

The Danish Basic-Data Initiative: Vision and the Realities of Implementation

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Agency for
Data Supply and
Efficiency

Leif Hernø, Chief-Consultant and
Senior Project Manager
Data Distributor Project

Agenda

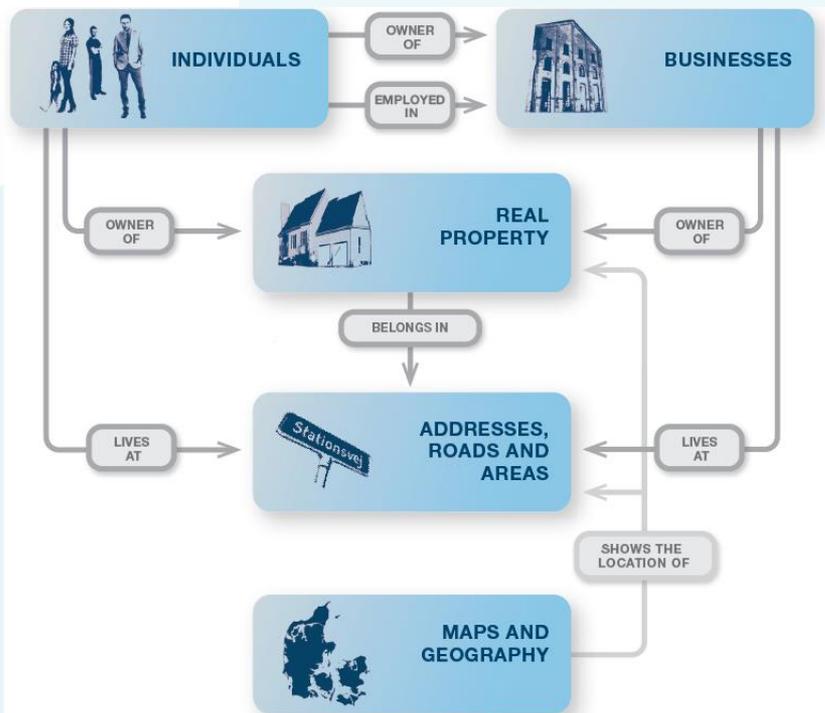
- Basic-Data
- The Basic-Data Initiative
- How far is the Basic-Data Initiative?
- The Realities of Implementation
- Questions?



What is Basic-Data?

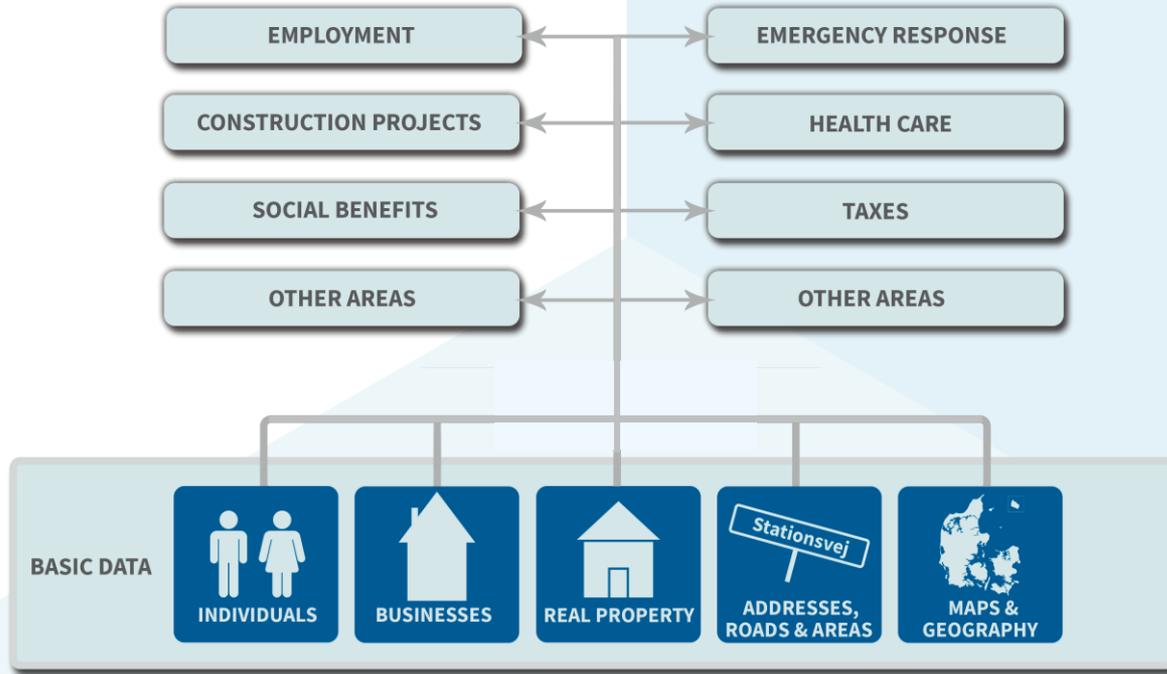
In a Danish context Basic-Data is public data about citizens, companies, real property, buildings, addresses, geography a.o.

