Towards Connected Governance

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Overview

- E-Government and GI

- Towards connected governance in Denmark

- Example: The municipality of Rudersdal

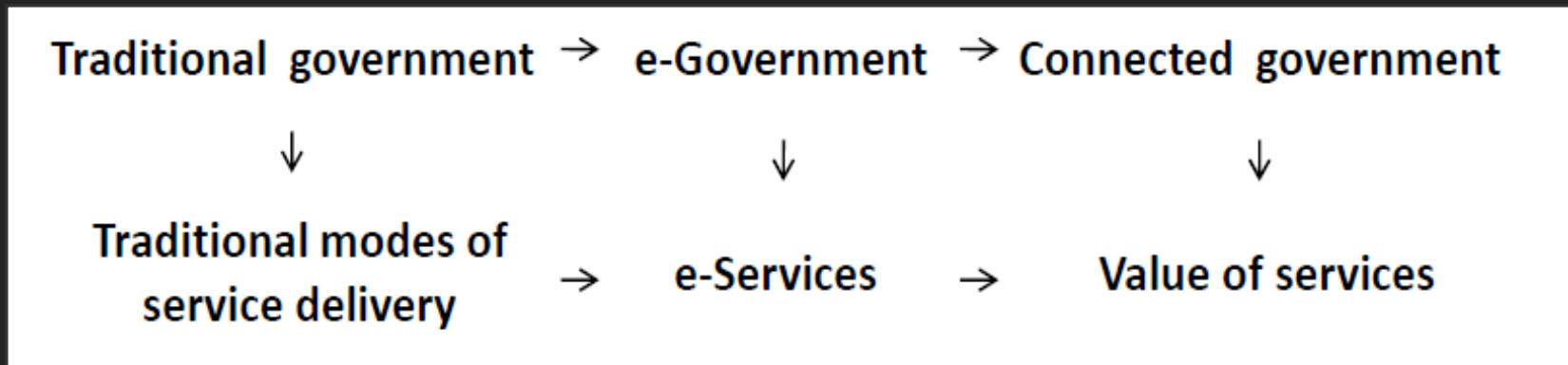- Conclusions

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Towards connected governance

SDI and Spatial enablement:

"The term 'spatially enabled society' attempts to describe an emerging cultural and governancerevolution: pervasive spatial information technologies and spatially equipped citizens are changing the way economies, people, and environments are managed and organized. Economic wealth, social stability and environmental protection can be facilitated through the development of spatial information products and services created by all levels of society including governments, the business sector, and citizens"

Spatially Enabled Society by Enemark and Rajabifard (2011 – in press).

Towards connected governance

Traditional government → e-Government → Connected government
↓ ↓ ↓
Traditional modes of service delivery → e-Services → Value of services

UN e-Government Survey from 2008 - From E-Government to Connected Governance (United Nations 2008)

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Back-end/front-end – model 1

Effective connected government is about a "bigger and better" front-end with a "smaller and smarter" back-end referring to an understanding of (United Nations 2008):

- *"Back office" as the internal operations of an organisation that support core processes and are not accessible or visible to the general public. These government functions normally do not interact with outside entities and involve such diverse tasks as calculat-ing benefits or enforcement of environmental laws*

