



Danish Ministry of the Environment
Danish Geodata Agency

The role of governments in geospatial data provision and management

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He who knows all the
answers has not yet been
asked all the questions.

- Author unknown



Outline

1. Intro and the changes
2. NSDI – development and impact
3. Governance!
4. Examples of public and private sector cooperation
5. Perspectives and mega trends

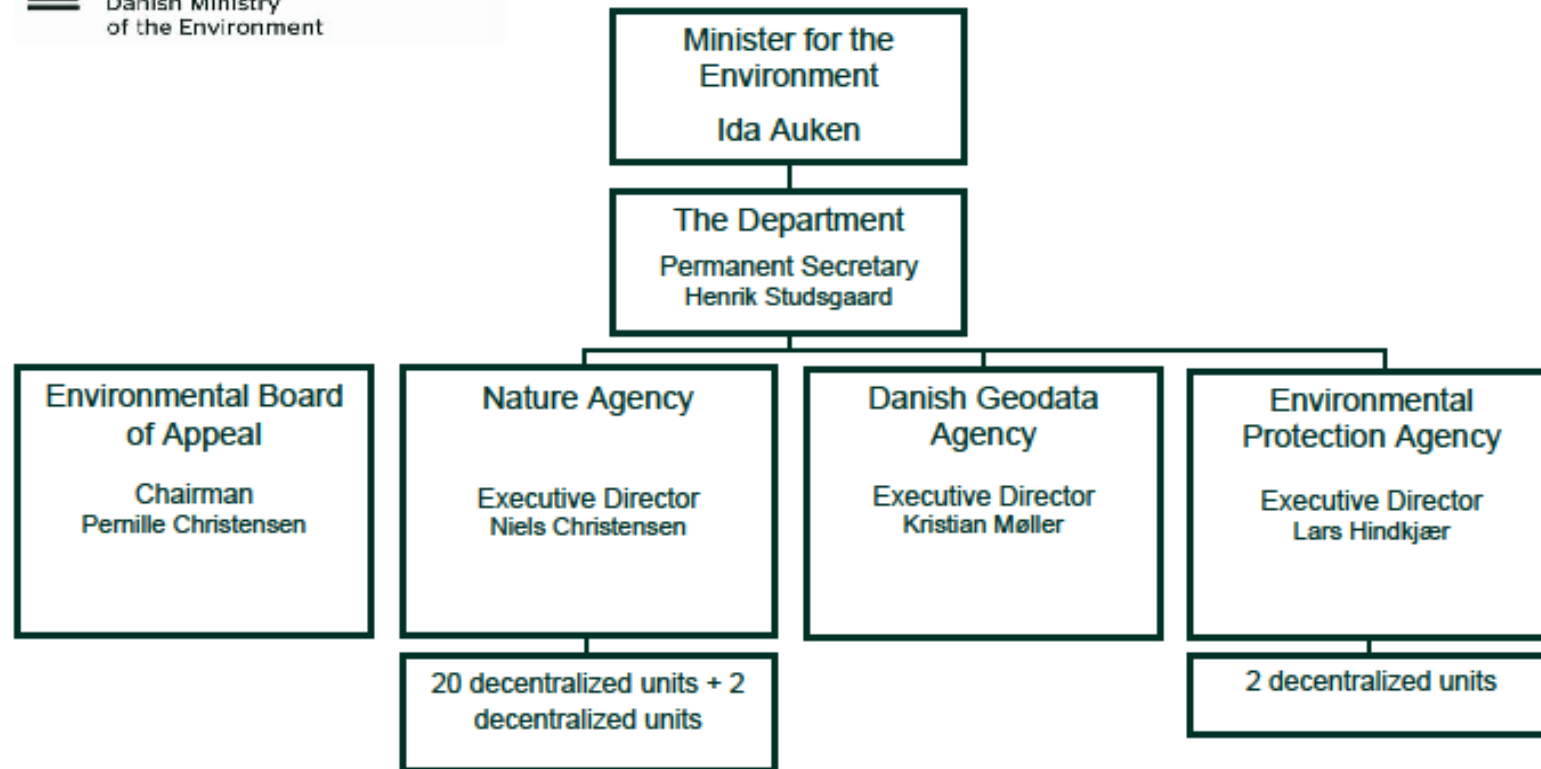




Ministry of the Environment



Danish Ministry
of the Environment



Danish Geodata Agency FKA National Survey and Cadastre

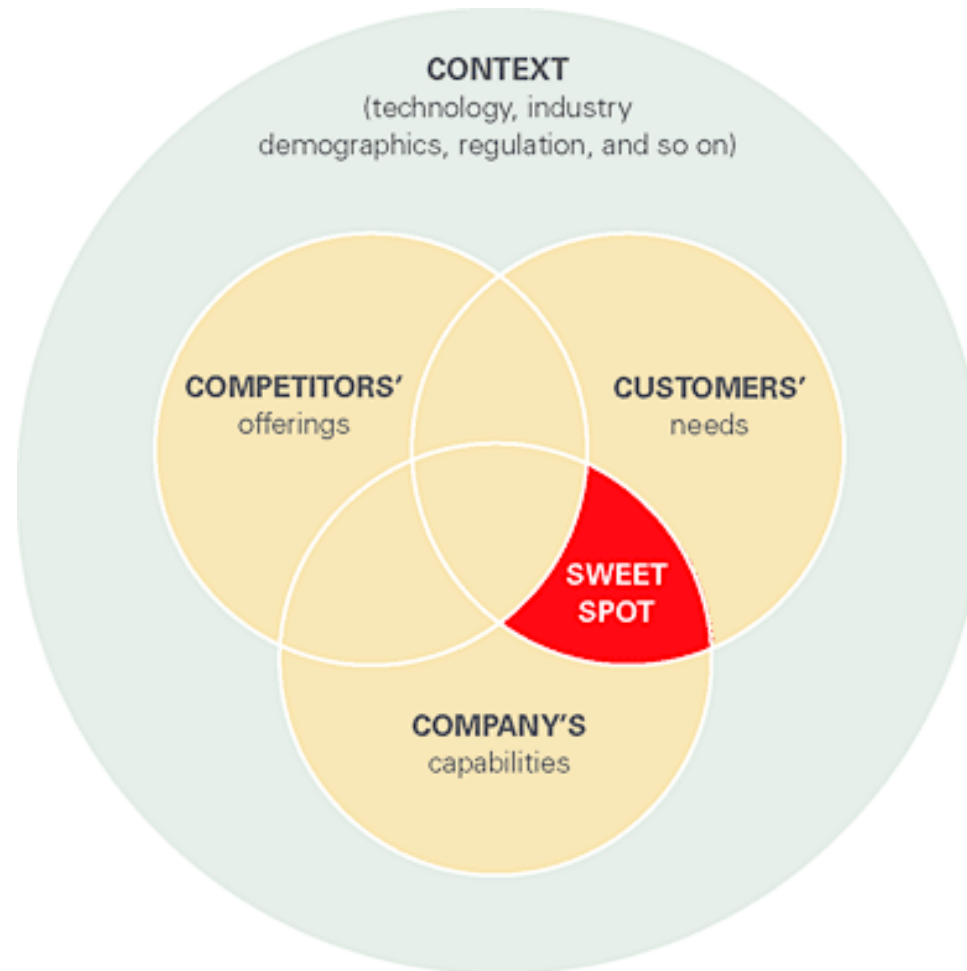


Surrounding Conditions

- Financial crisis
- Greening the economy
- Demand for free data
- Efficient administration