Basic-Data is stored in vast public registers, such as the Civil Registration System, the Central Business Register, and the Building and Dwelling Register.



Who uses Basic-Data?

Basic-Data is used every day all year in a wide range of areas within the public administration as well as in the private sector:



Characteristics of Basic-Data before the Initiative:

- The registers are individually owned by governmental, regional or municipal authorities,
- The registers are children of their time in the sense, that data structure and content reflect the needs of the public sector at the time of their development,
- Data is not necessarily coherent and can be redundant from one register to the other,
- Data is distributed through a serious of channels owner by the public sector or outsourced to private IT-companies,
- The use of Basic-Data has in most cases been payable.



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The Basic-Data Initiative aims at creating the basis for:



Increased effectiveness:

Authorities and companies will receive data fast and reliable. The high data-quality secures the quality of administration and reduces the need for correcting measures.

Innovation:

Standardized data and interfaces open up for new ways of using and combining public authoritative data and thus make Basic-Data to a potential driver for innovation.

Creating value:

The Basic-Data-Initiative builds the framework for development of new value-creating it-solutions by public and private it-developers. Basic-data - freely available to the private sector - is a potential driver for growth and job creation.



The objectives of the Basic-Data Initiative are achieved through a series of subprojects:

- Standardizing the Basic-Data, so that it can be combined and used coherently:
 - The Datamodel project
- Improving the quality of the Basic-Data and adding new data, where needed, making data as correct, complete and up-to-date as possible:
 - The Real Property and Address Data projects
- Improving the availability of the Basic-Data through a shared and efficient distribution platform, from where it can safely and easily be used:
 - The Data-Distributor project
- Making the Basic-Data freely available for everyone: authorities, businesses, citizens.

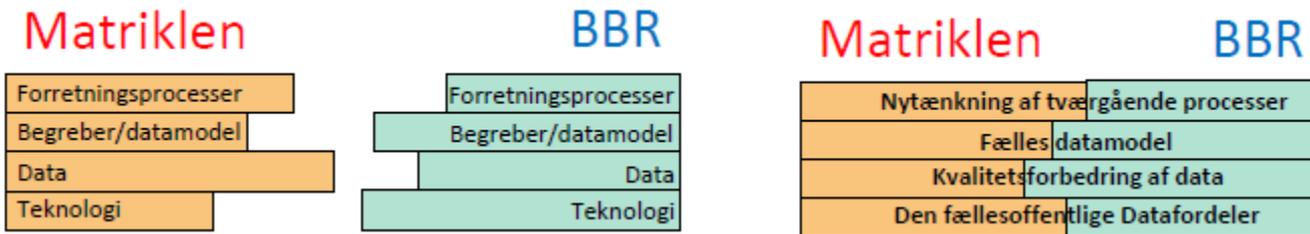


The Datamodel project:

- Basic-Data was until now documented and modelled in very different ways. Because of this, it was difficult to combine and exchange data between registers.
- Through the Datamodel project the Basic-Data authorities have cooperated on creating a consistent and coherent unique common model for all Basic-Data.
- The Basic-Data model is public and gives an overview over data and relations between data.
- It is a characteristic feature of the model that objects and attributes are unique and can only be found in one Basic Data register.
- For more information look [here](#)

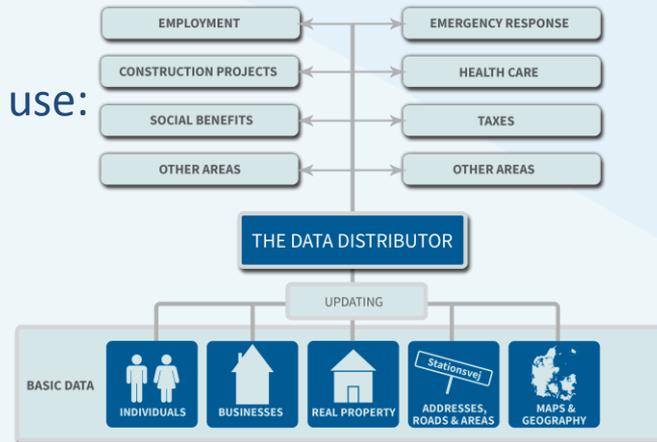
The Real Property Data project:

- Three registers have until now held data on real property: The Cadastre, the Building and Dwelling Register, the Land Register. Although the registers hold records of the same phenomena in the real world, data is inconsistent and there exists no unique identifier for identical objects.
- Through the Real Property Data project data is enhanced and made consistent, among other things through the introduction of a unique ID for real property.
- At the same time the basic registration of all types of real property is made coherent and recorded in one register: The Cadastre.
- For more information look [here](#)



The Data Distributor project:

- The Data Distributor is the core infrastructure element for the distribution of Basic-Data. It will within the next years replace the existing distribution channels of the Basic-Data registers.
- The Data Distributor is build to be a secure and stable, scalable platform with high availability (99,9%) and good performance.
- The Data Distributor secures a homogenous and easy access to data through standardized interfaces.
- The Data Distributor makes it possible to compile data from different registers in a single service.
- The Data Distributor integrates data and use:
- For more information look [here](#)



The BC of the Basic-Data Initiative:

Public investment:

- The Basic-Data Initiative is a joint venture of the Danish municipalities, regions and central government. The investment amounts to around 1 billion DKK.

Financial benefits:

- In municipalities, regional authorities, and central government, the Basic-Data Initiative is expected to deliver economic benefits of around 250 million DKK a year.
- Private businesses are given the opportunity to use free Basic-Data in developing new solutions and products. This way the Basic-Data Initiative can contribute to growth and innovation in the private sector. The Basic-Data Initiative is expected to deliver economic benefits of around 500 million DKK.



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The Basic-Data Initiative has come far:

- Although delayed and with one-and-a-half more years to go, the Initiative has come far and reached important milestones:
- The Data Distributor has been developed and is in production displaying the first proof-of-concept services.
- The Basic-Data datamodel has been established and is used as the basis for design and modernization of the Basic-Data-registers.
- The Civil Registration System and the Central Business Register are being configured and the services expected to be put into operation in April 2017.
- The registers of the Real Property and the Address Data projects have already been configured, but will not - due to the need for extensive testing - be put into operation until beginning of 2018.
- The configuration of geographical data started up 2016 and is expected to be put into operation by the end of 2017.

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The realities of implementation

- In reality initiatives like this are never as easy as they seemed when drafted. They are complex and difficult to manage.
- The fact that the Basic Data Initiative was expected to have completed the implementation of registers on the Data Distributor in the first half of 2016, but now for the third time has been rescheduled, indicates the complexity of the venture.
- The following recommendations are meant to address some of the difficulties the Initiative has encountered until now.

Lessons Learned...The Governance Part

- Be aware of the need for an extensive central governance structure, which is close to the projects and thus able to avoid bureaucratic traps. It has to be able to act fast and to have the power to make and implement critical decisions. It should focus on proactive management.
- Reduce complexity through loosely coupled subprojects. If the subprojects are tightly coupled, the delay of one subproject may induce delays in others.
- Agree on and use standard methods for project and program management (such as Prince2 and MSP) to secure a common language and general methods for planning, stakeholder management, risk assesment a.o.

Lessons Learned...The Technical Part

- Use agile methods for all relevant processes in e.g. planning , development and testing. Use proof-of-concept methods extensively.
- Establish transverse teams to handle specific tasks which involves more stakeholders, e.g. for testing connectivity.
- High-end quality is necessary when specifying and documenting the IT-systems and their interfaces. Be aware of the possible need for extended quality assurance.



Lessons Learned...The Human Part

- Be aware of the need for extensive communication and coordination between all stakeholders of the program.
- Make sure that the involved know their function and role as part of the total program and accept responsibility for their specific deliverances. Invest in education.
- Stay aware of the fact, that initiatives like the Basic-Data Initiative is not merely a technical change of data and IT-solutions, but also a business change process for the involved. To some it may even have a negative impact on their lives and thus also on their mindset. Some may loose their job-function, maybe even their job in the process of e.g. transferring data-distribution from the existing IT-systems to a central infrastructure element like the Data Distributor.



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