THE DIGITAL PATH TO FUTURE WELFARE

eGOVERNMENT STRATEGY 2011-2015

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THE DIGITAL PATH TO FUTURE WELFARE

Danish citizens use their computers, mobile phones and the Internet every day.
A wealth of new digital opportunities has quickly transformed everyday life for many citizens and companies. The Danish public sector is a world leader in the adoption of IT and new technologies, aimed at improving welfare services.

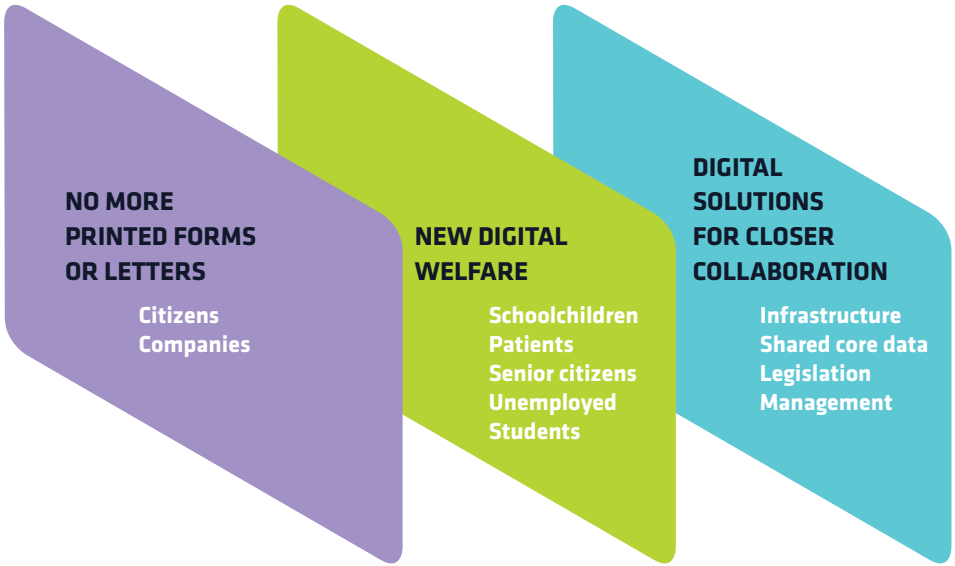
The central government, regions and municipalities are proposing a new eGovernment strategy in order to accelerate the adoption of digital solutions in the public sector. We must capitalize on our leading position and take the next steps on the way to future welfare services.

No more printed forms or letters: Danes do not want to waste their valuable time on paperwork at their local government office. And taxpayers' money must not be used on printed forms and postage when digital solutions can carry out these tasks more efficiently. Applications, reports, letters and all other written communication with both citizens and companies must by default be digital.

New digital welfare: Welfare technology is vital to future welfare services. In recent years, the public sector has invested in welfare technology and is now in a strong position to exploit IT and new technology more intensively to modernize and optimize public services such as schools, the health service and eldercare. Providing good service does not necessarily require a face-to-face meeting and, in many cases, digital solutions can provide citizens with a more modern and effective service.

Digital solutions for closer public sector collaboration: All public authorities are now required to use all relevant public sector solutions, to avoid developing parallel systems and to promote reuse of pertinent data. This will help to ensure that citizens experience a collaborative public sector.

THE eGOVERNMENT STRATEGY – MAIN TRACKS



The strategy is divided into three main tracks. Each track covers various areas and targets different groups.

FUTURE WELFARE IS AT STAKE

Providing welfare in a smarter way tomorrow is mandatory. The global financial crisis has turned well-balanced state budgets into deficits. While citizens continue to expect better and better public services, the public sector will have to manage with fewer employees in the years ahead. We must address these issues now.

According to the government's plan for growth, "Ambitions for More," the adoption of digital solutions and new technology will provide DKK 3 billion every year by 2020 in gains. The new public sector eGovernment strategy will help realize this potential, ensuring a sustainable economy, which is the essential criterion for preserving the welfare state in the years ahead.

The digitalization of the public sector also helps private companies to grow. This is one of the reasons well-known digital solutions, such as NemKonto (easy account) and NemID (easy ID) were developed in collaboration with the business community. Innovative interaction between the public and private sectors can create synergies that give Danish companies a competitive advantage in global markets.

We can achieve our objectives as long as we collaborate on handling our greatest challenges for digitalization of the public sector:

- Quality: Digital services for citizens and companies must be relevant, user-friendly, written in language that is easy to understand and easily accessible to people, for instance, with disabilities.
- Security: Citizens and companies must feel confident using the new digital public sector services. They must also feel that their personal digital data is in safe hands.
- Efficiency: The public sector needs to make sure that eGovernment results in financial benefits, for example by reusing data and digital solutions from other authorities far more systematically.

Denmark is, also in comparison with many of its international peers, in a good position to meet these challenges.

- The majority of citizens and companies are already familiar with digital technologies.
- The central government, regions and municipalities have been working closely together on adopting eGovernment solutions for more than ten years.
- Having made a strong start, and with these challenges top of mind, the public sector is ready to take its biggest digital leap forward.

TRACK 1
NO MORE PRINTED FORMS OR LETTERS

Citizens and companies can now manage many of their communications with the public sector online. Most Danish citizens check their tax returns on the Danish Tax and Customs Administration's website, *skat.dk*. Students sort out their grants online. Newly parents can check the rules for maternity and paternity leave on Borger.dk (The Citizen Portal). These are all examples of eGovernment services that work well – and signal the way forward.

Many public sector authorities can save resources by using channels that ensure the most cost-effective service for citizens and companies. For example, it costs up to 30 times more to inform of a change of address in person than to do it online. Furthermore, authorities can save a large proportion of the DKK 800 million currently spent on postage by using the Digital Post solution.

By 2015, it will be mandatory for citizens to use digital solutions to communicate in writing with the public sector. Once printed forms and letters have been phased out, all citizens will have to use online self-service. As of 2014, all citizens will have their own digital letter box (Digital Post) for correspondence from the public sector. This means that instead of being confined to office hours, citizens will be able to correspond with the public sector when it suits them.

This major step towards eGovernment will require considerable changes to the way public authorities work, and a certain degree of acclimatization from citizens. However, the transition will take place gradually, as user-friendly eGovernment solutions are introduced in more and more areas. Help will be available for citizens who find it hard to use the new solutions.

For companies, all relevant communications will be in digital form by the end of 2012. This means that companies will be making all their reports digitally to public authorities once the necessary legislation and solutions are in place and running smoothly. Companies will have easier access to a range of public data and eGovernment solutions, opening up new business opportunities and contributing to growth in the private sector.

TRACK 2
NEW DIGITAL WELFARE

The adoption of eGovernment solutions will have a positive impact on the Danish welfare system with initiatives for schools, the health service, and the care of children, the elderly and vulnerable groups. These are all areas heavy on resources, both in terms of employees and budgets, so carrying out core tasks in smarter ways will bring major benefits – and working smarter will often mean adopting eGovernment solutions.

In recent years, both public and private sectors have gained valuable experience from developing and adopting innovative technological solutions. Many of the public sector initiatives have been partly funded by the Danish Public Welfare Technology Fund, which has supported municipalities and regions in testing a wide range of technological approaches to welfare services. It is clear that this approach to welfare can provide citizens with services that target individual needs while reducing expenditure.

Between now and 2015, public sector services will be improved and modernized by:

- Investing DKK 1.5 billion in IT to prepare schools for a digital future
- Using technology to enable the treatment of chronically ill patients in their own homes
- Using digital tools to engage patients – and their families – in their treatment, resulting in greater compliancy
- Setting clear goals for using digital healthcare solutions to ease the daily adminstrative burdens on health care professionals
- Simplifying and optimizing employment initiatives

Effective IT tools help public sector employees to work well together and to make the right decisions. This leads to less time-wasting and a higher quality of service. By 2015, all major welfare services will have IT systems that help the daily workflow of professionals such as doctors, school teachers and municipal caseworkers.