- Geo data's potential in public administration
- Democracy and easy access



Strategic Sweet Spot



Ref.: David J. Collis and Michael G. Rukstad: "Can You Say What Your Strategy Is?", in Harvard Business Review, April 2008

The new strategy

Spatial data provides as much benefit to society as possible

Coordination and coherence - digitalization process
quality and efficiency in the public administration

Close and integrated interaction with the private sector

The new name

GEODATA AGENCY



Responsibilities as authority

Infrastructure for Spatial Information

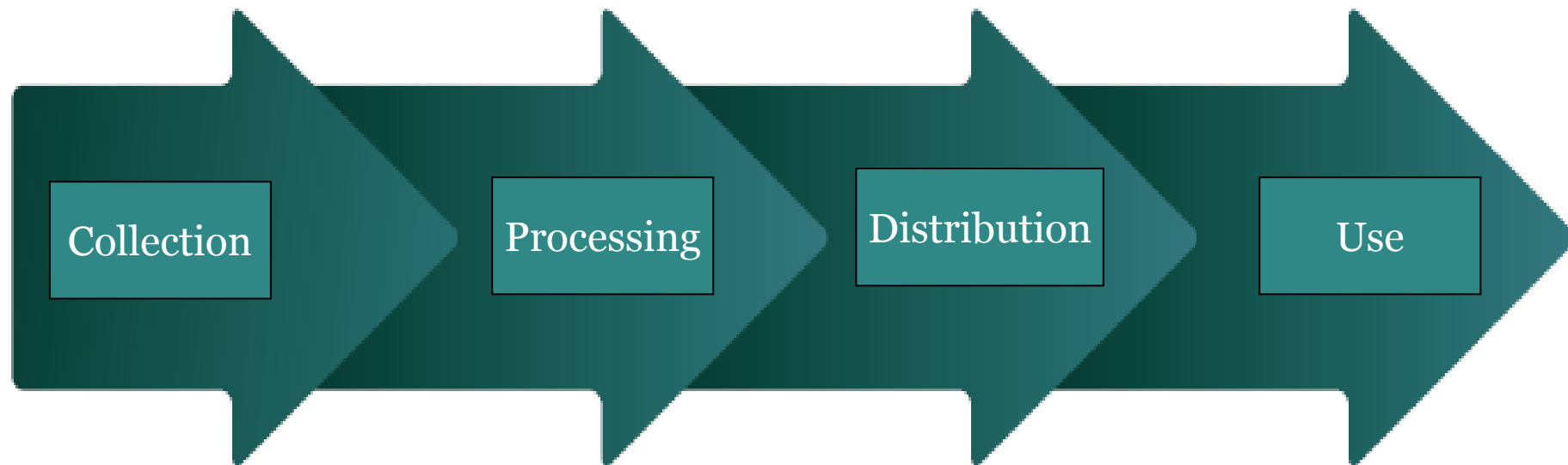
Land surveying, Nautical charting, Cadastre and cadastral activities

Hence responsible for the collection, maintenance, development and distribution of nationwide spatial data collections

