Linking data across domains and sources
– Danish Basic Data Programme & Data Distributor Platform

Conference of European Statisticians
Seventy-second plenary session
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Agency for Data Supply
and Infrastructure

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Tasks of SDFI – Data Distributor & Basic Data

- SDFI is part of the Danish Ministry of Energy, Utilities and Climate
- Responsible for Geospatial data/infrastructure - and regulating telecoms infrastructure
- Data Distributor:
  - Development of the Data Distributor
  - Documentation and support
  - Cooperation with the service provider and registry owners
- Basic Data programme:
  - Coordinate the Basic Data collaboration + secretariat for both the steering group and its underlying forums
  - Maintenance and further development of Basic Data

Overview - Distribution of Basic Data

Registration authorities provide and quality-assure data and establish terms for access to data.

The Data Distribution Platform operates and develops the joint public IT solution for data distribution.

Users must ensure that data is used within the current terms.

The Danish Property Assessment Agency

DANISH BUSINESS AUTHORITY

cpr
The Danish Central Office of Civil Registration

Danish Geodata Agency

Agency for Data Supply and Infrastructure

The Data Distribution Platform

Authorities

Businesses

Institutions

The Basic Data Programme

- Initiated in 2011 by the Danish Government, the municipalities and the Danish Regions

- Achieved through a series of sub-projects

- Fully implemented in 2020, development on-going

- The initiative has aimed to:
    - Secure free, fast and reliable access to Basic Data
    - Secure coherent Basic Data updated at one place
    - Increase effectiveness and modernise public administration
    - Increase innovation and growth - as well as costs reduction

The Basic Data Programme – conceptually

Through the Basic Data Programme, Danish public authorities deliver core information about
- individuals,
- businesses,
- real properties and buildings,
- addresses, maps and geography.

- Use and re-use of Basic Data is now a foundation for public authorities and private companies
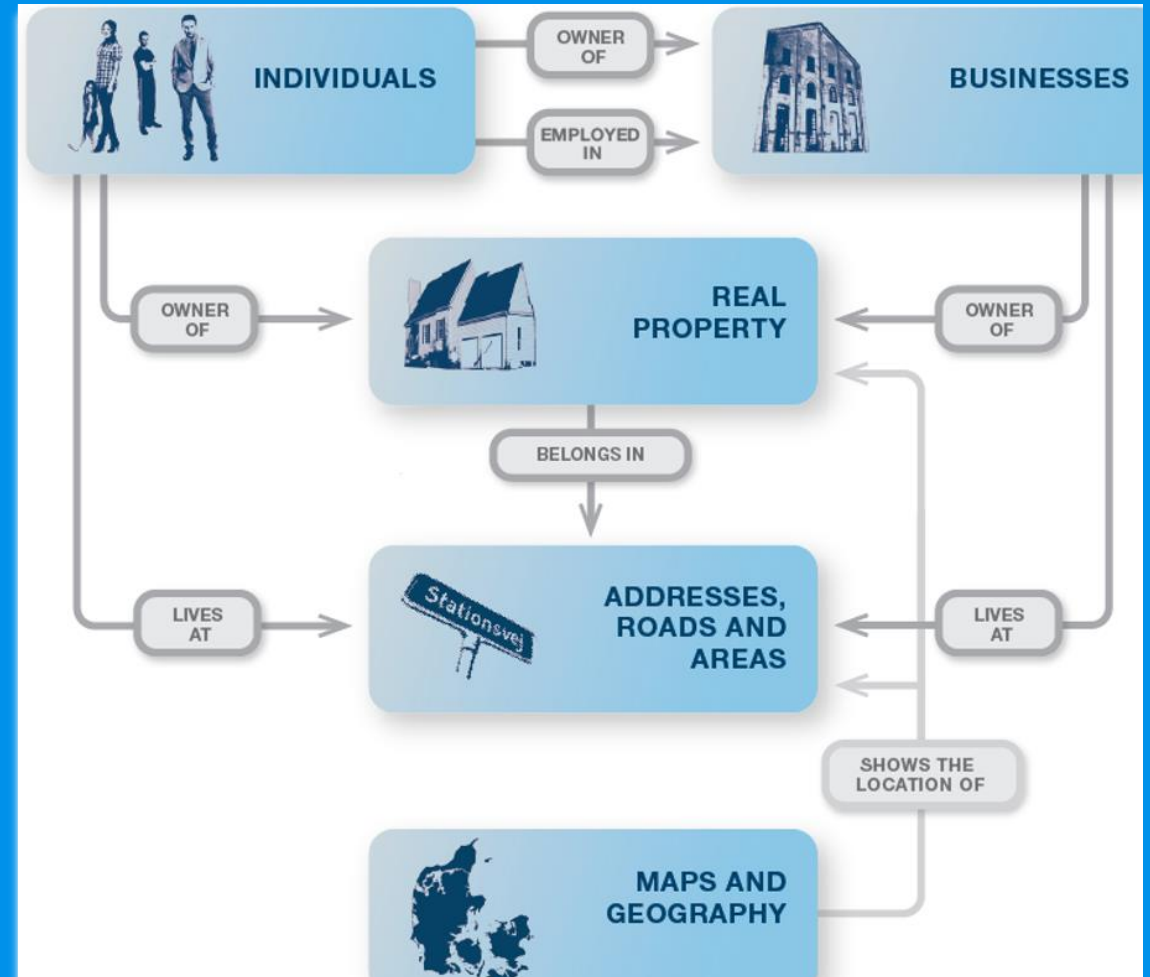
The Data Model