- *"Front office" processes are often understood as "services" though service delivery has both front and back office components. The element of contact in service processes fundamentally distinguishes them form the more production oriented processes in the back office*
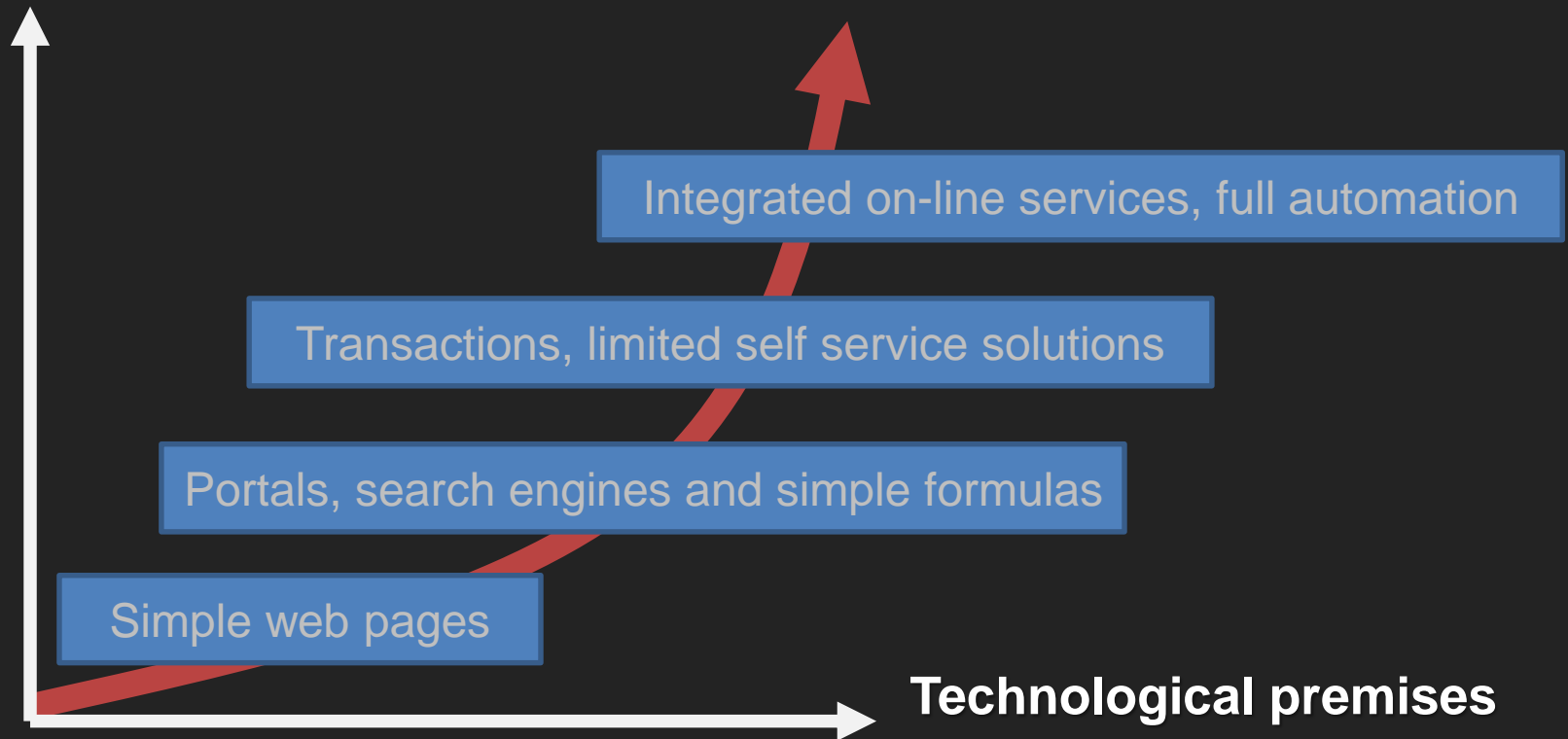
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Back-end/front-end – model 1

	Back-end	Front-end
Processes	Back-end processes	Front-end processes
Tasks	Integration, consolidation and innovation enabling connected government	Provision of front-end services for the public
Actors	Professionals within the GI-community as well as experts from various domains	Citizens and business
Values	Cost savings and improved service delivery	Improved use value for citizens and business
E-Chal-lenges	Different professional understandings and domain ontologies	Various usability aspects

Danish e-Government strategies

Efficiency potentials

Level of service

Integrated on-line services, full automation

Transactions, limited self service solutions

Portals, search engines and simple formulas

Simple web pages

Technological premises

"Better public service, a higher degree of efficiency and stronger collaboration"

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Basic data concept

Geographical data
with a profound role:

- Metadata,
- Reference data
- Multi-sector data
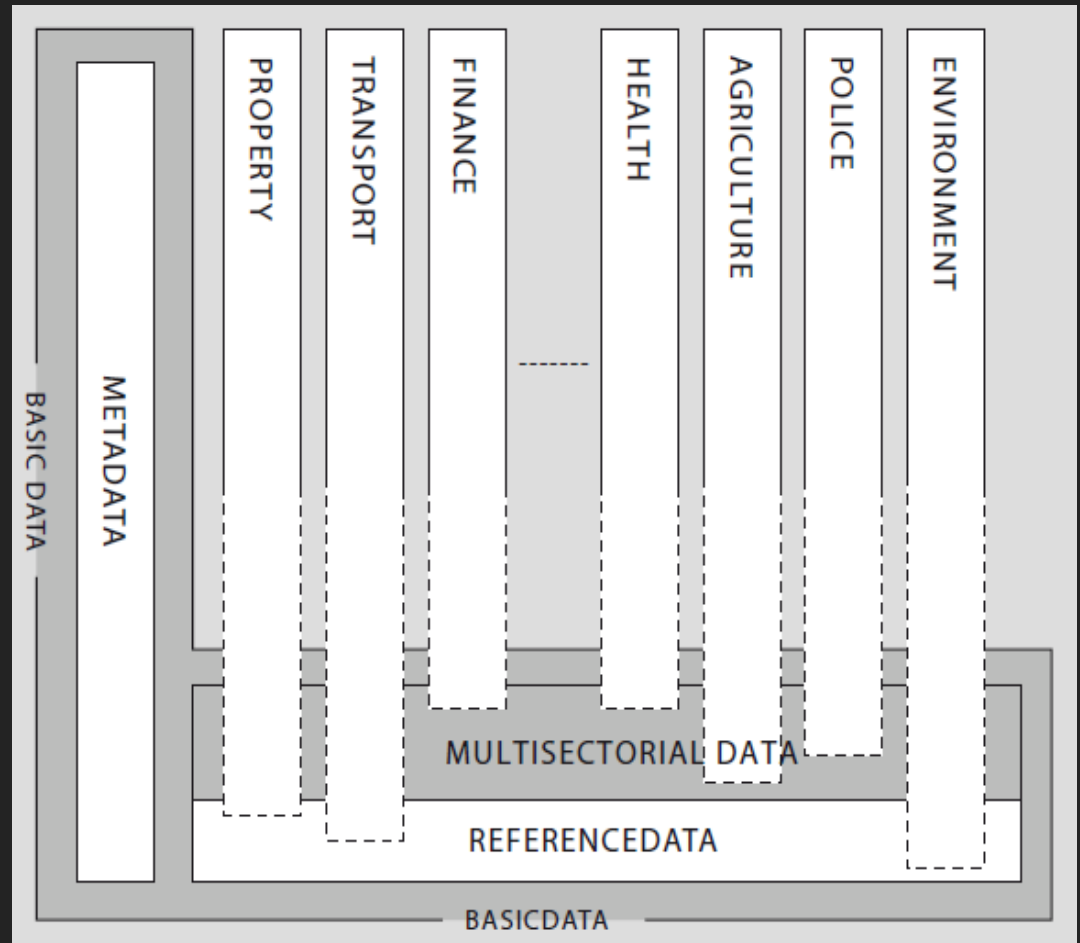
Danish SDI strategy
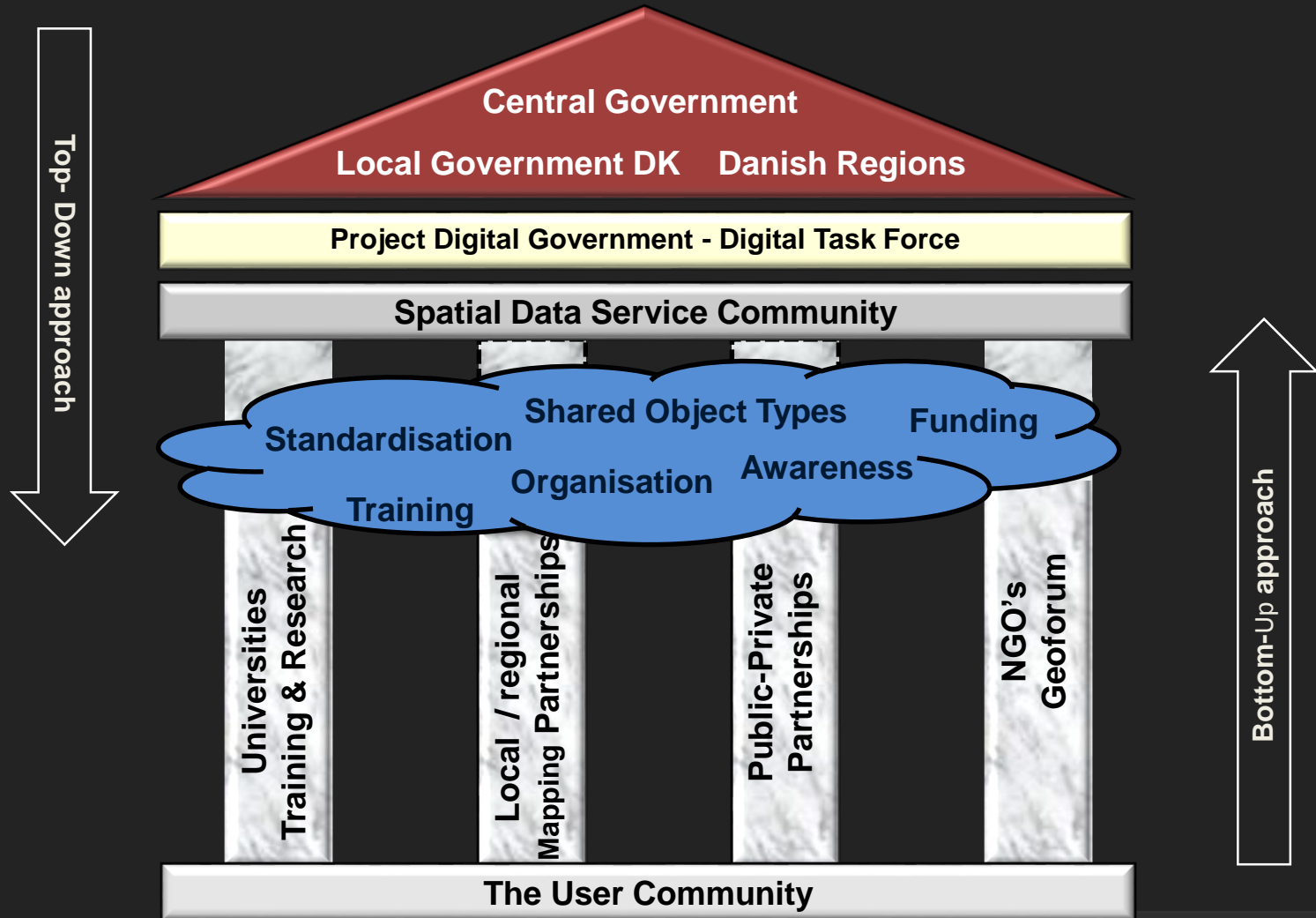
Danish SDI strategy