TRACK 3
DIGITAL SOLUTIONS FOR CLOSER PUBLIC SECTOR COLLABORATION

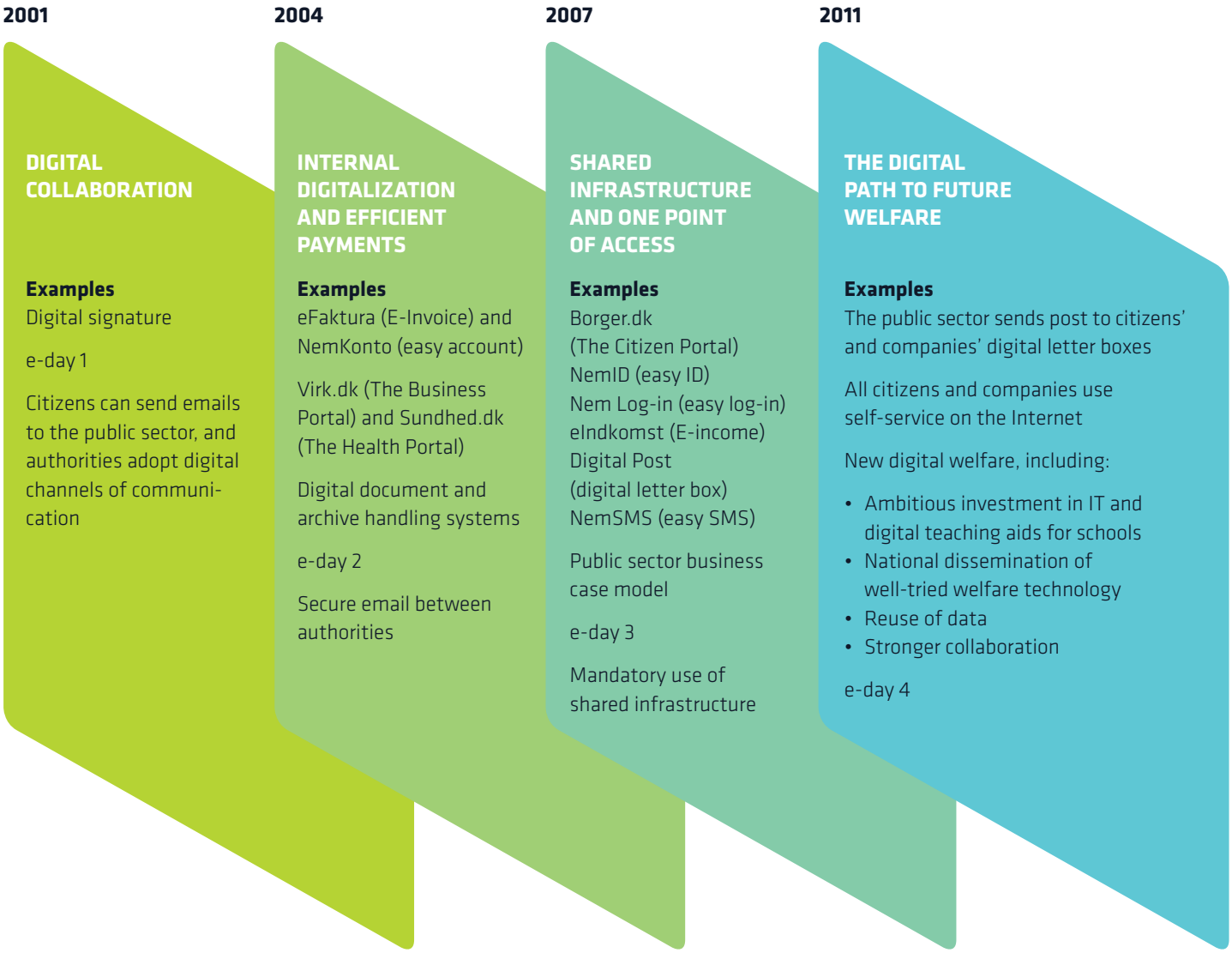
The eGovernment solutions developed up to now by the central government, regions and municipalities form a natural platform for the public sector's next phase of digitalization. Individual authorities or institutions must not develop their own systems in areas where good solutions already exist.

This is only possible if initiatives to introduce eGovernment systems are coordinated across all levels of government and administration: central government, regions, municipalities, and public institutions. Therefore cross public sector initiatives are needed in four key areas:

- A shared digital infrastructure that is safe and sufficiently robust to meet future requirements
- Effective and reliable sharing of core data between authorities
- Legislation adapted to the opportunities and challenges of a digitalized society
- Stronger coordination of public sector digitalization

The public sector's eGovernment strategy puts special emphasis on coordinating the implementation of these four initiatives across the various levels of public sector administration. This gives the central government, regions and municipalities scope to exploit the opportunities of digitalization and realize their own strategies within the shared framework.

10 YEARS OF eGOVERNMENT STRATEGY



Denmark is among the first countries to adopt eGovernment solutions for the public sector and is among the top-ranking countries in all relevant international studies. OECD reached this conclusion in a large-scale review of the Danish eGovernment initiative completed in 2010.

Denmark launched its first eGovernment strategy in 2001. Since then, the central government, regions and municipalities have worked together closely on improving and extending their eGovernment solutions.

Over the past ten years, our eGovernment initiatives have helped us transfer resources from administration to welfare and optimize and automate work procedures throughout the public sector.

INITIATIVES FOR THE eGOVERNMENT STRATEGY 2011-2015

NO MORE PRINTED FORMS OR LETTERS

Focus area 1
EFFECTIVE DIGITAL COMMUNICATION WITH CITIZENS

1.1 Digital Post for all citizens by 2014
1.2 All citizens serving themselves online
1.3 Help is available
1.4 Borger.dk is the access point for digital self-service
1.5 Well-functioning self-service solutions
1.6 Self-service solutions for citizens on mobile devices

Focus area 2
PAVING THE WAY FOR BUSINESS GROWTH

2.1 Digital Post for all companies by 2013
2.2 Access to company data on The Business Portal
2.3 Digital conception of new companies
2.4 Easier recruitment of new employees
2.5 Automated invoice handling
2.6 Accessible public data

NEW DIGITAL WELFARE

Focus area 3
SCHOOLS MUST CHALLENGE THE DIGITAL GENERATION

3.1 Support for purchasing digital learning resources
3.2 Access to well-functioning IT in class-rooms
3.3 Clear goals for the use of IT, digital learning resources, and learning goals
3.4 Research into IT-based teaching and learning processes

Focus area 4
EFFICIENT DIGITAL COLLABORATION WITH PATIENTS

4.1 Fully digital clinical workplaces
4.2 A complete overview of the patients' health information
4.3 Secure and cohesive digital communication
4.4 Action plan for rolling out telemedicine
4.5 Treatment of patients with chronic illnesses in their own home

Focus area 5
FASTER ADOPTION OF TECHNOLOGY IN SOCIAL INITIATIVES

5.1 Analysis of welfare technologies with potential for national implementation
5.2 General deployment of telemedicine solutions targeted at woundcare, etc.
5.3 Support for lifting
5.4 Digital rehabilitation
5.5 Better IT tools for administration and care in the social sector

Focus area 6
EFFICIENT, SIMPLE DIGITAL EMPLOYMENT INITIATIVES

6.1 Better IT support for Jobcenters
6.2 Digital self-service at 'Udbetaling Danmark'
6.3 E-income for more efficient workflow
6.4 Digital reimbursement and employment support services
6.5 Better self-service for citizens
6.6 Efficient screening of data to prevent fraud

Focus area 7
DIGITAL UNIVERSITIES

7.1 Digital examinations
7.2 Digital written communication
7.3 Digital application process
7.4 Use of eGovernment solutions at universities

Focus area 8
A SHARED PLATFORM FOR EFFICIENT ENIVIRONMENTAL ADMINISTRATION

8.1 Easy access to public sector environmental data
8.2 Digital overview of planning
8.3 Quality and declaration of environmental data
8.4 Improved communication between private and public sectors on environ-mental issues

DIGITAL SOLUTIONS FOR CLOSER PUBLIC SECTOR COLLABORATION

Focus area 9

ROBUST DIGITAL INFRASTRUCTURE

9.1 Secure digital self-service on mobile devices
9.2 Moving on with joint login and power of attorney
9.3 One account for transactions with the public sector
9.4 A shared overview of IT architecture
9.5 Distribution of core data
9.6 Hotspots for easier Internet access

Focus area 10

SHARED CORE DATA FOR ALL AUTHORITIES

10.1 More detailed geographical data
10.2 Reusing data on property, buildings and addresses
10.3 Improvements to personal data
10.4 Improvements to company data
10.5 Improvements to data on income

Focus area 11

LEGISLATION IN SUPPORT OF DIGITAL SERVICES

11.1 Legislation on mandatory digital self-service
11.2 Clear legislation on digital letters
11.3 Principles for legislation on digital services
11.4 Updated rules on cloud computing
11.5 Better frameworks for IT supply and procurement

Focus area 12

EFFECTIVE MANAGEMENT OF eGOVERNMENT

12.1 Stronger coordination and implementation
12.2 Clear division of responsibility and close collaboration in welfare areas
12.3 Documentation of achieved goals
12.4 E-day 4: No more printed forms or letters

NO MORE PRINTED FORMS OR LETTERS

FOCUS AREAS:

1. EFFECTIVE DIGITAL COMMUNICATION WITH CITIZENS
2. PAVING THE WAY FOR BUSINESS GROWTH

FOCUS AREA 1
EFFECTIVE DIGITAL COMMUNICATION WITH CITIZENS

The experiences of the Danish Tax and Customs Administration, online banks and libraries speak for themselves: citizens will serve themselves online if it is simple, user-friendly and makes their lives easier. And the more organizations that shift to digital channels, the more resources can be moved from administration to welfare at the municipality, region or central government authority in question. By 2015, we expect to be able to send 80% of all correspondence to citizens in digital form. We also expect that 80% of all applications and correspondence from citizens will be in digital form. This will save billions of kroner on administration throughout the public sector.

