of complexity viewing the number of services for citizens and businesses, the number of employees and the amount of different administrative processes and IT support systems. This high level of complexity and the desire for a modular IT architecture in the public sector make it increasingly important to obtain a general overview of digitalization on the part of the authorities.

In order to ensure cohesion and be able to prioritize digitalization efforts better more decisions will be made in binding collective fora. Those decisions will be based on a better overview and more thorough insight into which services and work processes it will be most valuable to digitalize, and which solutions can be reused at different levels.

The basis for digitalization is individual domain areas

The basis for increased binding coordination will be digitalization boards set up within individual domain areas. The domain boards will be allocated responsibility for promoting proposals for cross-governmental digitalization projects within their domain area. The initiatives will be financed by the derived rationalization or reprioritization within that domain.

'Domains' refers to large well-defined areas of the public sector where the tasks to be performed in relation to citizens and businesses are delivered by several different authorities cutting across tiers of authority.

The individual digitalization boards will be represented by the principal stake holders, irrespective of the level of authority involved in producing services and making decisions within the domain area in question. This entails involving the public authorities as well as private players in a number of cases. The areas can consist of parts of or one or more ministries and municipal and regional spheres of responsibility. In organizational terms, the boards can be assisted by project units or staff functions from one or more of the participating authorities.

In the individual domain areas action plans will be drawn up, ensuring coordinated, efficient and targeted digital development. The link between the individual domain and the national level will be achieved by articulating action plans for the respective domains and implementing them within the framework of the overall strategy for digitalizing the public sector.

In addition, linkage will be provided with existing coordination in the area, including sectoral data standardization and IT architecture committees.

Examples of interdisciplinary priority areas

The Health Area

The Health Area's EPJ Board will foster the development and dissemination of electronic patient records in the health service and strengthen digitalization across the health service.

The Board's work will thus translate into a new strategy for IT in the health service and ensure the development of a joint IT architecture and EPJ platform compliant with joint standards.

The Geodata Area

The service community for Geodata is devising a framework for the development of geodata in Denmark, ensuring coordination and a cohesive geographical administrative basis cutting across disciplines and administrative levels.

One project central to this collaboration is the "FOT [Shared Object Types] Col - laboration", in which the municipalities and the National Survey and Cadastre, Denmark, are collaborating to produce a shared map base, aimed at public admin istration.

In 2007 the EU also adopted a directive (the INSPIRE Directive) containing a framework for constructing a joint European geographical infrastructure. This directive will also be the standard-setter for essential public data collections in Denmark.

The Children's Area

Another example of an interdisciplinary digital action is the Children's Area. Under the topic of "My Children" the munici palities, regions and the government are putting together a number of digital services, e.g. recording for schools and day-care institutions as well as schoolhome contact, as a collective cluster on the Citizen Portal.

These clusterss are based on what citizens perceive to be naturally defined areas, but for the public sector digitalizing these areas will involve components sourced from a large number of different authorities and levels.

Steering Committee for Joint Cross-Government Cooperation (STS)

In its present form the steering commit tee has existed since 2005 and consists of the Danish Ministry of Finance (chair), the Ministry of Science, Technology and Innovation, the Ministry of Economics and Business Affairs, the Ministry of the Interior and Health, LGDK and Danish Regions. The parties are represented by permanent under-secretaries or managing directors, respectively.

The steering committee reports to the Danish government, LGDK and Danish Regions.

The steering committee is responsible for coordinating cross-governmental digitalization initiatives.

The steering committee's secretariat function is provided by the Digital Taskforce. The Digital Taskforce is a project-based unit located at the Ministry of Finance, comprising employees of the government, LGDK and Danish regions stationed in-house.

Ministry of Science, Technology and Innovation

The Ministry of Science, Technology and Innovation is responsible for the compilation of general information and communication technology applications in Danish society.

The Ministry of Science, Technology and Innovation will ensure that information and communication technology is exploited in a sophisticated and creative manner to support the Danish government's vision of Denmark becoming a leading knowledge society. The Danish government's aim is to:

- Qualify the Danes for the knowledge society of the future.
- Create growth in Danish trade and industry
- . Develop the public sector

The latter plays a particular role in securing interdisciplinary considerations concerning data standards and IT architecture.

In connection with the annual negotiations on the economy of the municiplaties and regions, the Danish government, LGDK and Danish Regions will decide how to organize new domain boards in relevant areas and prioritize the drafting of action plans in those domains.

Digitalization must be based on the right balance between relevant joint binding de cisions and decentralized self-determination, at government, regional and municipal level. The basic principle will be to place tasks and responsibilities for digitalization as close to the individual authorities as possible.

At the national level the Steering Committee for Joint Cross-Government Cooperation (STS) will contribute coordination and joint framework decisions on the development of public sector digitalization, which has a cross-cutting impact on the domains' action plans. On the one hand these frameworks will forge links that cut across, higher quality and better overall economy, and on the other hand they will create a greater sense of security in those decisions made by the domain boards and individual authorities.

Priority areas being coordinated by the Steering Committee for Joint Cross-Government Cooperation (STS)

Processes: Joint processes must be implemented in some standardized form across the entire public sector, e.g. e-Invoice, EasyAccount, etc.