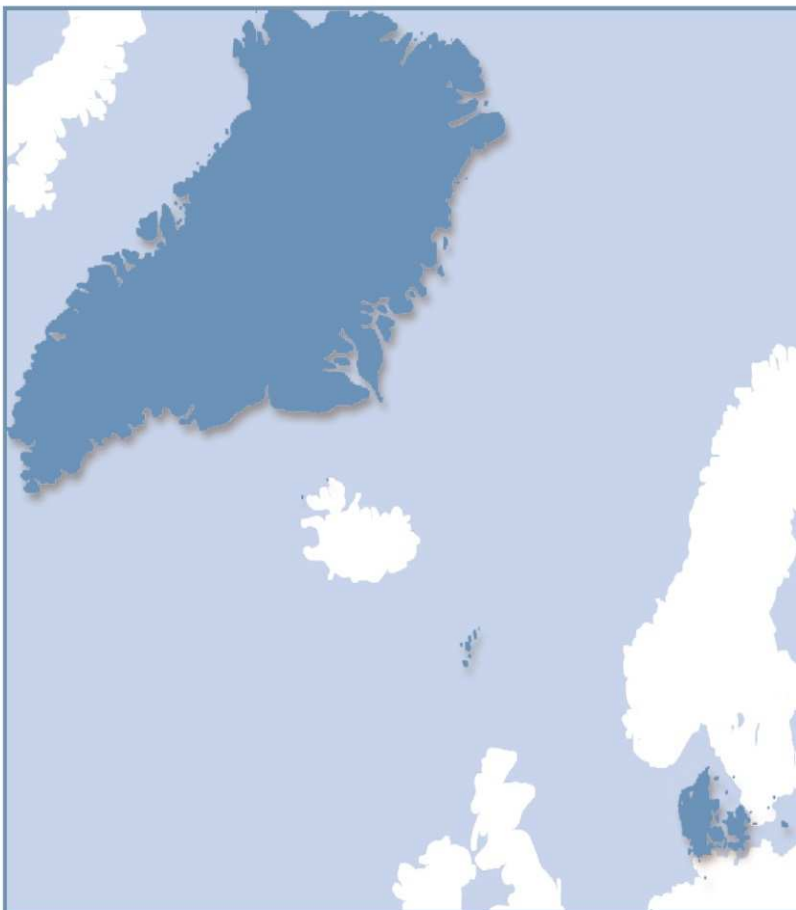
Infrastructure for Spatial Information



Organization – the data value chain



Field of activity



Denmark
Faroe Islands
Greenland
Seas

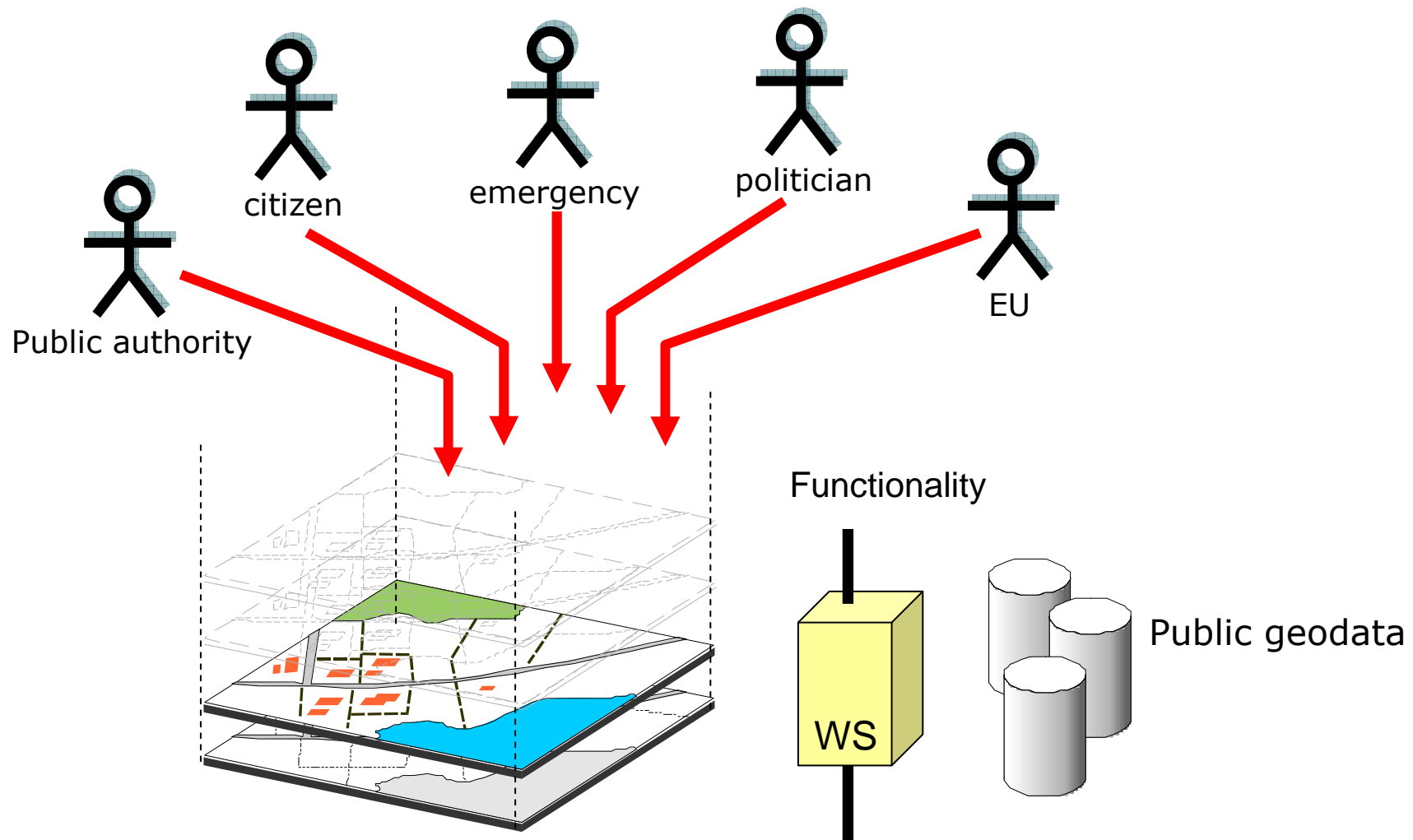


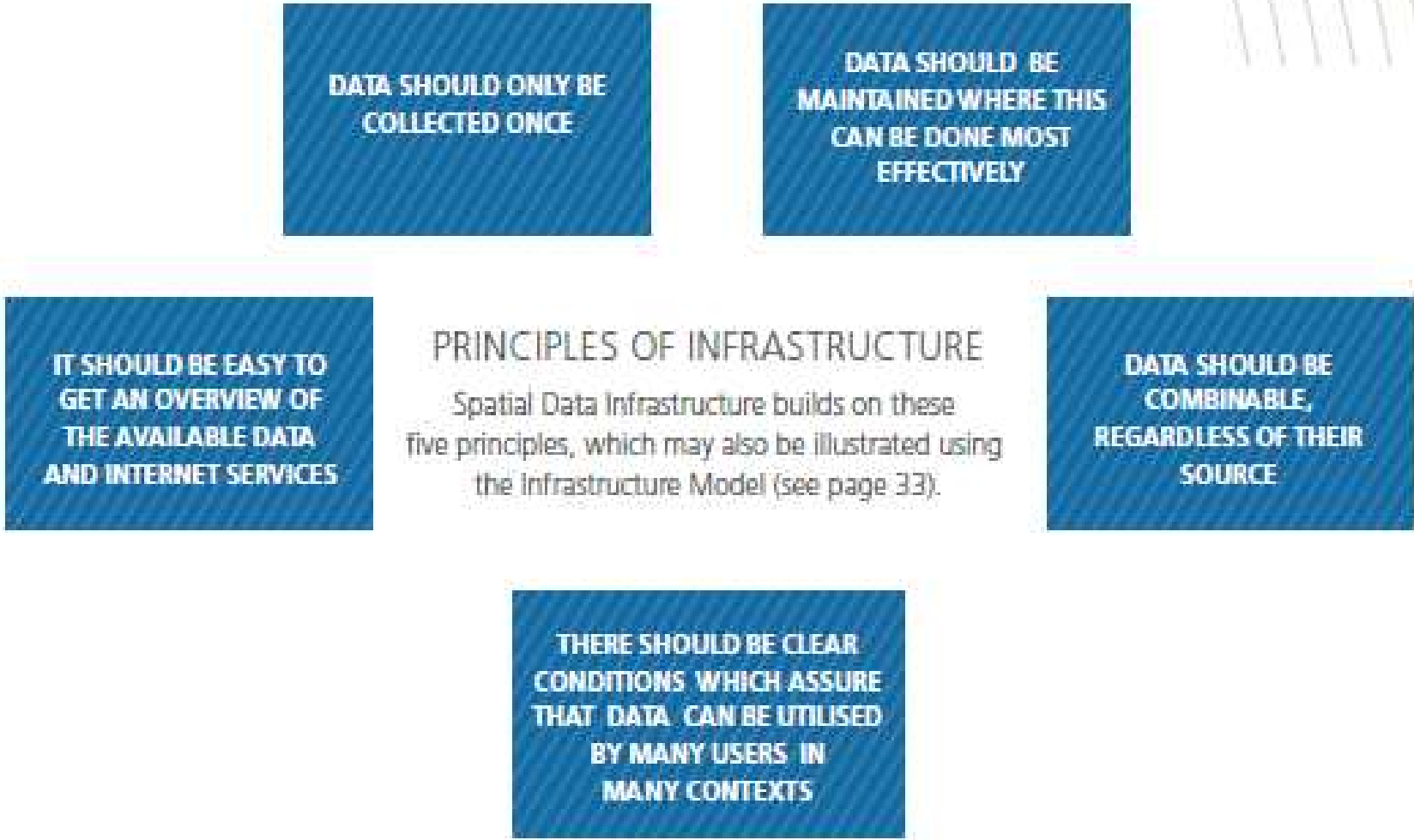


NSDI – development and impact



The concept – a shared information window





The diagram consists of five blue rectangular boxes with a diagonal line pattern, arranged in a circle around a central text block. Each box contains one of the five principles of infrastructure. The central text block explains that Spatial Data Infrastructure builds on these five principles, which can also be illustrated using the Infrastructure Model (see page 33).