- Before the Basic Data Initiative, data was documented and modelled in different ways for each register, making them difficult to combine

- Solution: Creation of a coherent common model for all Basic Data

- The Data model secures relations between objects, and that objects and attributes are unique and can only be found in one Basic Data register

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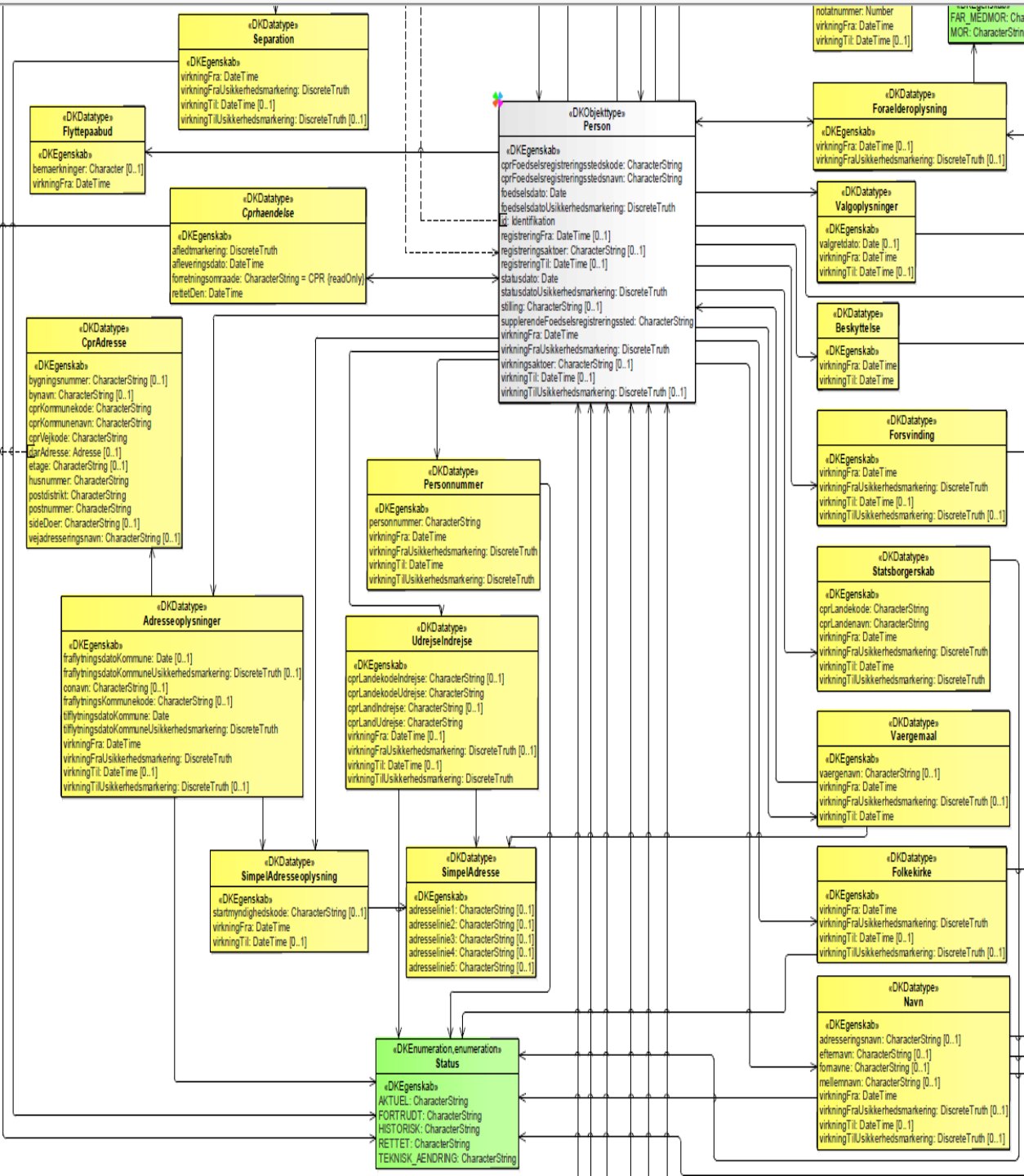
The links between Basic Data registers