DIGITAL COMMUNICATION AS THE NATURAL FIRST CHOICE

We need smarter, more effective communication between citizens and the authorities. Digital channels of communication are not just an alternative to traditional paperwork and letters; they should replace them. As a rule, all citizens should use the Internet whenever possible to make applications and correspond with the public sector. From 2014, the majority of all public sector letters previously sent via the postal service will be sent to citizens' digital letter boxes (Digital Post).

To date, public sector digital solutions have not always been adequate. Therefore the public sector will be working to upgrade its online services and bring them up to the level of quality and functionality as seen in online banking. The public sector also needs to keep up with the latest advances in technology. For example, many of the new digital services will be available through mobile applications: people will be able to use their smartphones to access their personal Digital Post and the self-service 'My Page' on the Borger.dk.

HELP IS AVAILABLE

We must also take citizens who have trouble with or are simply unfamiliar with using digital channels into consideration. Firstly, citizens must be able to get help with communicating online. If someone needs to change doctors, for example, the local citizen service centre can help out. Secondly, we are running a pilot study in which citizens can call a helpline for support outside normal working hours.

Citizens unable to use digital solutions will be able to submit correspondence and applications to the public sector in other ways. And citizens unable to use the Digital Post solution will receive conventional letters from the public sector. Citizens with weak IT skills, such as frail senior citizens, will be able to authorize a family member so they can access their personal Digital Post. Furthermore, many people with disabilities will be able to use digital solutions without the need for personal assistance.

MILESTONES FOR 2015

- All citizens are using the Internet to submit applications and correspondence to the public sector
- Paper forms have been phased out
- No more letters: each citizen receives public sector correspondence in their dedicated Digital Post solution
- Citizens experiencing trouble with the new digital solutions can get help

INITIATIVES

DIGITAL POST FOR ALL CITIZENS BY 2014 1.1

Today, all citizens have a letter box hanging by their gates or in the entrance to their apartment building. In the same way, by 2014 at the latest, citizens will have a digital letter box (Digital Post) where they will receive letters from public authorities. All citizens will also be able to authorize family members to give them access to their personal Digital Post.

ALL CITIZENS SERVING THEMSELVES ONLINE 1.2

Over the next four years, the use of more and more online self-service solutions will become mandatory. For instance, as early as 2012, citizens will be required to go online to sign up children for school and daycare, apply for medical cards, register a change of address and manage their student loans. More services will become available every year until 2015.

HELP IS AVAILABLE 1.3

Many citizens will need help in getting started with the new digital self-service solutions. Help will be available at local service centers. Between 2012 and 2013, we will be running a pilot project with a contact center to help citizens with self-service solutions outside normal working hours.

BORGER.DK IS THE ACCESS POINT FOR DIGITAL SELF-SERVICE 1.4

Borger.dk (The Citizen Portal) will provide a secure, clear access point for anyone who needs to use public sector self-service solutions. 'My Page' on the Borger.dk will give each citizen direct access to their personal information on issues such as housing, health care, tax, rights and duties.

WELL-FUNCTIONING SELF-SERVICE SOLUTIONS 1.5

The public sector will offer citizens user-friendly and efficient self-service solutions in all relevant areas. Important information on security, design, user-friendliness, language, accessibility and the reuse of data will be collected in a set of guidelines and released in 2012.

SELF-SERVICE SOLUTIONS FOR CITIZENS ON MOBILE DEVICES 1.6

Rapidly becoming a regular part of every day life, smartphones provide Danish citizens with even better opportunities for communicating online with the public sector. Initially, mobile versions of Digital Post and 'My Page' on Borger.dk will be available so citizens can keep an up-to-date overview of their public sector correspondence in their pocket.

PRELIMINARY PLAN FOR THE TRANSITION TO MANDATORY SELF-SERVICE FOR CITIZENS

	2012	2013	2014	2015
AREAS IN FOCUS	Danish Tax and Customs Administration (SKAT), services for individual citizens such as management of student loans	Citizen-focused services provided by local authorities and the state	Employment, housing, construction and the environment	Employment, social services and integration
EXAMPLES OF TASKS	Moving Medical cards Self-service tax declaration (for submitting information to the Danish Tax and Customs Administration) Signing up for after-school clubs, daycare and schools Student loans Passports	Driving licenses Marriages Birth registration Name registration Admission to higher education	Town planning and roads Income support Construction Vehicle registration License plates	Benefit pre-validation for senior citizens and people with disabilities Reimbursement and social support services Maternity and paternity benefits Old age pension
	WAVE 1	**WAVE 2**	**WAVE 3**	**WAVE 4**

The eGovernment Strategy 2011-2015 maps out a step-by-step transition toward mandatory self-service for communications between citizens and the public sector. The preliminary plan for communications requiring citizens to use digital self-service will be specified up to 2015.

FOCUS AREA 2
PAVING THE WAY FOR BUSINESS GROWTH

The time and energy Danish companies spend on administering rules and requirements from the public sector could be better spent on developing businesses and stimulating growth. Increased digitalization should help implementing lean administrative processes, and ease the administrative burden on companies. Digitalization can also create a platform for growth, uncovering new opportunities for business and innovation.

MORE ACCESSIBLE DIGITAL SERVICES

Companies already communicate online with public sector authorities, and have had access to online self-service for years. Many businesses/companies have welcomed the opportunity to submit tax returns or apply for the reimbursement of sickness benefits online. But digital services have not yet reached their full potential. Most companies have heard of them, but some find the solutions too difficult to use and access – partly because they are spread across many websites in different formats.

As a result, although many companies are ready for digital communication, they are still struggling with paper, postage and unnecessarily long processing time. Digital communication between authorities and companies therefore needs to be improved.

From 2013, all letters to companies will as a rule be sent online. And between now and 2015, filing solutions will be streamlined and simplified. As improvements are made to the digital self-service systems, companies will be obliged to use them. By the end of 2013, companies will be able to find all self-service solutions on the Business Portal, which will also be targeted to meet specific company needs. Regarding construction and housing further digitalization will continue to improve self-service and casework.

REUSING DATA MAKES FORMERLY REQUIRED FILINGS UNNECESSARY

Required filings should not only be easier, there should also be less fillings. Between now and 2015, public sector authorities will begin to automatically exchange and reuse corporate data like company name, address, type of company and accounting data.

MILESTONES FOR 2015

- Each company will have access to company information on the Business Portal, and will as often as possible only be required to file the same information once. This will give them more time to focus on and develop their business.
- More and more procedures in the public sector will be automated and digitalized, saving resources and streamlining workflows, as well as making it easier to run a business.
- All companies will have a Digital Post box (a secure letter box) for letters from the public sector.

INITIATIVES

DIGITAL POST FOR ALL COMPANIES BY 2013 2.1

By 2013, all companies will have a digital postbox for letters from the public sector. Accessing the postbox will be easy – also for the company's advisors.

ACCESS TO COMPANY DATA ON THE BUSINESS PORTAL 2.2

By 2012, companies logging on to the public sector Business Portal (Virk.dk) will be able to manage all communication with the public sector from one web page with an overview of forthcoming, current and already filed information. All self-service business solutions will also be accessible on the Business Portal.

DIGITAL CONCEPTION OF NEW COMPANIES 2.3

In 2012, all new companies will be registered online via the Business Portal, along with receving the basic public sector services such as NemID, NemKonto and Digital Post. Newly established companies will receive a digital welcome package providing an overview of rules, requirements and offers.

EASIER RECRUITMENT OF NEW EMPLOYEES 2.4

In 2013 Medarbejdernøglen (The Employee Key) will be established. This will give companies a cohesive, efficient and user-friendly program guiding them through the process of recruiting new employees.

AUTOMATED INVOICE HANDLING 2.5

Every day, companies and the public sector exchange thousands of financial documents. In 2012 the NemHandel (easy trade) system will be extended, so that entries received on paper will not have to be typed but will 'find their own way' online.

ACCESSIBLE PUBLIC DATA 2.6

Public sector data can be valuable for private companies when conducting tests or developing digital services for their customers. Companies can use these data as long as the use of data complies with legislation, such as the Act on the Processing of Personal Data.

NEW DIGITAL WELFARE

FOCUS AREAS:

3. SCHOOLS MUST CHALLENGE THE DIGITAL GENERATION
4. EFFICIENT DIGITAL COLLABORATION WITH PATIENTS
5. FASTER ADOPTION OF TECHNOLOGY IN SOCIAL INITIATIVES
6. EFFICIENT, SIMPLE DIGITAL EMPLOYMENT INITIATIVES
7. DIGITAL UNIVERSITIES
8. A SHARED PLATFORM FOR EFFICIENT ENVIRONMENTAL ADMINISTRATION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FOCUS AREA 3
SCHOOLS MUST CHALLENGE THE DIGITAL GENERATION

Today's schoolchildren do not view computers, mobile telephones and the internet as new technology; they see them as an indispensable part of everyday life. 98% of the pupils in Denmark have Internet access at home which they can use to do their schoolwork. Three out of four Danish homes have at least three computers.

In addition to the ordinary skills which our children must have when they leave school, they are met with a growing demand for new skills and qualifications.

The government will invest DKK 500 million, with municipalities adding up to DKK 1 billion, to tailor teaching in schools to the needs of the future. The pupils must be able to use modern digital learning resources in the classroom, so that photocopies and dog-eared notebooks may be relegated to the past.