**DATA SHOULD ONLY BE
COLLECTED ONCE**

**DATA SHOULD BE
MAINTAINED WHERE THIS
CAN BE DONE MOST
EFFECTIVELY**

**IT SHOULD BE EASY TO
GET AN OVERVIEW OF
THE AVAILABLE DATA
AND INTERNET SERVICES**

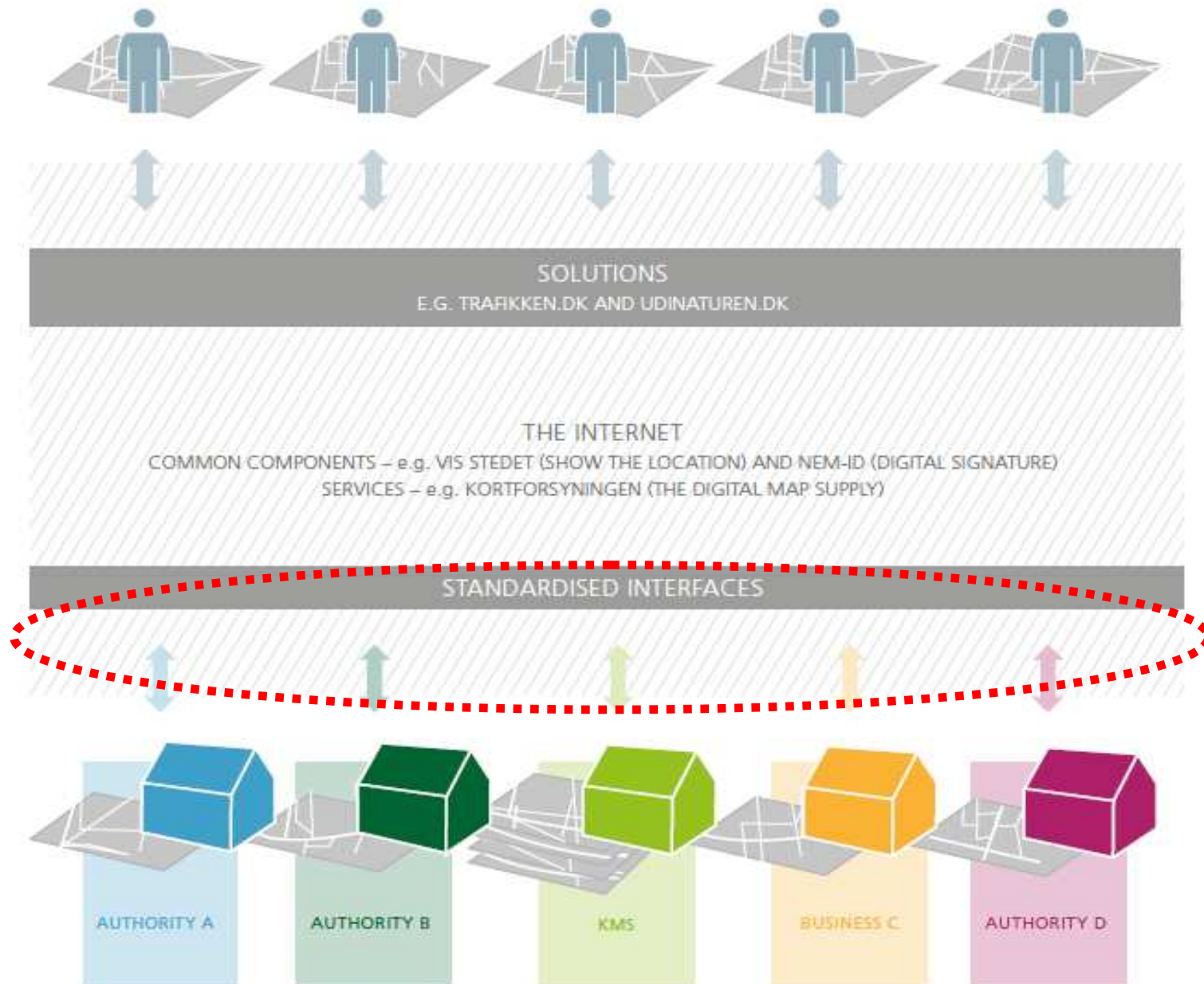
PRINCIPLES OF INFRASTRUCTURE

Spatial Data Infrastructure builds on these five principles, which may also be illustrated using the Infrastructure Model (see page 33).

**DATA SHOULD BE
COMBINABLE,
REGARDLESS OF THEIR
SOURCE**

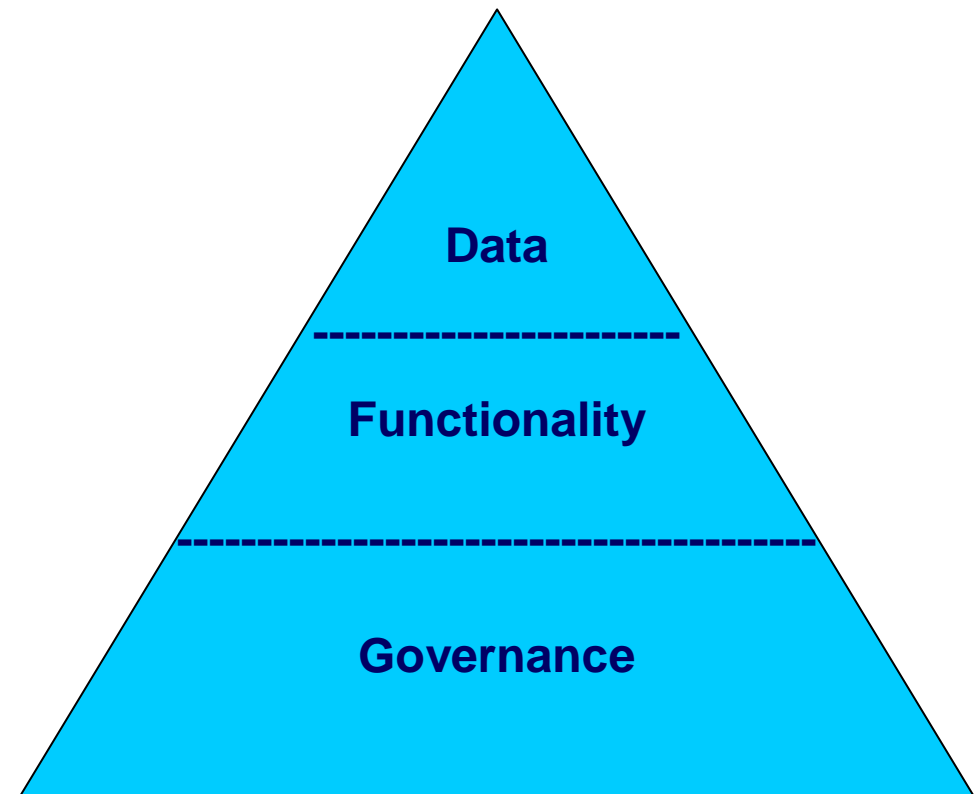
**THERE SHOULD BE CLEAR
CONDITIONS WHICH ASSURE
THAT DATA CAN BE UTILISED
BY MANY USERS IN
MANY CONTEXTS**