Examples of relations/links between domaine data models:
- Person
- Address (Adresse)
- Administrative division (Adm. Inddeling)

The unique identifiers allow combination of data across registers
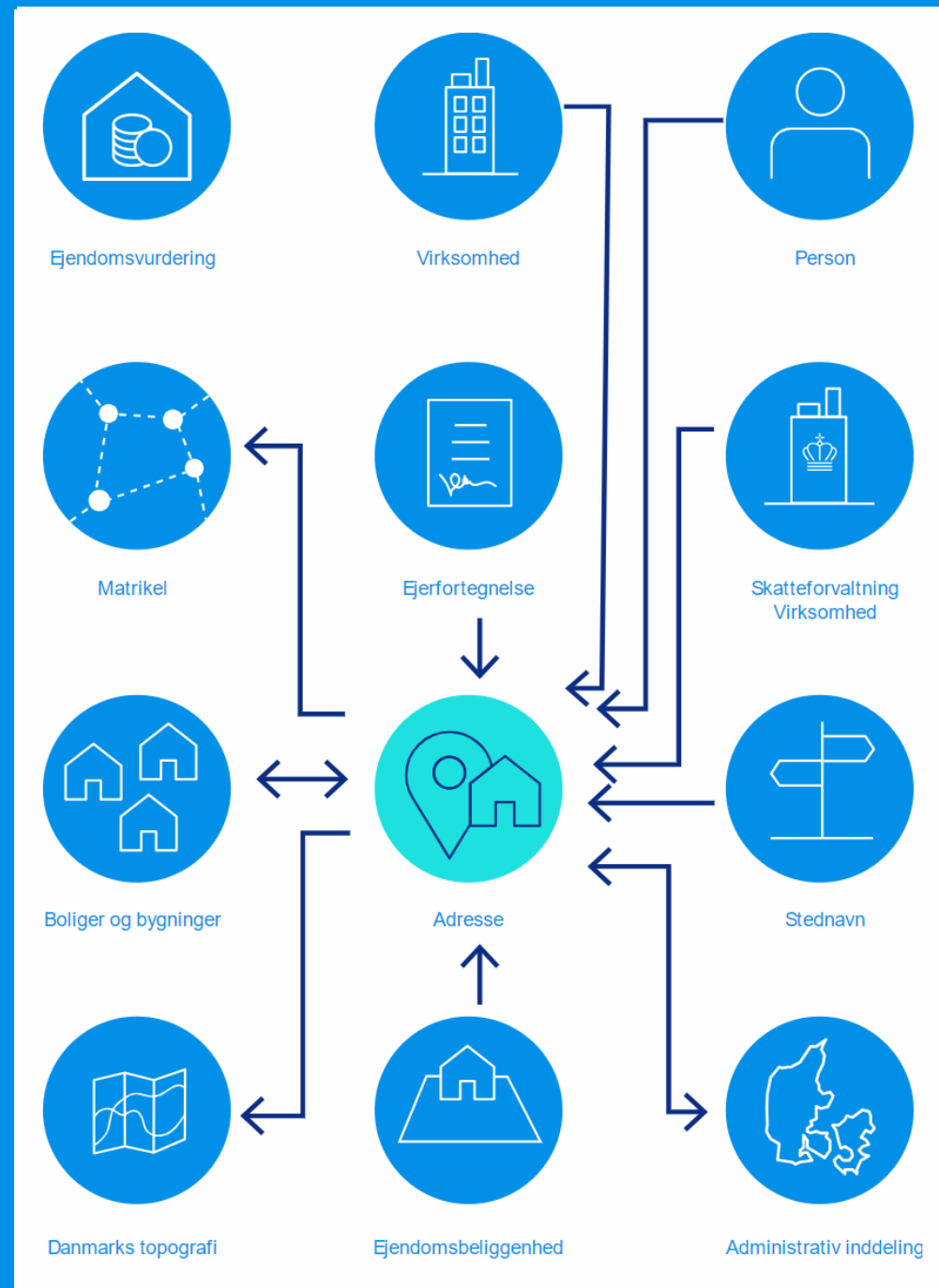
The Data Distributor Platform

- Basic Data is distributed through the Data Distributor Platform

- Secure, stable and scalable platform (January 2024 - 2.5 billion calls to the web services in total)