NOT JUST AN OCCASIONAL TEACHING AID

Already many good digital learning systems are used in the Danish schools. Often, however, their use is restricted to supplementing the traditional teaching or making a bit of a change in the classroom. In the future, the aim will be to integrate digital learning resources into everyday teaching.

IT for teaching is not simply a matter of entertainment. Digital learning processes are meant to strengthen pupils' academic skills and better equip them for the future, because in today's world, the ability to use digital technology creatively and critically is essential. Pupils must be able to determine the quality of the information they find online, express themselves using new media, and collaborate online with each other – and with people from all over the world.

Because they motivate and actively engage pupils, digital learning resources can raise the quality of learning in core subjects such as Danish, mathematics, languages and the sciences. And, this approach also helps individual pupils to find their own level and learn at a pace and in a way that suits them. These kinds of solutions could also help keep more pupils in regular classes instead of placing them in special classes or even special schools.

GIVING TEACHERS MORE TIME

Digital teaching and learning solutions also show potential for giving teachers more time to focus on their teaching – and on individual pupils. The aim is for all teachers to be using digital learning resources and new technologies to support their workflow in preparation, teaching, tests and examinations by 2015, giving them more time to spend with their pupils.

MILESTONES FOR 2015

- There is a well-developed market for digital learning resources. Efficient distribution channels give schools, teachers and pupils easy and clear access to digital learning resources and goals for learning.
- Digital learning resources are a natural and integrated part of everyday teaching. This means that pupils benefit from even better teaching and are better equipped to face a digital future.
- Pupils work with well-functioning IT. Schools have wireless networks and pupils can use their own computers. The few pupils without computers can borrow them from the school.

INITIATIVES

SUPPORT FOR PURCHASING DIGITAL LEARNING RESOURCES 3.1

To increase the demand for digital learning resources and thereby support the market, funds will be ear-marked for digital learning resources. The central government and municipalities will also create frameworks for establishing one or more market-based distribution platforms by the end of 2012 (such as 'app stores'), that can provide teachers and pupils with easy and quick access to digital learning resources.

ACCESS TO WELL-FUNCTIONING IT IN CLASSROOMS 3.2

By 2014, all pupils will have access to well-functioning IT so they can benefit from digital learning resources in the classroom. Schools' wireless networks will be expanded to provide secure, stable connections with adequate capacity for all pupils by 2014. Schools will also make equipment available for individual pupils who are unable to bring their own devices, such as laptops or tablet computers, to school.

CLEAR GOALS FOR THE USE OF IT, DIGITAL LEARNING RESOURCES AND LEARNING GOALS 3.3

Pupils, teachers and parents need clearly defined learning goals to help focus their efforts. These goals are to be documented digitally so they are easy for pupils, teachers and parents to access and refer to. It must also be easy to find the digital learning resources that meet the learning goals. Local authorities and school boards must also set clear goals for the use of IT and digital learning resources in the classroom, and follow up on them.

RESEARCH INTO IT-BASED TEACHING AND LEARNING PROCESSES 3.4

Applying IT to teaching isn't simply a question of being 'plugged in.' Studies and research can give us precise information on how teachers best organize and support teaching using digital learning resources and online teaching programs. The development will be based on initiatives such as studies in digital demonstration schools.

FOCUS AREA 4
EFFICIENT DIGITAL COLLABORATION WITH PATIENTS

Digitalization has a vital role to play in the health service. Effective IT tools, that give doctors access to data and examination results across the entire health sector, can be crucial for administering the correct treatment quickly.

IT for healthcare is also vital for leveraging secure, efficient work procedures, high productivity and good quality in hospitals. The need for these digital solutions is extensive. In the coming years, growing numbers of senior citizens and the introduction of new treatments will increase pressure on health sector resources. At the same time, citizens expect healthcare that is open and engaging, and treatment that gets better and better all the time.

IT FOR HEALTHCARE WILL HELP HOSPITALS RUN SMOOTHLY

The health sector is well under way with digitalization, but the vision for an efficient, progressive health service has not yet been achieved. The central government and regions have entered into an ambitious national agreement on IT for healthcare, which also involves working with municipalities on coordination and prioritization.

The common goal is to make everyday life easier and more efficient for healthcare professionals.

Fully consolidated Electronic Patient Journals (EPJs) in each region is the foundation for effective eHealth. EPJs will ensure that healthcare professionals do not waste time logging on to many different systems, looking for printed journals or searching for information from various sources. The systems must be compatible to ensure that x-rays, scans, test results, information on medicine consumption and the results of previous examinations are readily available.

Citizens must be assured that healthcare professionals can gain efficient, secure access to their data if it's relevant to their particular treatment – regardless of context: hospitals, doctors on call, local GPs or home nursing. Today, citizens, hospital staff and other healthcare professionals have access to a range of health data from hospitals on Sundhed.dk (the E-Health Portal), and citizens can also see who has accessed their information. In future, this access will be extended to more parts of the health service.

WELFARE TECHNOLOGY ENGAGES PATIENTS

Digitalization can help the health service take a major step forward. In many areas, technology is now so mature that the largest and most treatment-intensive groups of patients can be engaged at a deeper level in their own treatment. And experience shows that most people suffering from chronic illness are particularly motivated to take advantage of new technology in their treatment. This means that there is scope for developing new, resource-saving healthcare services, such as telemedicine solutions that monitor patients in their own homes, eliminating the need for so many visits to the hospital for routine check-ups.

We know that our best welfare technology solutions use fewer resources, and deliver treatment that improves the quality of our patients' lives. In light of this, the best and most thoroughly tested solutions should be rolled out much faster with better coordination across the entire health service.

MILESTONES FOR 2015

- IT makes internal work processes at hospitals smoother and more efficient. This allows doctors and nurses to devote more time to patients.
- Across the health service, information on each patient is shared efficiently and securely with the relevant healthcare professionals – and with the patient. This gives a better basis for taking decisions and raising the quality of treatment.
- Telemedicine is not in the distant future; it is already here. Reliable telemedicine solutions are being rolled out across Denmark, enabling patients to stay at home in familiar surroundings, and reducing the growth in healthcare costs.

INITIATIVES

FULLY DIGITAL CLINICAL WORKPLACES 4.1

Hospitals must have cohesive IT tools to support efficient and well-organized work procedures, while ensuring healthcare professionals always have the necessary data to administer high-quality treatment to their patients. This means each Danish region needs to have a fully consolidated EPJ up and running by the end of 2013.

A COMPLETE OVERVIEW OF PATIENTS' HEALTH INFORMATION 4.2

Each citizen, and the healthcare professionals that care for them, need access to a complete digital overview of their health issues that can be shared with all relevant parties in the health service. During 2012, a National Patient Index (NPI) will be established that will be continuously expanded with information on medicine, including vaccinations and imaging (including x-rays and CAT scans).

SECURE AND COHESIVE DIGITAL COMMUNICATION 4.3

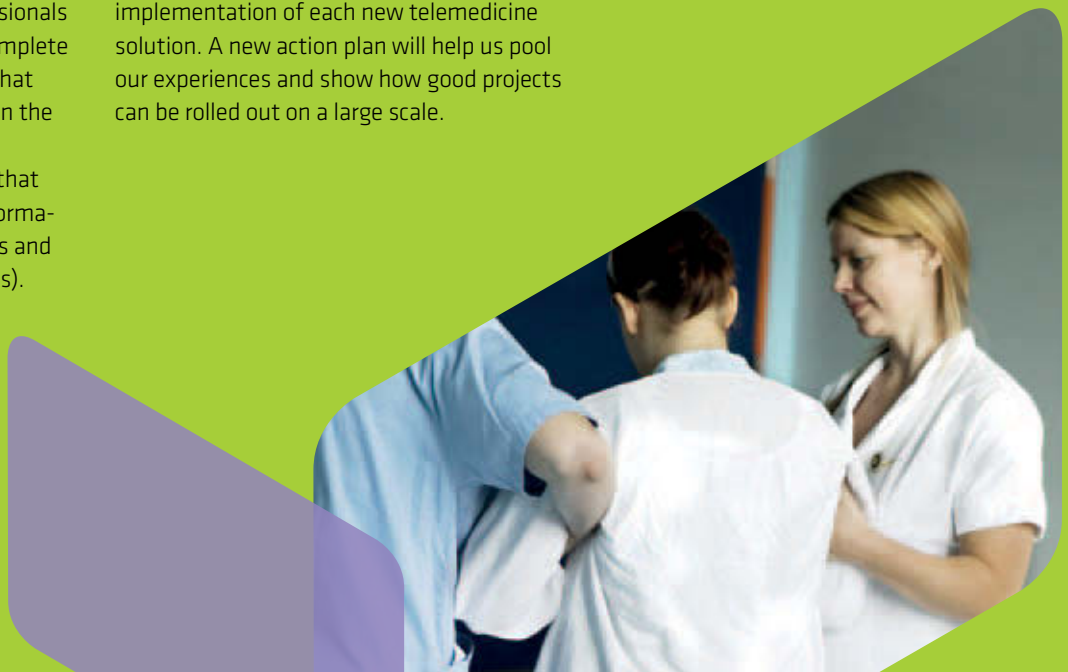
All relevant communication between people in the health service should take place online. Before the end of 2012, all MedCom-standards will be fully implemented in Danish hospitals.