GENERAL PUBLIC, BUSINESSES AND THE PUBLIC SECTOR

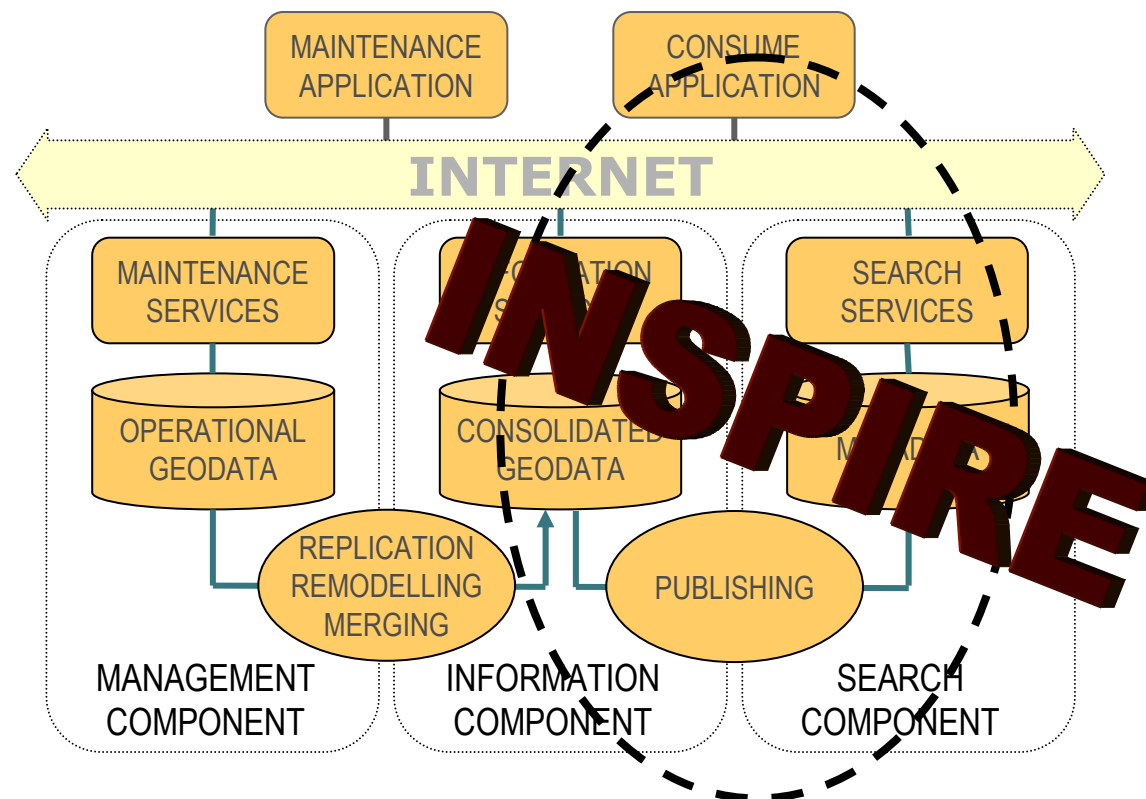


Components in the infrastructure

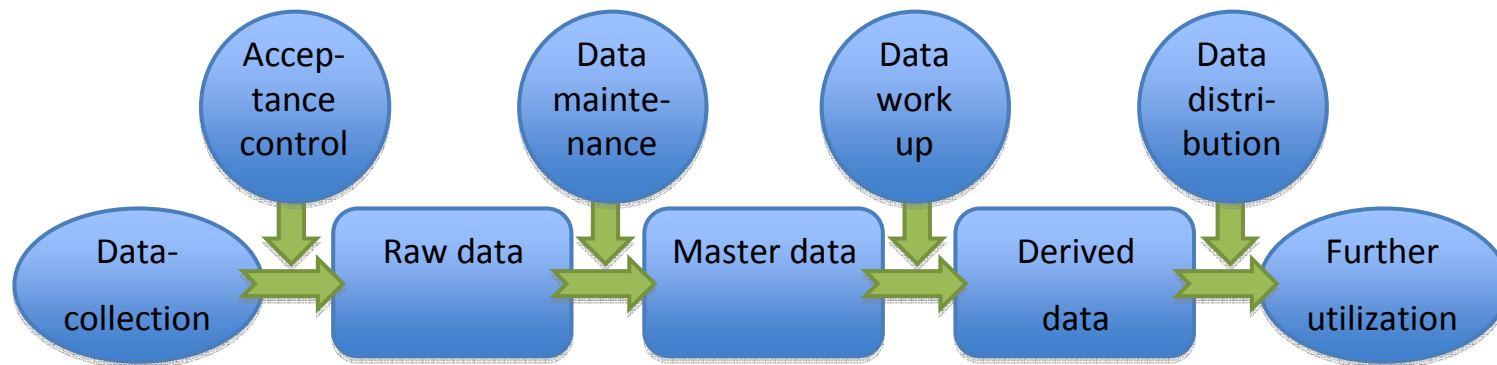
- DATA - metadata, datasets
- FUNCTIONALITY – spatial data services, web services and other technology
- Agreements and organization – rights and access - *Governance!*