- High uptime (99,9%) and high performance

- Possible to compile data from different registers in a single service

- …not just channel for distribution of data, also organisation (operator, data owners and users)
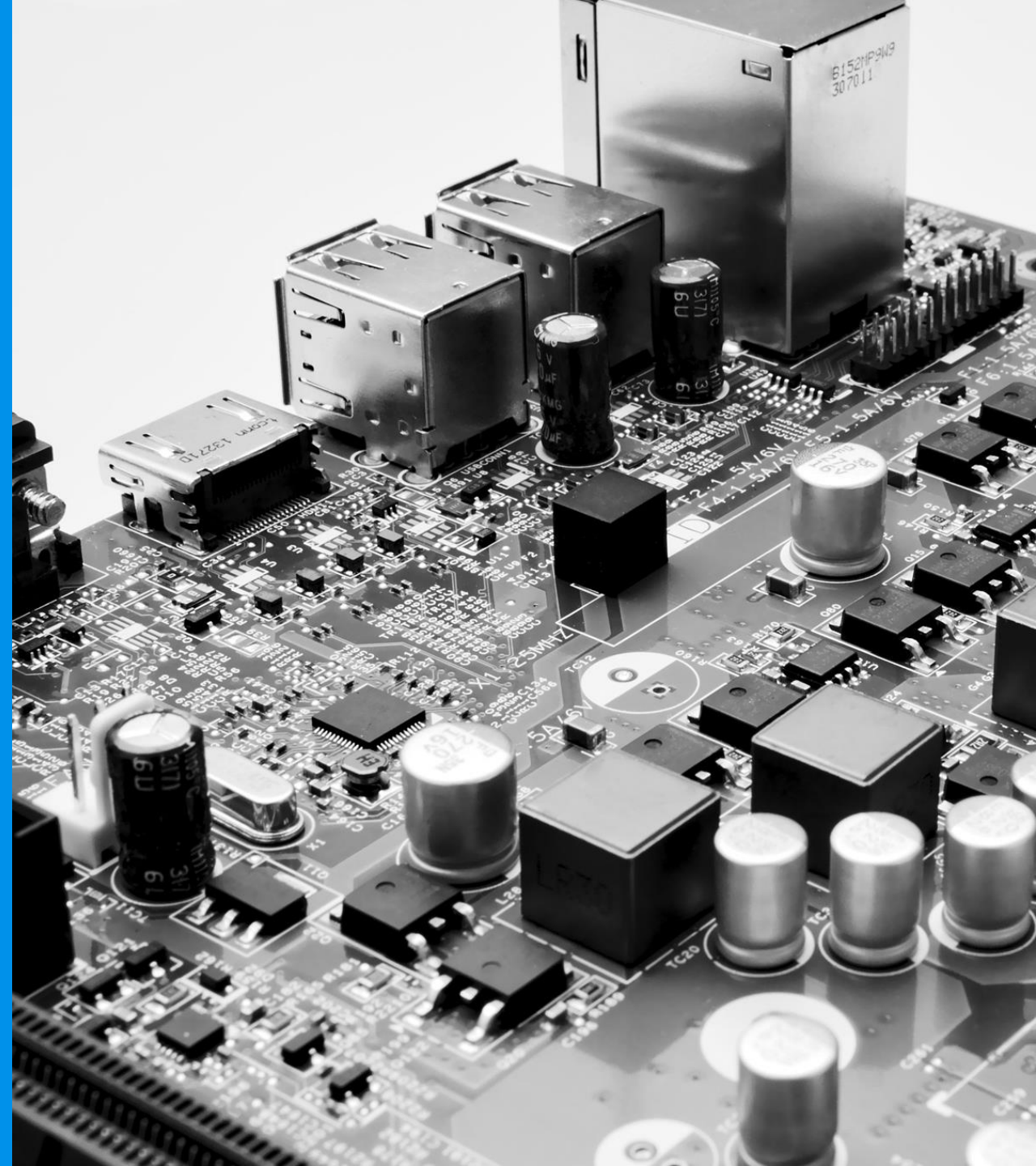
The Data Distributor Platform

- Well over 500 different services: web services, file download, events…

- Over 20 different registries

Working with the DD:

- Simple bulk downloads – register/geospatial

- Retrieve geospatial data about your municipality via your GIS client

- Make advanced integrations with register (tabular) data

Basic Data use

Basic Data is used every day in a wide range of areas within the public administration as well as in the private sector:
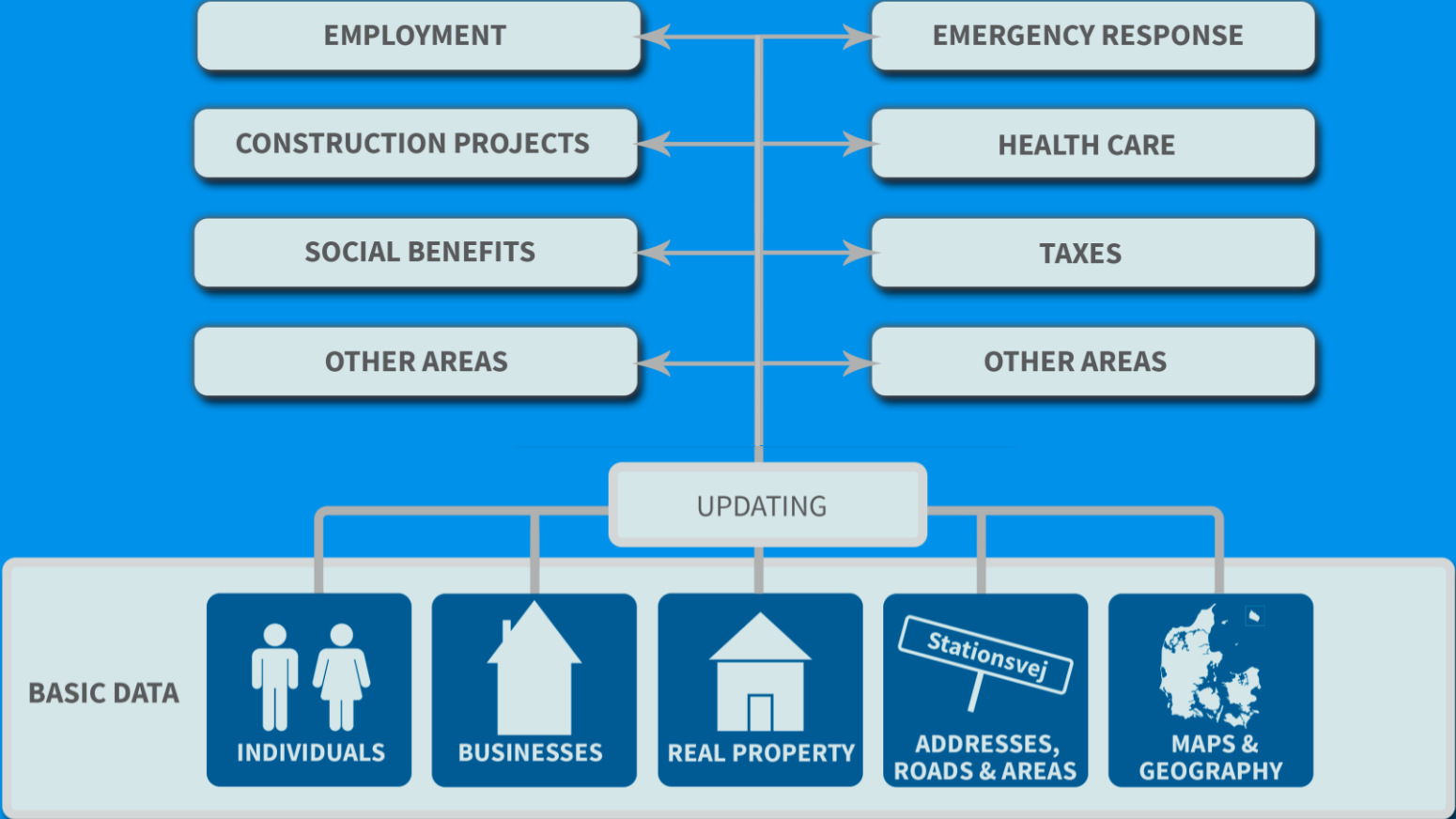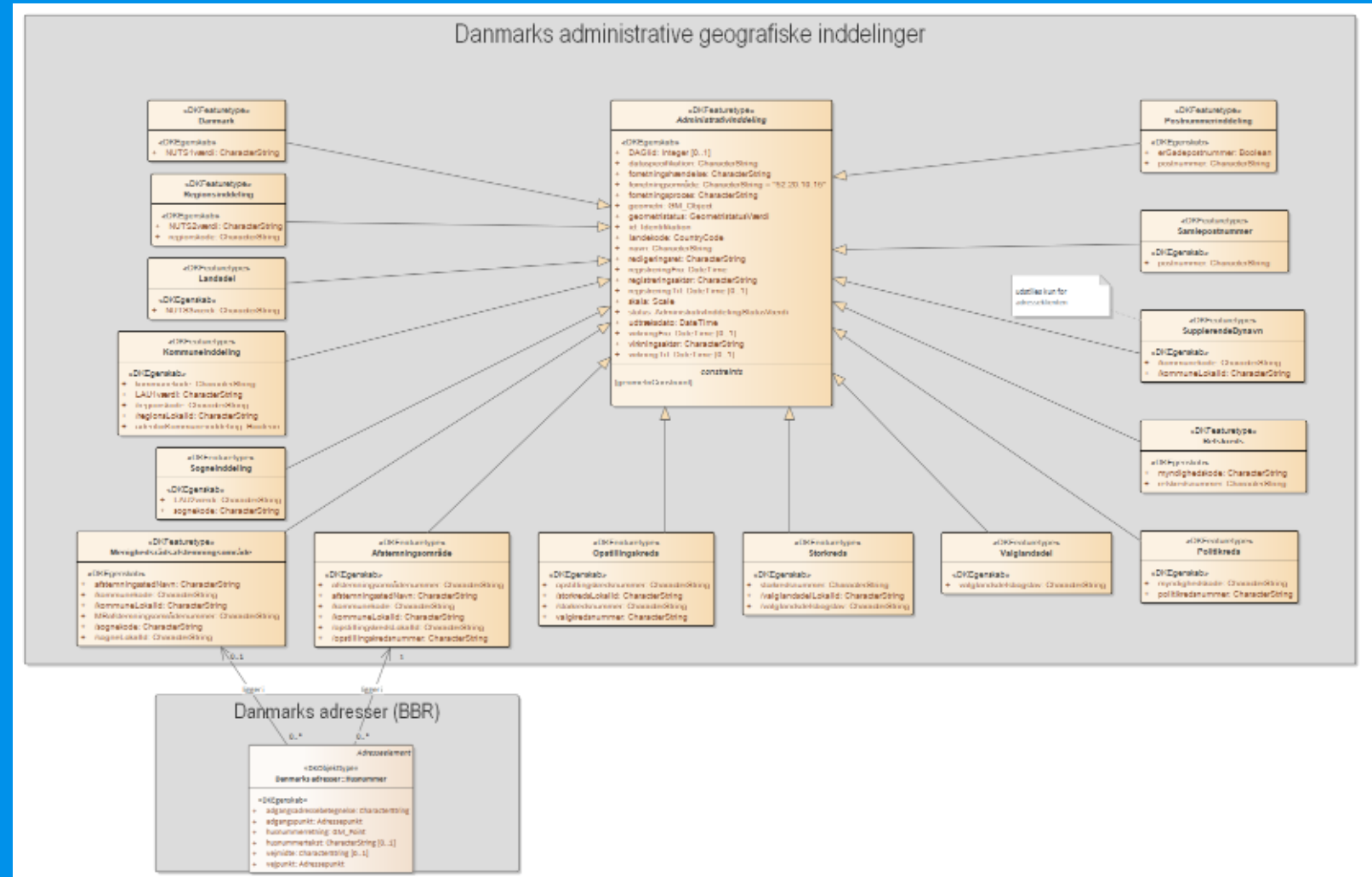
Statistics Denmark –
use of Basic Data