ACTION PLAN FOR ROLLING OUT TELEMEDICINE 4.4

We need to pick up the pace in introducing proven telemedicine solutions across the whole health service. To a large extent, we can achieve this by setting goals for the implementation of each new telemedicine solution. A new action plan will help us pool our experiences and show how good projects can be rolled out on a large scale.

TREATMENT OF PATIENTS WITH CHRONIC ILLNESSES IN THEIR OWN HOME 4.5

It should be possible for patients with chronic illnesses to avoid unnecessary hospital visits for routine check-ups. From 2012, a number of hospitals will enable patients with emphysema, diabetes or diseases of the intestines to receive individually tailored treatments at home by following onscreen instructions via the Internet. The project will comprise a large-scale test of how tele-medicine solutions can provide cohesive patient treatment programs.



SHARED MEDICATION RECORD

Citizens in Denmark need medical treatment that's accurate and safe. This will be supported by an electronic medication record received by all citizens in 2011.

The Shared Medication Record means that doctors, home nurses and other healthcare professionals can obtain a list of a patient's current medicines at the touch of a button, regardless of context: hospital admission, consultation at a doctor's surgery or house calls.

This will reduce the incidence of inaccurate prescriptions, and doctors will be able to access the information they need to prescribe the right treatment much faster.

FOCUS AREA 5
FASTER ADOPTION OF TECHNOLOGY IN SOCIAL INITIATIVES

Considering the size of the social sector, technological development has been relatively limited. In recent years, digital solutions and new technology have made great progress – particularly in the care of senior citizens, with professional care workers being able to use electronic care records, lap-tops and other devices. But there is still untapped potential.

NEW AVENUES FOR SOCIAL INITIATIVES

New technologies can be explored for new approaches to social initiatives. For example, touch screens connected to the Internet can access physiotherapy sessions at rehab centers, enabling senior citizens to go through rehabilitation programs from the comfort of their own living rooms. And there are many technologies that can free up resources. For example, with modern lifting equipment, one homecare worker can do lifting that would normally require two people.

New technology goes hand-in-hand with efficient operations. But it also provides senior citizens with greater security, a higher quality of life and more healthcare options. But technology cannot achieve that on its own. It takes a lot of effort to change both habits and work procedures so that new technology actually contributes to a better workflow. We must make sure that the most promising solutions can be rolled out on a large scale, and that employees are equipped to take on new responsibilities. These introductions need to be made smoothly and at a pace that allows citizens to experience each new solution as an asset with clear benefits.

WELL-FUNCTIONING IT FOR 200,000 EMPLOYEES

We will make a special effort to ensure that all of our 200,000 employees who work with the elderly, people in daycare, people with disabilities, and vulnerable children and young people are supported by well-functioning IT tools on a daily basis.

Core systems have already been developed and are fully operational in selected municipalities. The task remains to establish binding collaborations so we can make sure that each solution is implemented at every institution – at a faster pace than today.

To enjoy the full benefits, institutions need to optimize their workflow to bring them in line with all of the opportunities provided by the new systems. This will also pave the way for an even higher quality of administration and better management of resources and capacity in the social sector.

Finally, we need to use our digital tools to create a clear picture of which initiatives that actually works best and meet the needs of our target groups. This approach applies equally to services supplied by the public sector and privately owned suppliers. We need to document and manage information systematically so that resources are used in areas where they will make the most impact. This will also enable us to reverse the recent trend of rising costs in the social sector.

MILESTONES FOR 2015

- Welfare technology is used to release employees from administrative work and enables them to provide even better care.
- New, efficient IT tools help to upgrade and optimize administration for the social sector. Focus is on tools that make a positive impact on each social worker's daily work.
- Implementation of digital tools in the social sector will generate better knowhow on, how well initiatives performs and how resources should be allocated.

INITIATIVES

ANALYSIS OF WELFARE TECHNOLOGIES WITH POTENTIAL FOR NATIONAL IMPLEMENTATION 5.1

In 2011, a study on how new tools of welfare technology will be conducted to identify which parts of the social sector show potential for optimization. The study will look into daily rehabilitation regimens, telemedicine and the use of video tools in the care of senior citizens.

GENERAL DEPLOYMENT OF TELEMEDICINE SOLUTIONS TARGETED AT WOUND CARE, ETC. 5.2

Experience shows that telemedicine solutions have great potential to make a positive impact on healthcare. Experience from telemedicine projects on wound treatment and the prevention of bed sores can be applied to a range of other initiatives aimed at replacing routine house calls. To this end, we have launched a nationwide initiative to roll out the most efficient solutions.

SUPPORT FOR LIFTING 5.3

Even though heavy lifting can result in physical injuries for employees and time-consuming transfers that can be stressful and uncomfortable for senior citizens, it is an everyday reality at many nursing homes and for homecare workers. However, with the latest 'lifting technology,' for example, bathroom visits are much easier, faster and less physically demanding for homecare personnel. In 2012, we will look in detail at plans to provide patients with better lifting technology throughout Denmark.

DIGITAL REHABILITATION 5.4

Technology-assisted rehabilitation can strengthen the self-help components of rehabilitation programs, reducing reliance on healthcare professionals and increasing the quality of the patient's life. From 2012, we will carry out continuous systematic assessments of the ways a number of municipalities are using techniques such as gaming technology, remote monitoring and training to improve the success rate of rehabilitation for patients at home.

BETTER IT TOOLS FOR ADMINISTRATION AND CARE IN THE SOCIAL SECTOR 5.5

Considerable financial and quality benefits can be gained through more efficient IT solutions for casework concerning vulnerable groups of children and young people, and people with disabilities. The systems (DUBU and DHUV) have been developed and implemented widely throughout the municipalities.

FOCUS AREA 6
EFFICIENT, SIMPLE DIGITAL EMPLOYMENT INITIATIVES

Danish companies depend on a flexible and well-functioning labor market – including efficient employment initiatives, and digital tools play a key role.

EFFICIENT COMMUNICATION WITH UNEMPLOYED

More extensive self-service solutions will give unemployed people registered with a Jobcenter greater insight into their own cases. This will provide a solid platform for dialogue between each Jobcenter and the people it serves. An increase in the use of digital solutions must also relieve the burden of casework so that Jobcenter employees can spend less time completing paperwork and keying information into systems, and more time helping people find work.

It is essential that eGovernment solutions help Jobcenters, unemployment funds and other stakeholders to share information and knowledge, so that initiatives for citizens and companies are efficient and well-coordinated.

Citizens with different disabilities or a lower capacity for work should also be given the opportunity to use their skills in the labor market. To achieve this, reimbursements and other benefits should be simple to administer, enabling companies to hire people with a lower work capacity easily. Today, companies use a lot of resources to make requests and calculations, and apply to local authorities for subsidies and reimbursements. Once these processes are digital and easy to use, both companies and Jobcenters will save time – and money.

EFFICIENT PAYMENT OF BENEFITS

Application forms, sworn statements, copies of pay slips, annual statements, and any printed forms required for citizens to receive benefits from the public sector, are all to be phased out. Instead, public sector authorities will use the data on citizens income already registered in central databases. Across the board, objective criteria will be used to automate as much administration as possible. These deregulations will be introduced in areas regulated by Udbetaling Danmark (the Danish agency for the administration of payments) for old age public pension, disability pension, housing benefits, maternity and paternity benefits, and family allowance.

When information on residence, employment and income is combined in new ways, the public sector will also find it easier to ensure that benefits are paid only to citizens who are entitled to them. These opportunities will be exploited more systematically so that errors and social fraud can be uncovered faster. Modern IT tools can alert social workers to anomalies that are worth looking into in more detail.

MILESTONES FOR 2015

- Citizens and companies find that communicating digitally with jobcenters is quick and easy.
- Automating a good deal of case work simplifies the benefit payment process. Efficient digital solutions mean that citizens can use self-service solutions when making inquiries into benefits such as old age pensions.
- Smart IT solutions and simpler rules help prevent errors and social fraud in the payment of social benefits.

INITIATIVES

BETTER IT SUPPORT FOR JOBCENTERS 6.1

Cohesive IT systems will be systematically rolled out in Jobcenters in support of casework for all target groups. This will make employment initiatives more efficient and facilitate communication between the various stakeholders involved in employment initiatives in Denmark.

DIGITAL SELF-SERVICE AT 'UDBETALING DANMARK' 6.2

Transferring administration to Udbetaling Danmark, will raise the quality of digital self-service for a range of social benefits by introducing more digital tools, simplifying the rules, removing red tape and making positive organizational changes. Legislation will also be adapted and simplified enabling the automation of some key areas of administration.

E-INCOME FOR MORE EFFICIENT WORKFLOW 6.3

In a number of areas, local authorities and unemployment funds still request printed documents even though similar information exists on the e-Income register. Income concepts and rules need to be brought in line with the definition used in the e-Income register wherever possible, so e-Income can be used for both ongoing administration and spot checks.