Policies supporting SDI

- Directive 2003/4/EC on public access to environmental information as an EU implementation of the Aarhus Convention

- The PSI Directive was implemented in July 2005 aiming at regulating and stimulating the reuse of public sector in formation (PSI)

- The INSPIRE Directive from 2007 on establishing infrastructure for spatial information in Europe

Danish SDI strategy

Funding models

- From 2009 all ministries pay an annual fee to KMS, and all the central government agencies and institutions have access to KMS' geodata and related services

- A similar Municipal Geodata Agreement was reached with Local Government Denmark in 2009, and came into effect in 2010

Danish SDI strategy

Back-end/front-end - model 2

- Back-back-end processes – referring to the basic infrastructural elements handled by professionals insuring SDI-aspects as basic data sets, interoperability, quality

- Back-end processes – referring to the internal operations of an organisation that support core processes and are not accessible or visible to the general public.

- Back-end/front-end processes – referring to front-office services mostly used by professionals and linked to back-office functions within local governmental organisations

- Front-end processes – referring to front-office services designed for citizens and business

Back-end/front-end – model 2

	Back-back-end processes	Back-end processes	Back-end/ front-end processes	Front-end processes
Processes	Back-back-end processes	Back-end processes	Back-end/ front-end processes	Front-end processes
Services	FOT	Plansystem.dk	Digital plans at municipal homepages	Borger.dk
Actors	Technicians within the GI-community	Technicians within the GI-community	GI-technicians and municipal planners	Citizens
Values	SDI/basic data sets/inter-operability/ quality	SDI/e-Government	E-Governance and e-Democracy	Front-office services

Local e-government initiatives

Danish municipality reform in 2007:

271 municipalities were reduced to 98

- the former and Birkeroed and Soelleroed municipalities were merged into the new municipality of Rudersdal.

Rudersdal:

- Located in the northern capitol area

- has a strong focus on digitisation of back-end processes as well as front-end services as a means of supporting the vision of creating good living conditions for its 55.000 citizens.

- Is actually the only Danish municipal, which has been part of the innovation processes at all four levels.