Rule simplification: There should be a continuous focus on the possibilities for simplifying the rules as an extension to digitalization projects, for instance in connection with the **i**mplementation of "e-Income".

Solutions: Joint IT solutions must be offered across the public sector, for a national system for authorizationl are authentication to ensure secure access to data.

Incentives: Problems between authorities due to uneven distribution of the net gains achieved through digitalization will be solved, and the right incentives guaranteed for ensuring that citizens actually the solutions on offer.

Architecture: A public sector Enterprise Architecture approach will be generated, based on open standards, joi methods, requirements and recommendations.

Infrastructure: Common public services must be set up, based on open standards for the secure and reliable exchange of data and fast creation of new solutions and processes. To this will be added joint methods, requirements and recommendations for data exchange formats.

Security: Joint security solutions etc. must be developed - e.g. in relation to the digital signature.

Public-sector IT systems must speak the same language

The public sector will align and attune IT development through both the formation of interdisciplinary projects and joint general initiatives. The aim is to keep development costs down and promote a scope for reusing data. Eventually, this will help to ensure that the public IT systems can "talk together".

In order to ensure the greatest possible commercial and IT linkage in citizen and business-based services, the individual authorities will additionally be obliged to adhere to a unified set of requirements and recommendations when new interdis ciplinary digital solutions are put in place for use on the common public portals.

Continuing on from the Danish Parliament's decision to use open standards for software in the public sector, another special priority area will be to continuously ensure that compulsory open standards are introduced in step with the develop ment of relevant open standards. A further objective is that all digital informa tion which the public sector exchanges with citizens, businesses and institutions should be based on open standards, wherever possible.

A more efficient public sector must base its development on an Enterprise Architecture approach in order to generate and develop strategic overview over the public sector's services, processes and IT solutions. Architectural work will partly focus on links between individual systems and partly identify openings for joint solutions, framework conditions and modules, with a view to better digital ser vices, reuse of data between authorities, streamlining and economies.

The experience of recent years, gleaned from, e.g., e-days, e-invoicing, EasyAccount to etc. shows that substantial savings and quality improvements can be guaranteed by means of such initiatives. The public sector will therefore continue to implement joint initiatives and projects, wherever relevant.

Joint development necessitates joint operation

Where administration and services vis-à-vis citizens and businesses are closely interconnected across authorities, it will be expedient to handle development, implementation and operation of standards and services in an interdisciplinary community. This requires a well-defined allocation of responsibilities and roles between the authorities involved. This applies, for example, during operational set-up for the cohesive citizen and business flows to be presented at the citizen and business portals; and it applies to concrete solutions such as common public user control.

Open standards

The most essential prerequisite for creating interconnectivity between IT systems with different functions supplied by different suppliers is to ensure that IT systems are based on the same open standards.

An open standard means that:

- the standard must have been completely documented and pub licly accessible.
- the standard must be freely imple mentable without economic, political or legal constraints on implementa tion and application, either now or in the future.
- the standard must be maintained in an open forum through an open process (standardization organiztion).

Enterprise Architecture

A cohesive Enterprise Architecture is a prerequisite for being able to realize the full potential of the overall digitalization effort.

Interconnectivity between individual public systems is created by constructing individual projects in accordance with the requirements stipulated jointly.

The fact that there is systematic interaction between the organization of the business and IT architecture further ensures that the focus is on whether the solution creates value for citizens, businesses and the public authorities.

Objectives and initiatives for stronger collaboration and digital interconnectivity

More decisions will be made as part of a binding community

- During the strategy period 2007-2010 domain boards will be appointed responsible for digitalization, channel strategies and standardization in selected areas.
- The Steering Committee for Joint Cross-Government Co-operation (STS) will ensure coordination and prepare joint framework decisions on public-sector development.
- Marketing of major digital solutions with relation to the Citizen or Business Portals will be coordinated to generate increased impact from marketing efforts.
- The first sets of compulsory, open standards will be operationalized on 1 January 2008. After
 this, all authorities will have to use the compulsory, open standards unless substantial grounds
 for not complying with these standards can be substantiated.

The public sector's IT systems must speak the same language

- In partnership with the domain boards, an action plan will be forged in 2008 for the
 development of the overall Enterprise Architecture in the public sector. The action plan will be
 based on a mapping of the potential for efficiency gains, joint solutions and standards among
 other features.
- In 2007-08 business case analyses will be conducted on a number of joint initiatives. Examples of
 this are joint solutions or standards, such as a paying-in solution, a 'preprinted' form solution and
 other service-oriented infrastructure solutions.
- In 2008 a new joint tender will be conducted on the public sector electronic file and document management systems in order to ensure the secure dissemination of electronic file and document management and improve the public sector's purchasing potential in respect of price, quality and functionality.
- In January 2009 at the latest, a set of common public IT architecture requirements will be drawn up for all public authorities. Joint frameworks will include the use of architectural methods, standards and security policy.

Joint development will be strengthened by joint operation

- In 2007 guidelines will be prepared for setting up collaborative IT operating solutions that cut
 across the public sector.
- A joint solution for authentication and authorization will be put in place, allowing citizens and businesses to gain easy and secure access to all relevant public services, making it easier to administrate public-sector employees' access to systems based at other authorities.