DIGITAL REIMBURSEMENT AND EMPLOYMENT SUPPORT SERVICES 6.4

Companies and municipalities use considerable resources on administering public and private sector requests for subsidies and reimbursements. In 2011, a study will assess how better IT support, the reuse of data and simpler rules can optimize and automate the payment of subsidies and reimbursements for people in government-subsidized employment.

BETTER SELF-SERVICE FOR CITIZENS 6.5

We need to develop and improve self-service for people using Jobcenters. This includes developing self-service solutions that make it easier for unemployed people to register sick days, a return to work, and holidays. It should also be more straight forward for citizens to access information and their files on Jobnet.dk.

EFFICIENT SCREENING OF DATA TO PREVENT FRAUD 6.6

Modern IT tools will help uncover errors or fraud in the payment of public benefits, subsidies and reimbursements. A central database is being developed (VAS) to identify claims for sickness benefits that need looking into in more detail. Other areas of investigation include screening payments made through Udbetaling Danmark for signs of errors or anomalies.

FOCUS AREA 7
DIGITAL UNIVERSITIES

University graduates are, for the most part, skilled and innovative people who make valuable contributions to society by helping to promote growth and raise productivity. Companies are calling for highly educated people with the ability and drive to develop, produce and sell the products and services that will form the basis of Denmark's future livelihood.

At universities, we need a more focused program of digitalization to strengthen teaching and raise operational efficiency.

FROM INTAKE TO GRADUATION: THE DIGITAL UNIVERSITY

University teaching must embrace innovation and creativity. Universities can achieve this by strengthening the use of IT solutions to support teaching – and learning. The Danish government will create the best possible framework for universities to share their IT user experiences so that the most efficient digital teaching tools can be rolled out for all major faculties.

A program of digitalization for universities, however, covers more than just teaching tools. At the end of each semester, completed examination papers must be delivered online. Many students can already hand in their assignments and theses online, but conducting digital tests that preclude cheating has been a challenge. We need to develop examination forms that are adapted to the new digital age. And the technological infrastructure must be upgraded so that by 2013, written tests can be carried out without the need for a pencil or paper.

Students are already the group in society most at home with using digital technologies in their everyday lives. So by 2013, it will be mandatory for students to be communicating online with teachers and university administrators as much as possible. By 2013 at the latest, students will be required to apply for admission online.

Phasing out printed forms will make it easier to allocate university places. And, throughout their university career, students will be able to complete most of their administration online.

UNIVERSITIES NEED TO COLLABORATE ON OPTIMISING EFFICIENCY

Operations that do not directly involve students must also be digitalized as soon as possible. In 2011, a national forum for digitalization will be established for all Danish universities. This will promote collaboration for administering degree courses and compile best practices for streamlining and facilitating administrative processes.

Universities will also be encouraged to coordinate their respective systems and use the new public sector infrastructure so that the same good solutions can be rolled out for all of Denmark's universities.

MILESTONES FOR 2015

- Students attend universities that have embraced the digital age
- Universities and students communicate with each other online, including making applications, submitting assignments and dealing with administration
- Universities share IT best practices to improve efficiency. And they use eGovernment solutions where applicable, keeping all public sector systems aligned

INITIATIVES

DIGITAL EXAMINATIONS 7.1

Universities must offer up-to-date examinations. By 2013, as many university tests, assignments and theses as possible will be handed in online.

DIGITAL WRITTEN COMMUNICATION 7.2

Written communication between each university's administration and its students must be more efficient. By 2013, as much of this written communication as possible must be digital. The government will monitor the progress of the universities in the transition towards digital communication.

DIGITAL APPLICATION PROCESS 7.3

Today, students can already apply to university online. From 2013, it will, where applicable, be mandatory to submit applications using the interactive website *Optagelse.dk*.

USE OF eGOVERNMENT SOLUTIONS AT UNIVERSITIES 7.4

Universities will avoid duplicating IT development by using the eGovernment solutions established by the public sector in recent years where applicable. For example, NemID is to be used as a login solution for e-learning platforms, and NemSMS will be implemented in universities so students can receive notifications of changes to teaching, courses and events on their mobile devices.

FOCUS AREA 8
A SHARED PLATFORM FOR EFFICIENT ENVIRONMENTAL ADMINISTRATION

Our living conditions and well-being rely on a diversity of natural resources and a healthy environment. It is therefore essential that we plan and manage our natural resources and the environment efficiently. And to do this, we need cohesive, nationwide data on the environment that citizens, companies and authorities can trust.

Recent local government reforms divided the environmental administrative tasks that were once the responsibility of the Danish counties, between the central government, regions and municipalities. Now, municipalities take care of issues relating to citizens and companies, drawing on information from governmental and public sector systems. However, the quality of the information is still not consistent, and much of it is duplicated.

Many authorities maintain their own databases, storing environmental data on various geographical areas that already exists on other databases. And not all of it is compatible. For example, the municipal registration of protected natural areas is currently difficult to access across municipal boundaries, making comparisons difficult.

Nearly all municipalities maintain a wealth of this kind of data.

Shared, quality-assured environmental data is key to efficient environmental administration. The information helps to create a snapshot of environmental issues, such as the current state, the effects of environmental initiatives and the spread of invasive species. In addition, companies will be able to process environmental cases faster and more efficiently if data is more accessible, making reporting, applications and court proceedings less complicated.

EFFICIENT ACCESS TO ENVIRONMENTAL DATA

When citizens or companies are deciding to buy or sell property, they need quick and easy access to credible environmental data. At the moment, a shortage of valid digital environmental information is preventing the establishment of good self-service solutions and automated administration for a range of activities, including property sales. It is also difficult and expensive for public sector authorities to maintain the many different systems and databases where the same information is stored in more than one place. Finally, a common source of reliable environmental data is vital to ensure cohesive environmental administration across the jurisdiction of different public sector authorities. It is particularly important that all environmental data complies with the same basic geographical data.

MILESTONES FOR 2015

- Gathered only once, environmental data is updated where this can be done most efficiently for use across the entire public sector
- Citizens and companies have easy access to reliable, consistent environmental data
- Companies and citizens use online self-service solutions, which provide an overview of issues such as planning, and promote efficient communication

INITIATIVES

EASY ACCESS TO PUBLIC SECTOR ENVIRONMENTAL DATA 8.1

Public authorities, companies and other interested parties need to be able to use public sector environmental data to develop digital systems, services and solutions for citizens. Because of this, we will establish a cohesive, user-friendly way of distributing public sector environmental data.

DIGITAL OVERVIEW OF PLANNING 8.2

Citizens and companies need a clear, general picture of the various plans and maps that regulate the use of an area or piece of land. This will also make the administration of physical plans more cohesive, clear and efficient.

QUALITY AND DECLARATION OF ENVIRONMENTAL DATA 8.3

Today, large fluctuations in the quality of environmental data make them difficult to understand and use. Users are often unsure which data to trust, causing a sharp drop in efficiency. Because of this, every entry in the environmental database has to meet new, stricter requirements if we are to achieve a high quality of digital environmental administration.

IMPROVED COMMUNICATION BETWEEN PRIVATE AND PUBLIC SECTORS ON ENVIRONMENTAL ISSUES 8.4

Environmental law and regulation is complex and technical. That calls for a special effort in assisting companies in carrying out inspections, environmental reports and applications for permits. In 2011 a survey will be carried out to identify how data can be reused and how eGovernment can help improve communications between private and public sectors.

SHARED ENVIRONMENTAL DATA

Environmental data includes detailed information on Denmark's waterways, forests, soil pollution, town planning, fauna, water table, protected areas, open-air activities, air pollution, and use of chemicals and pesticides.

Municipalities, regions and the government cooperate to provide reliable environmental data for citizens, companies and the authorities themselves. Today, data on Denmark's natural resources and environment can be found on Danmarks Miljøportal (Denmark's Environmental Portal), and local planning data in plansystem.dk. Metadata can be found on geodata-info.dk. We intend to coordinate or combine these solutions so that users will experience them as one cohesive resource.

DIGITAL SOLUTIONS FOR CLOSER PUBLIC SECTOR COLLABORATION

FOCUS AREAS:

9. ROBUST DIGITAL INFRASTRUCTURE
10. SHARED CORE DATA FOR ALL AUTHORITIES
11. LEGISLATION IN SUPPORT OF DIGITAL SERVICES
12. EFFECTIVE MANAGEMENT OF eGOVERNMENT

FOCUS AREA 9
ROBUST DIGITAL INFRASTRUCTURE

Denmark's secure digital infrastructure enables citizens and companies to take care of their dealings with the public sector online efficiently. Thanks to the digital infrastructure, we can each have all our digital post in one place, secure digital identification, one login for all public sector systems, access to all data on the shared portals, and we can receive secure payments from the public sector. A well-constructed digital infrastructure also makes it cheaper for the authorities to develop new digital services because the existing systems form a solid platform for new solutions.

Close collaboration on centralized IT solutions also reduces risk and development time of new projects because authorities can reuse key components rather than building them from scratch.