Back-back-end

FOT – common object types:

- National base map to be used at all administrative levels by combining the nationwide topographical TOP10DK database and large-scale technical maps used by local government administrations

- In 2008 77 municipalities were parts

- the local network HRKS/Midt were among the first to get FOT data – and were also part of a development project regarding the browser applications in the municipalities

- 93 of 98 municipalities have joined FOTDenmark – 1/3 have now covered their territory with FOT maps.
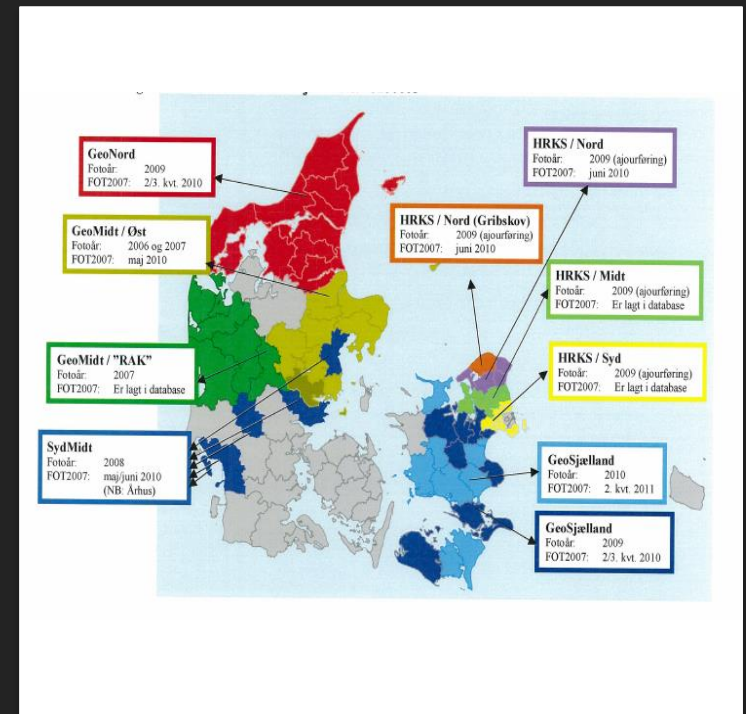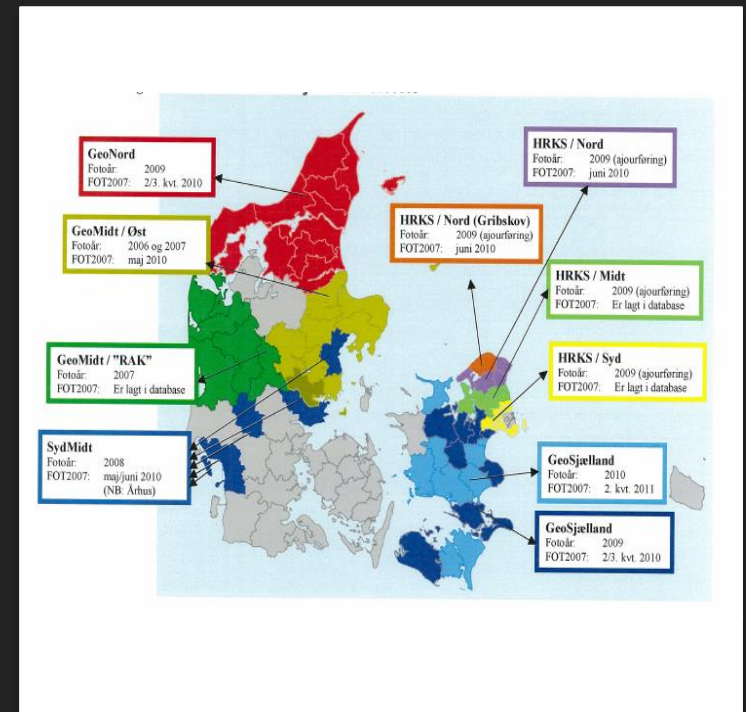
Back-back-end

GI-based communities of practise:

- Spatial awarenes

- Engagement and shared responsibility among the players

- a short way from the technicians to the decision makers

- ideas born on one level is quickly adapted on the other levels

Spatial awareness:

- Collaboration among technicians from municipalities, mapping agencies, interest groups based on a common set of values – sees SDI and basic data sets as essential for data interoperability and quality and efficiency in e-Government
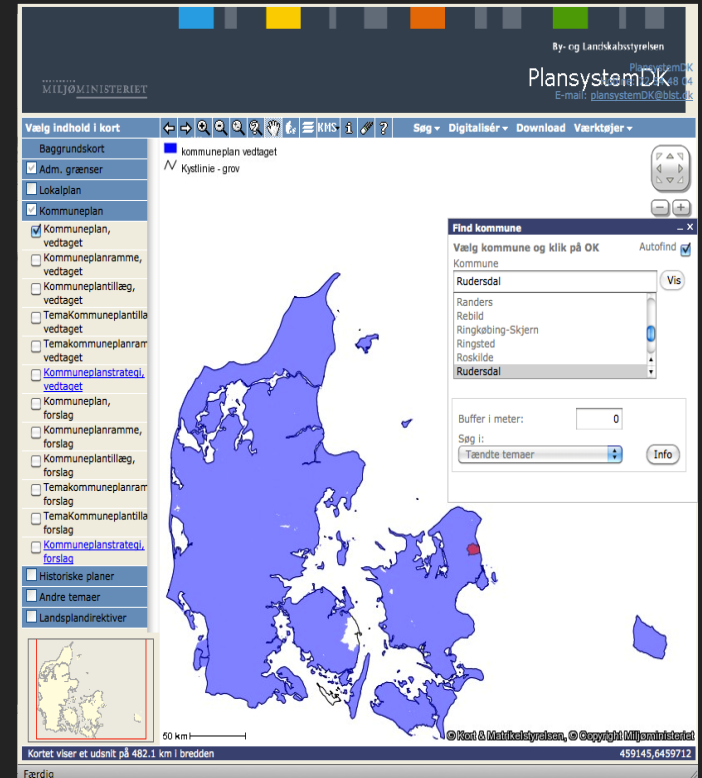
Back-end

The geoportal Plansystem.dk:

- Contains plans produced in accordance with the Danish Planning Act.

- Ensures that planning data are standardised and universally accessible

- Provides easy access to municipal and state spatial plans

- A simple way for the municipalities to report their plan proposals and adopted plans to the national public authorities.

- Feeds other portals with this information
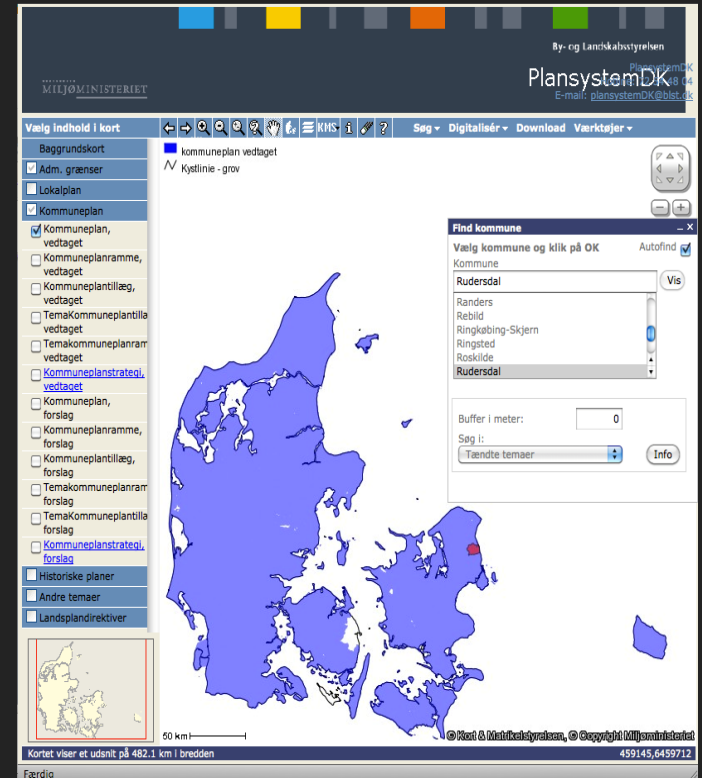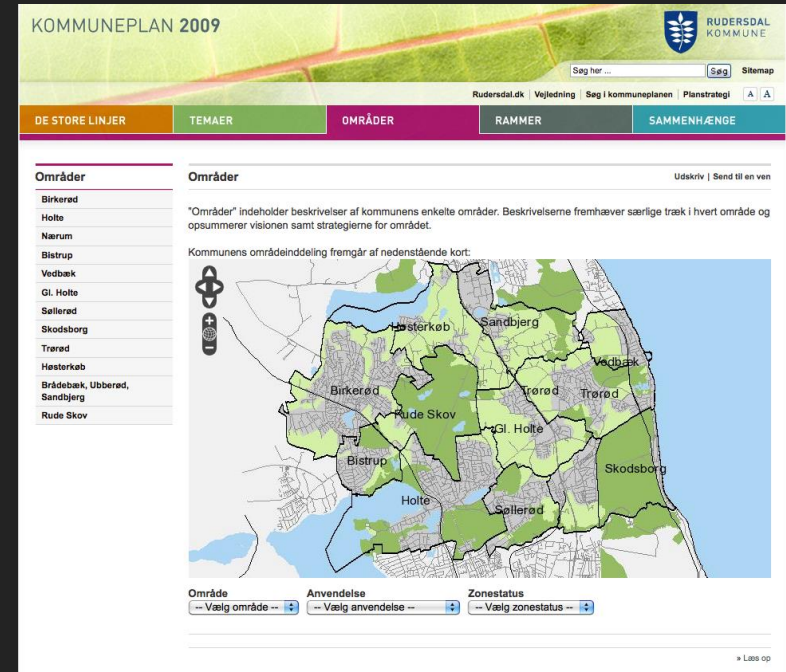
Back-end