SDI - Reference Architecture



Data processes

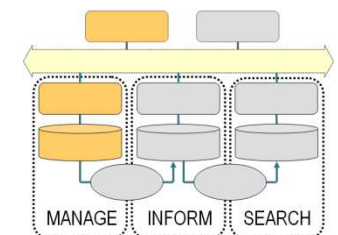


Acceptance control - raw data is controlled against delivery agreement

Data maintenance - master data is kept current according to available raw data

Data work up - master data is worked up to derived data

Data distribution - derived data is passed on to utilization





THE INFRASTRUCTURE MODEL



Governance



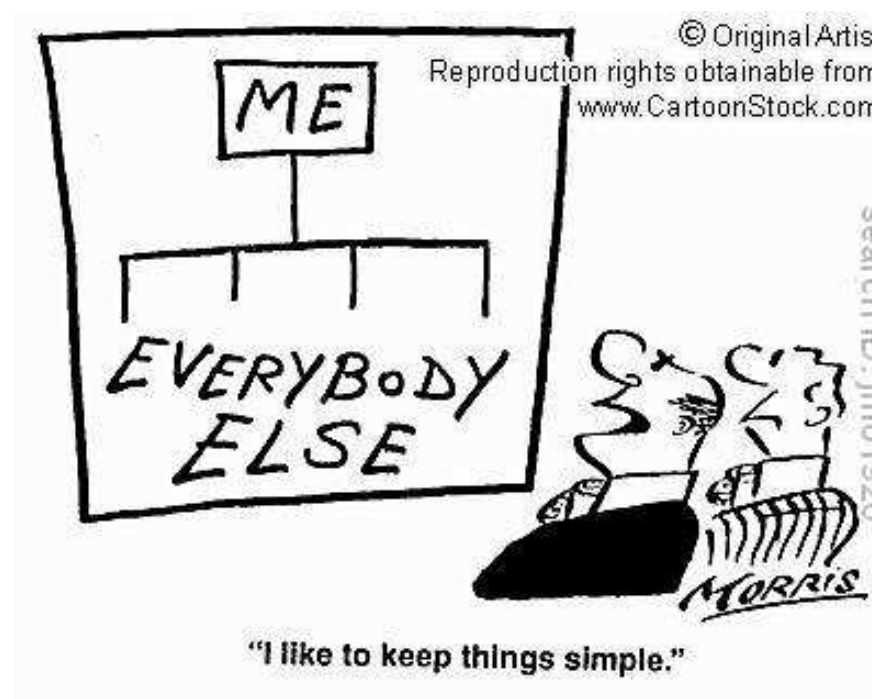
But.....

Governance is just a fancy word encompassing all the things we do to organize ourselves, make plans and decisions together, get things done, and resolve conflicts.

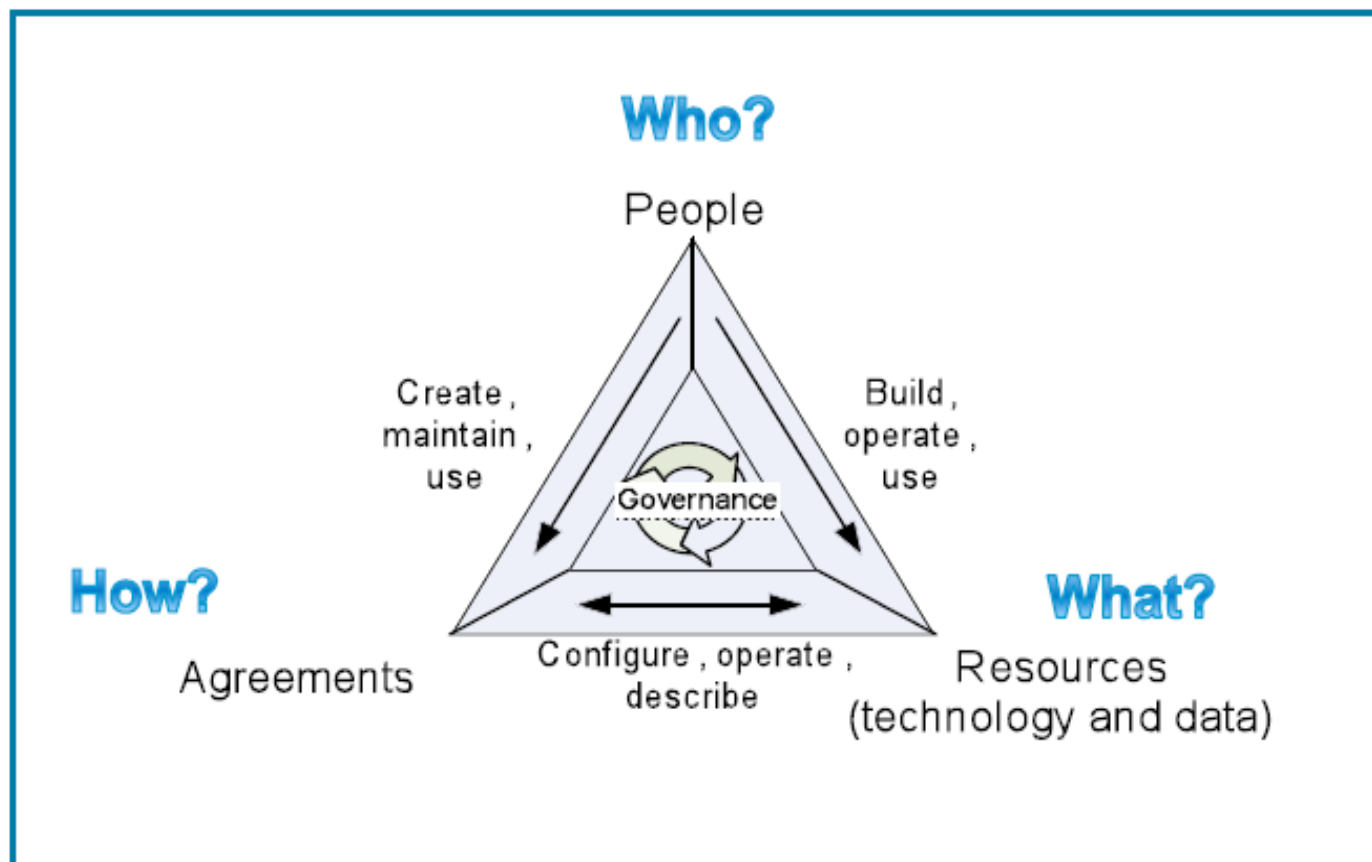


So governance comprises

- Authority structures
- Roles and relationships
- Rules and policies
- Processes and mechanisms



SDI governance dimensions



When?