BETTER INFRASTRUCTURE LEADS TO BETTER SERVICE

Solutions (and thereby also investments) shared by both public and private sectors deliver a more cohesive user experience, which leads to an increase in the use of digital channels such as NemID and Digital Post. Thanks to many years of joint development, Denmark's public sector already has a well-designed, efficient digital infrastructure. But the infrastructure requires constant detailed monitoring to keep the systems up-to-date. The robust digital infrastructure and joint framework architecture must also encourage as much competition between suppliers as possible, so when local authorities conduct public procurements for large service systems, they will have a healthy, dynamic market to browse.

THE INFRASTRUCTURE MUST BE EXPANDED AND CONSOLIDATED

Firstly, we need to make sure our digital infrastructure keeps up with the needs of citizens and businesses. For example, citizens should be able to log on securely to mobile digital solutions. We also need digital solutions that allow citizens to allocate power of attorney and make secure payments online.

Secondly, the infrastructure must be reliable and robust enough to deal with the increasing number of key processes that take place online. For example, the authorities must be able to share large volumes of data reliably. This means setting the coordination of the shared infrastructure in a rigid framework, ensuring better, cheaper and more stable operation for critical systems.

Thirdly, the existing shared solutions are to be adopted by all authorities and public sector institutions where relevant. Not only do the shared solutions need to be stable, secure and user-friendly, they will also be easy to implement because the infrastructure is based on open standards.

MILESTONES FOR 2015

- There is no time wasted on overlapping development. All public sector authorities use the shared IT infrastructure, such as NemID, Digital Post and Borger.dk. The public sector has a simple, cohesive appearance for citizens and companies
- The public sector IT infrastructure is kept stable, secure and up-to-date with continuous development and consolidation
- Wherever possible, public sector IT infrastructure development is coordinated with the private sector

INITIATIVES

SECURE DIGITAL SELF-SERVICE ON MOBILE DEVICES 9.1

Much of our digital self-service and communication tools would work well on mobile devices. Therefore, we are developing mobile versions of NemID and Nem Log-in so that citizens can use our services and check their Digital Post securely when and wherever they want to.

MOVING ON WITH JOINT LOGIN AND POWER OF ATTORNEY 9.2

Individual login solutions will be combined into one new, improved Nem Log-in solution, giving citizens and companies one point of entry. Nem Log-in will include features such as power of attorney, and is supported by identity-based web services that make it easier to exchange citizens' and companies' data.

ONE ACCOUNT FOR TRANSACTIONS WITH THE PUBLIC SECTOR 9.3

The flow of payments between the public sector, citizens and companies can be simplified and rationalized. At the same time, a more cohesive payment infrastructure will provide a clearer picture of financial transactions with the public sector. Investigations are under way to find out whether a shared infrastructure can be developed to deal with payments between companies and public authorities.

A SHARED OVERVIEW OF IT ARCHITECTURE 9.4

A shared overview of tasks and their links with organization, legislation and IT services is being prepared to improve work related to IT architecture in the public sector. This includes the maintenance and expansion of the public sector's IT architecture model, FORM and STORM. Work on standardization continues, but the focus is on realizing the strategy's initiatives, including shared core data in particular.

DISTRIBUTION OF CORE DATA 9.5

For the authorities who need it, core data must be easy to access, efficient to work with and very stable. The trend of rising costs for data distribution also needs to be reversed. We are currently investigating possibilities for a shared infrastructure for distribution of core data, looking for benefits such as gains in efficiency and better payment models.

HOTSPOTS FOR EASIER INTERNET ACCESS 9.6

To promote Internet use in Denmark, The Danish Public Welfare Technology Fund will allocate DKK 15 million to establish Internet hotspots in public places. Institutions for education, knowledge or culture can apply for funds to provide their users with free internet access. The funds will be used to prioritize Internet connectivity and use.

A FIRM FOUNDATION

Denmark has come a long way since it took the decision to establish a modern, robust digital infrastructure for the public sector. Up to 2015, the most important areas of activity are:

- **Security:** NemID, NemLog-in, joint power of attorney and mobile platforms
- **Messages:** Digital Post solution, remote printing and NemSMS
- **Core data:** one source for authoritative core data, a data catalog and data distribution
- **Portals:** Borger.dk (the citizen portal), Virk.dk (the business portal) and Sundhed.dk (the health portal)
- **Payment:** Nem Konto and eFaktura

HIGH-SPEED BROADBAND FOR EVERYONE IN 2020

The government's goal is for all citizens and companies to have access to at least 100 mbit/s broadband by 2020. High-speed broadband throughout Denmark is an important basis for developing new digital solutions in large welfare areas such as healthcare, homecare and education.

To achieve this goal, we must continue to develop the same market-based, technology-neutral access that has proven so successful to date.

FOCUS AREA 10
SHARED CORE DATA FOR ALL AUTHORITIES

The public sector captures and stores a wide range of data, including information on citizens, companies, real estate, buildings and roads. A small but important part of this data – 'authoritative core data' – is used over and over again across the entire public sector. These core data enables authorities to do their work effectively, citizens and companies to access their legal rights; and society as a whole to operate efficiently.

CORE DATA IS FUNDAMENTAL TO AN EFFICIENT PUBLIC SECTOR

Core data includes personal data, which is registered in the Central Person Registry (CPR). For the digital strategy the next step is that the registration of people, companies, property and so on needs to function as a single, high-quality, fully cohesive digital administrative platform with a single, secure point of entry for login for authorities.

Core data must also be cross-referenced so the public sector can connect work procedures and compare data with other authorities and sectors. A case in point is property data. Today, different data on a property can be difficult to compare because they appear in different forms on different property registries.

In addition, the way core data provided by the public sector are described needs to be more uniform. Companies and the authorities need a clearer picture of which core data and data services can be used and how.

BETTER AND MORE ACCESSIBLE CORE DATA

Even though Denmark has made considerable headway with core data, challenges still remain. The quality of the core data needs to be higher in a number of areas. This applies to geographical data, and data on properties, addresses, personal registers, and companies, and information on personal income.

It is vital that public sector caseworkers have reliable access to core data. It can be expensive for authorities – and society – when casework grinds to a halt. And it is also expensive, slow and risky to depend on data from many different sources.

We need to be able to bring core data into play with greater stability and capacity than we can at the moment. This means finding an efficient way to distribute data across the public and private sectors using a shared infrastructure.

Public authorities also need to decide on one way to use and add to the body of 'authoritative core data.' New data collected by the authorities should be linked to relevant core data, enabling casework that's aligned across the various public authorities.

MILESTONES FOR 2015

- High-quality and cohesive core data ensures that the authorities can serve citizens and companies quickly and easily
- All authorities reuse core data so that citizens and companies do not have to enter or look for the same data several times
- Core data is distributed more smoothly, efficiently and reliably thanks to a shared infrastructure for data distribution

INITIATIVES

MORE DETAILED GEOGRAPHICAL DATA 10.1

Denmark's division into municipalities, parishes, constituencies, and so on, is fundamental to public sector administration. We will establish a single high-quality, easy-to-access, authoritative source for every division of the public sector administration. The same will be done to provide core data on the land registry system, place names, road network, waterways and lakes.

REUSING DATA ON PROPERTY, BUILDINGS AND ADDRESSES 10.2

In 2012, we will finalize our action plan for a stronger, simpler digital data infrastructure for the property and buildings domain. This will mean that data recorded on real estate and associated rights will be easy to find on the Cadastre, building and housing register, (BBR), and Tingbogen, where deeds are registered. Duplication of registers will no longer be needed, and local authority property registers can be rationalized. In addition, we will make an action plan on reusing authoritative address data from the BBR across the public sector so major central registers will use them, and we will also look into ways of improving the quality of the data.

IMPROVEMENTS TO PERSONAL DATA 10.3

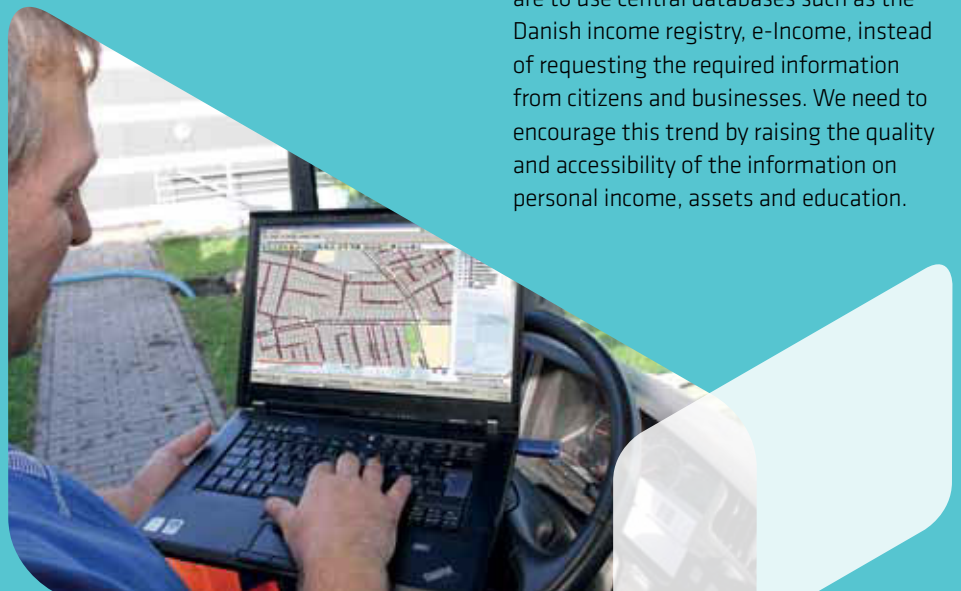
Each individual and unique CPR number forms the cornerstone of an efficient digital administration. But in cases such as the registration of parental separation and child custody, the information can be incomplete or inaccurate. Because of this, we are putting together proposals for improving the quality of these records.