Spatially enabled governance:

- Feeds other portals with this information for instance the public portals Public Information Online – targeted at citizens (www.ois.dk) and The Danish Nature & Environment Portal – targeted at the professional users

- is a result of cooperation between the ministries, the municipalities and the Local Government in Denmark. PlansystemDK illustrates the potentials of innovation within a GI-based working environment based on visible common values due to a shared understanding of the daily administration.

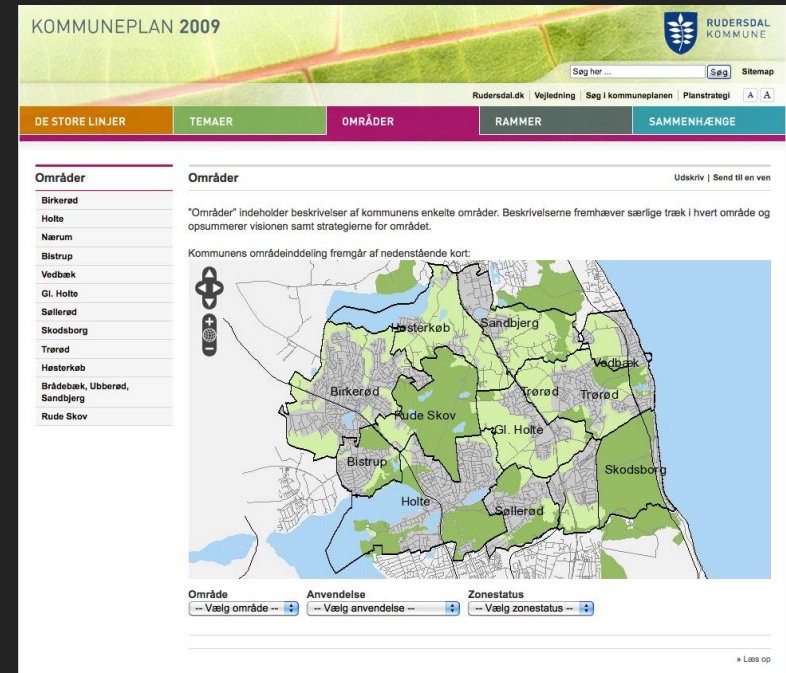# Back-end/front-end

Digital Municipal plans:

- obligated to upload their municipal plans and their local urban plans to a central register called PlansystemDK .

- Uploading Portable Document Format (PDF)

- Rudersdal has chosen to develop more advanced digital municipal plans based on web-technologies as part of the general revision of the municipal plans in 2009.

- making useful digital municipal plans is an interesting example of back-end/front-end processes referring to e-Governance in general as well as more specific issues regarding e-Democracy.

Back-end/front-end

Prototyping processes – 1. steps:

- difficult task to meet the needs of the very different end-users in one solution. Many of the municipalities are working with Content Management Systems (CMS) in order to integrate the workflows in the digital plans.

- a product with a low appeal to the citizens who find the solutions too incomprehensible.

Back-end/front-end

Prototyping processes – 1 steps:

- digital representation of the municipal plans instead of rethinking and reorganising the way of working with municipal planning.

- lack of reusing data and services from other public registers.