- Statistics Denmark use a variety of Basic data, such as:
  - Person register
  - Owner register
  - Cadastre register
 - Place names and polygons
  - Administrative division…

- The data model ensures that the individual datasets are linked with each other through reference keys

Statistics Denmark –
use of Basic Data

- The Danish Administrative Geographical Division (DAGI) can be combined with other data

- The population is linked to an address, which is linked to the Administrative Geographical Division - and used to display the data from the selected tables.

    - The DAGI data set contains the divisions: Denmark, Regional Division, Country Division, Municipal Division, Parish Division, Constituency District, Large District, Electoral District Division, Police District, Judicial District, Postcode Division, Supplementary City Name, Voting Area and Parish Council Voting Area.
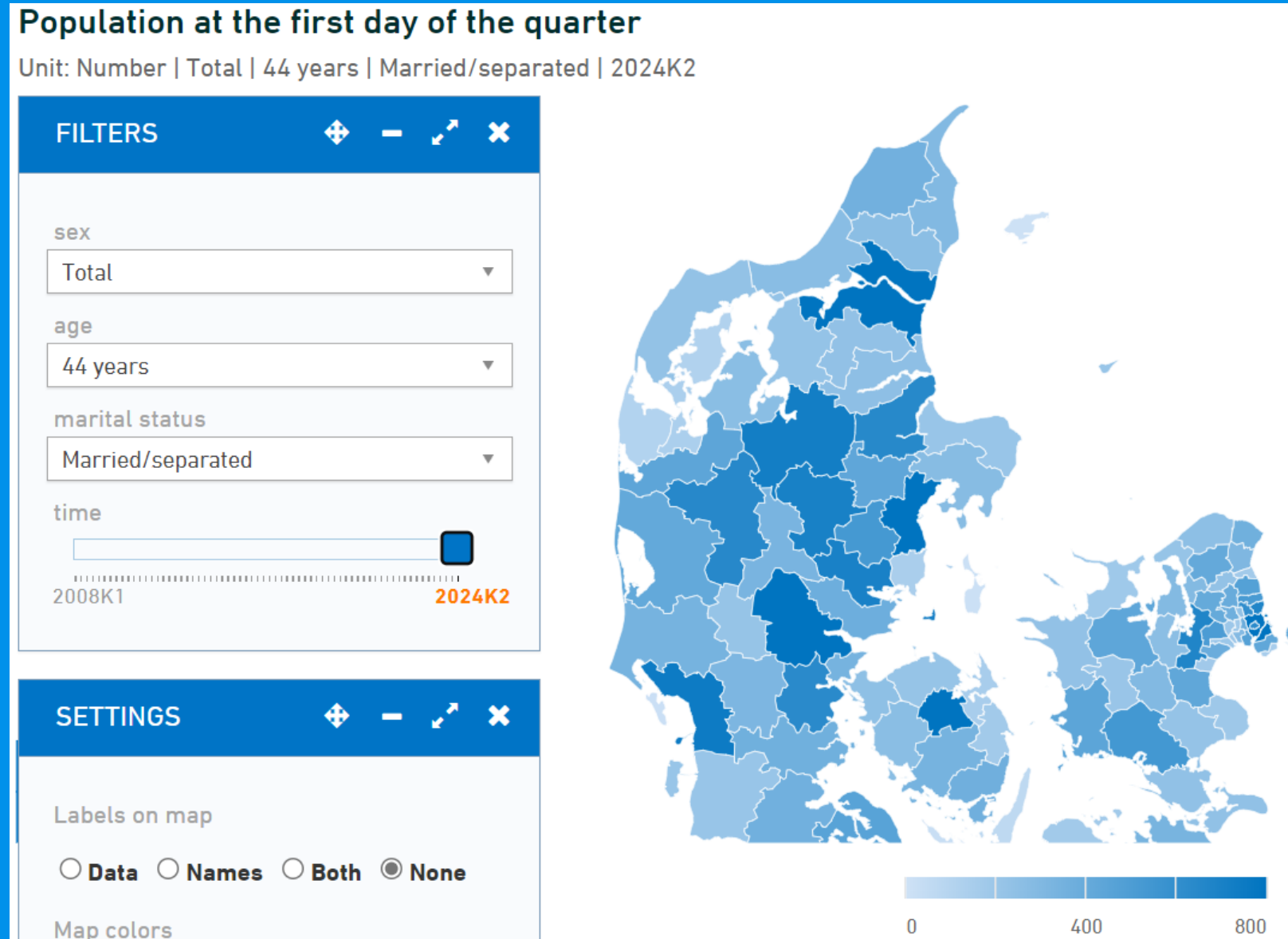
Thank you for your attention!

Data Distributor:

https://datafordeler.dk/

Basic Data model:

https://grunddatamodel.datafordeler.dk/

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