IMPROVEMENTS TO COMPANY DATA 10.4

Public authorities need to share and reuse corporate core data so that companies can avoid reporting information that the public sector already has. This is the goal for the Central Business Register (CVR) in 2013, and for accounting and company data in 2014. To reach this goal, we will improve the quality and accessibility of the data.

IMPROVEMENTS TO DATA ON INCOME 10.5

When allocating any income-related benefit such as housing benefits, the authorities are to use central databases such as the Danish income registry, e-Income, instead of requesting the required information from citizens and businesses. We need to encourage this trend by raising the quality and accessibility of the information on personal income, assets and education.



WHAT IS CORE DATA?

Core data is authoritative data covering the fundamental information needed for effective public sector administration. Core data is standardized in the following areas:

- Geography, roads, and real estate
- Properties, housing, buildings and addresses
- Personal identity, residence and family relations
- Companies and their key related persons
- Personal income, assets and education

Core data needs to be easier for the authorities to use. This means they have to be well-defined, well-documented and the entire process needs clearly defined quality goals. The distribution of core data also needs to be efficient and reliable.

FOCUS AREA 11
LEGISLATION IN SUPPORT OF DIGITAL SERVICES

Many of Denmark's laws were written back when digital technologies played a minor role in public sector administration. Today, as we raise our digital ambitions and roll out technology to new areas, new legal issues will inevitably arise.

LEGISLATION MUST BE ADAPTED TO THE DIGITAL AGE

It is important that legislation keeps up-to-date. Public administration authorities need new IT tools, so all unnecessary legal barriers to digital collaboration at work need to be removed.

In the same way, digital collaboration between the different public authorities makes dialogue with the public easier and faster. Many citizens and companies expect authorities to be fully digitalized and expect the public sector to exchange information as a matter of course. Legislation needs to support this, which is not always the case today. Changes to legislation have to respect considerations such as individual legal rights and privacy. Making legislation digitalization-ready entails three fundamental initiatives:

- Adapting legislation to support the digitalization of the public sector, including the statutory basis for paperless communication between citizens and public sector authorities
- Considering digitalization from the ground up when devising new legislation for a certain area. This could help ensure that the regulation of an area is suitable for automated casework and the reuse of data.
- Ensuring that acquiring new IT solutions can be done more simple and smooth and still complying with EU legislation.

MILESTONES FOR 2015

- Legislation written for the analog society does not prevent the use of digitalization to create a more efficient public sector
- Clear legislation makes it mandatory for citizens and companies to use digital tools to correspond with public authorities
- Smoother public procurement rules make it easier and less expensive to acquire IT

INITIATIVES

LEGISLATION ON MANDATORY DIGITAL SELF-SERVICE 11.1

The government will campaign for adapting legislation so that correspondence with public authorities can be made mandatory where appropriate by 2015. New legislation will take into account that some citizens will be unable to correspond online, so they will need to be able to use other means.

CLEAR LEGISLATION ON DIGITAL LETTERS 11.2

A public authority message to the Digital Post solution needs to be just as legally valid as a physical letter sent by post. The government will campaign to put the necessary regulations in place so that citizens and companies will receive all their post from public authorities digitally. The government will also work to remove any ambiguities concerning demands for signatures on digital letters that citizens and companies receive from public authorities.

PRINCIPLES FOR LEGISLATION ON DIGITAL SERVICES 11.3

When new legislation is being put together, opportunities for digitalization must be considered from the start. This applies to areas such as mandatory digital correspondence, the reuse of data and the use of the eGovernment infrastructure. In 2012, principles will be set for digitalization-ready legislation that should be used when preparing laws.

UPDATED RULES ON CLOUD COMPUTING 11.4

Cloud computing can open new opportunities for more efficient IT operations and better access to IT services. Citizens' and companies' sensitive information must be protected, but outdated rules must not pose an unnecessary barrier to cloud computing.

BETTER FRAMEWORKS FOR IT SUPPLY AND PROCUREMENT 11.5

More efficient processes are needed when public sector authorities, working together or alone, acquire IT. We need to look into whether legislation could create greater clarity and flexibility for public procurement. The rules for public procurement need to be more flexible, and we need to make an effort to simplify EU public procurement directives.

FOCUS AREA 12
EFFECTIVE MANAGEMENT OF eGOVERNMENT

Since 2001, municipalities and regional government have worked together on eGovernment solutions to renew and rationalize the public sector. From simple email communication between municipalities to new digital services for citizens and a single point of entry for logging on to eGovernment services, this collaboration has continually expanded to meet changing service requirements and expectations. Starting with isolated technical solutions, we now have one of the most well-developed eGovernment infrastructures in the world.

AMBITIOUS GOALS MUST BE REALIZED

The new strategy sets clear and binding goals for eGovernment by 2015. Achieving our objectives is less about developing major new IT solutions and more about ensuring more consistent implementation of the eGovernment solutions established in recent years. Not only does this require a strong capacity for decentralized implementation capacity, it also demands a centrally focused coordination effort.

In major welfare areas, the eGovernment effort is breaking new ground, and IT solutions are becoming more and more essential for delivering robust, efficient services.

In recent years, eGovernment initiatives in selected areas of the public sector have been coordinated by domain boards. In the light of this experience, the collaboration on eGovernment initiatives will be strengthened, partly by clearly dividing responsibilities across central government, regions and municipalities.

The economic situation has put the central government, municipalities and regions under pressure to find efficient solutions that can make resources available for sustainable welfare. eGovernment has a key role to play, but only if the authorities can deliver the benefits. It is vital to follow up, make visible progress and maintain eGovernment as a central theme on the political agenda – as it has been in relation to the negotiations on the finances of municipalities and regions in recent years.

This also means that the decisions to make new investments in IT need to be presented in well-documented business cases. This is the only way to clearly show what the citizens get for their tax money – and whether there is a return on investment.

MILESTONES FOR 2015

- Stronger coordination ensures that the various sections of the public sector work together seamlessly
- The benefits predicted for eGovernment projects are realized in practice
- All progress made in the eGovernment strategy initiatives and their benefits are clarified and documented.

INITIATIVES

STRONGER COORDINATION AND IMPLEMENTATION 12.1

The Steering committee for joint-government cooperation (STS) will carry on its work, implementing the eGovernment strategy initiatives, so the authorities will get enough support to achieve their ambitious objectives.

CLEAR DIVISION OF RESPONSIBILITY AND CLOSE COLLABORATION IN WELFARE AREAS 12.2

Each relevant ministry ensures that legislation, rules and standards support efficient digital processes in each welfare area.
In addition, they make sure that the municipalities and regions realize their goals and milestones for each area. Steering groups can be set up to advise the ministers responsible and create frameworks for more efficient coordination of strategy initiatives within each sector.

DOCUMENTATION OF ACHIEVED GOALS 12.3

The progress and status of eGovernment initiatives need to be transparent. The authorities need to be able to check that goals are being reached and benefits realized so that changes can be made if initiatives run into unexpected difficulties. This means they need easy access to relevant information on the authorities' initiatives and on the realization of benefits.

E-DAY 4: NO MORE PRINTED FORMS OR LETTERS 12.4

E-Day 4 will be held in November 2014 to coincide with the day all citizens have their own digital letter box (Digital Post). By then, the authorities must also have up-and-running digital solutions for services that are mandatory for citizens and companies.

STEERING COMMITTEE FOR JOINT-GOVERNMENT COOPERATION (STS)

The STS consists of representatives from a number of ministries, the municipalities and the regions, and is responsible for coordinating eGovernment initiatives throughout the public sector. The STS reports every half year to the Government, municipalities and regions.

KOMBIT

Established to strengthen municipal procurement capacity in the IT area, KOMBIT is responsible for exposing municipal IT to competition. During the lifespan of the strategy, KOMBIT will work with the municipalities on the public procurement of certain municipal IT solutions, where KMD currently has a dominating position.

RSI

Regional Healthcare IT (Regionernes Sundheds-IT – RSI) is the regions' dedicated consultancy for digital healthcare solutions. Twenty-four milestones for improving Health-IT have been identified, and they are to be brought into effect by 2013. These opportunities will strengthen IT applications at Danish hospitals, optimize the way hospitals are run, promote cooperation across the different healthcare sectors and help engage patients in taking responsibility for their own health.

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