- no active link between the mandatory plans in PlansystemDK and the digital municipal plans.
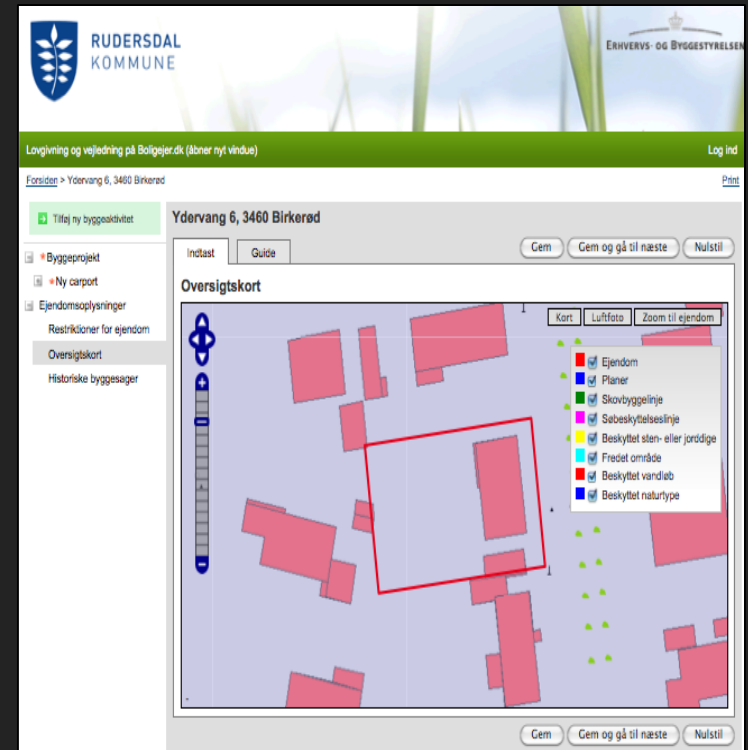
Front-end

Borger.dk:

- Borger.dk has two entrances for information.

- an entrance to general information about public service and as a portal the site links to other relevant websites.

- delivers targeted information to the individual citizen by the use of a personal sign-on (in Denmark there is a single sign-on signature for all public information as well as e-banking). After logging into the system the portal displays the information registered in public registers – tax, property information, health.
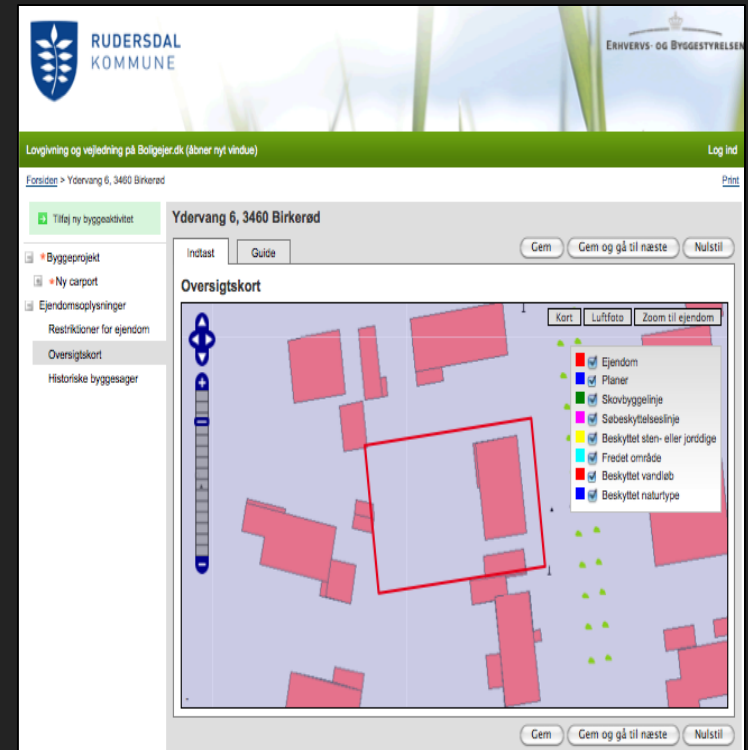
Front-end

Creating value of services:

- a strong focus on the citizens as end-users, and citizen needs have been incorporated by means of personas representing different types and life-stiles

- The approach to the project concerning digital building permits is more technical due to its economic potential.

Conclusions

GI-community - potentials:

- facilitating the actual move towards a connected form of governance

- employee experiences as means of user centered innovation creating value in front-end services as well as back-end procedures.

- The GI-working environments facilitate collaboration and prototyping processes due to the integrative nature of tasks as well as technology possessing the potential of making common values visible and iterative processes tangible.

- Considering re-engineering processes in a larger scale for instance SDI projects at the national or inter-municipal level functions as prototypes making visions visible and future identities and working conditions sharable among practitioners.

Spatial enabled digital government – challenges:

- Lack of spatial awareness – need for more communicative ontologies

- Among 98 Danish municipalities only Rudersdal could serve as specific example represented in all four cases, which indicates the importance of an organizational culture facilitating innovation as well as strategic efforts.

UDMS Conference 2011

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