Lifecycle and status of resources and agreements under constant change



Get the roles and responsibilities right

Business responsible

Data responsible

Service responsible

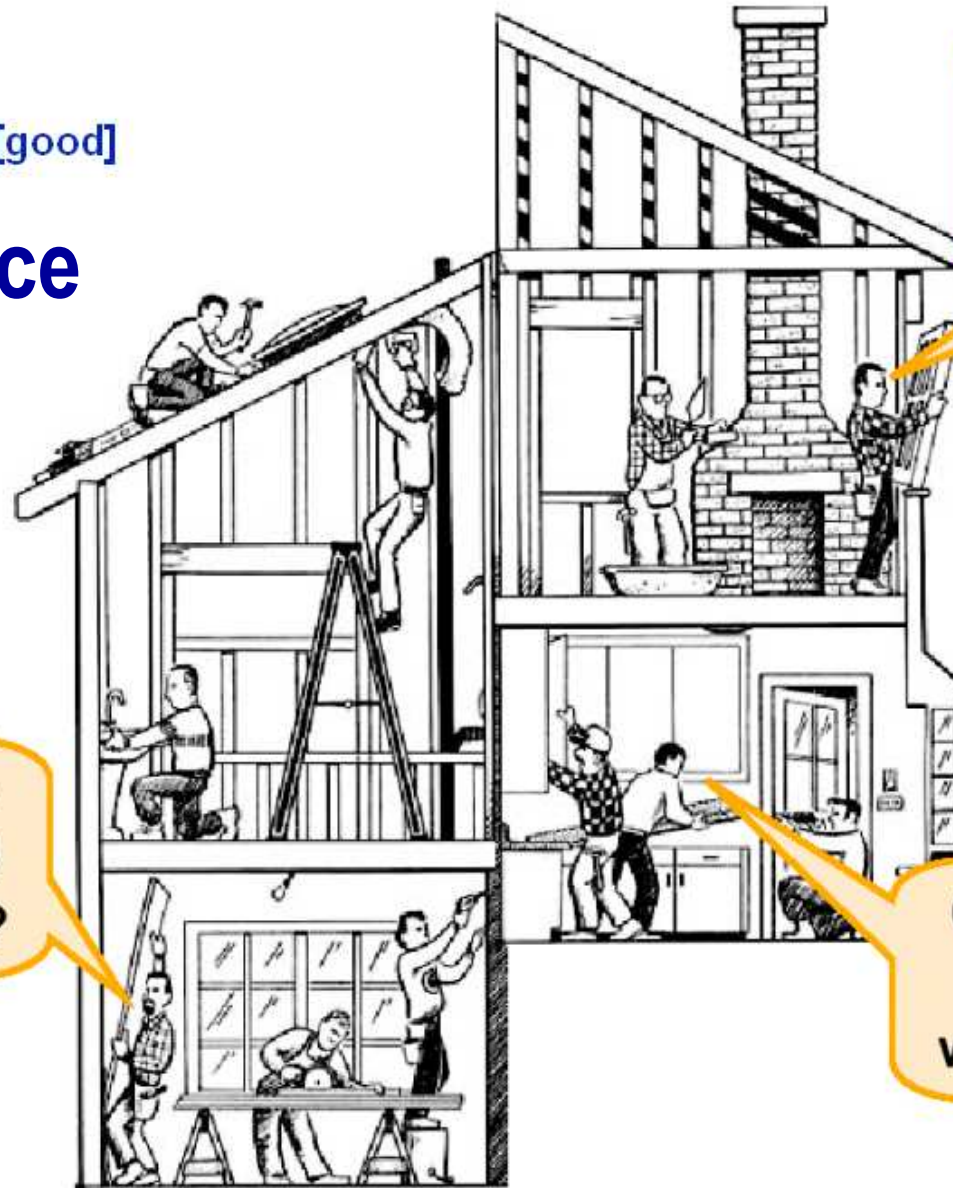
Application responsible

User!

Decision and coordination boards – make commitment



Oops! No [good] Governance



Oops! Who is
this supposed
to hand off to?

Oops! What
does this
connect?

Oops! Where
does the
water flow to?



Examples of public and private sector cooperation – provision and management



Firefox In English Google Oversæt

www.fotdanmark.dk/Service/In+English

FOT | **DANMARK**
Fællesoffentligt Geografisk
Administrationsgrundlag

IN ENGLISH KONTAKT

NYHEDER DATA ANVENDELSE

IN ENGLISH

About FOTdanmark

FOTdanmark is an association established in October 2007 between the Danish state (Danish National Survey and Cadastre) and six of the municipalities in Denmark. Today (july 2009) more than 88 of the 98 municipalities within Denmark are members.

FOTdanmark works for the establishment of a unified public topographic mapping of Denmark with the aim to become one of the main elements in the national strategy for eGovernment in Denmark.

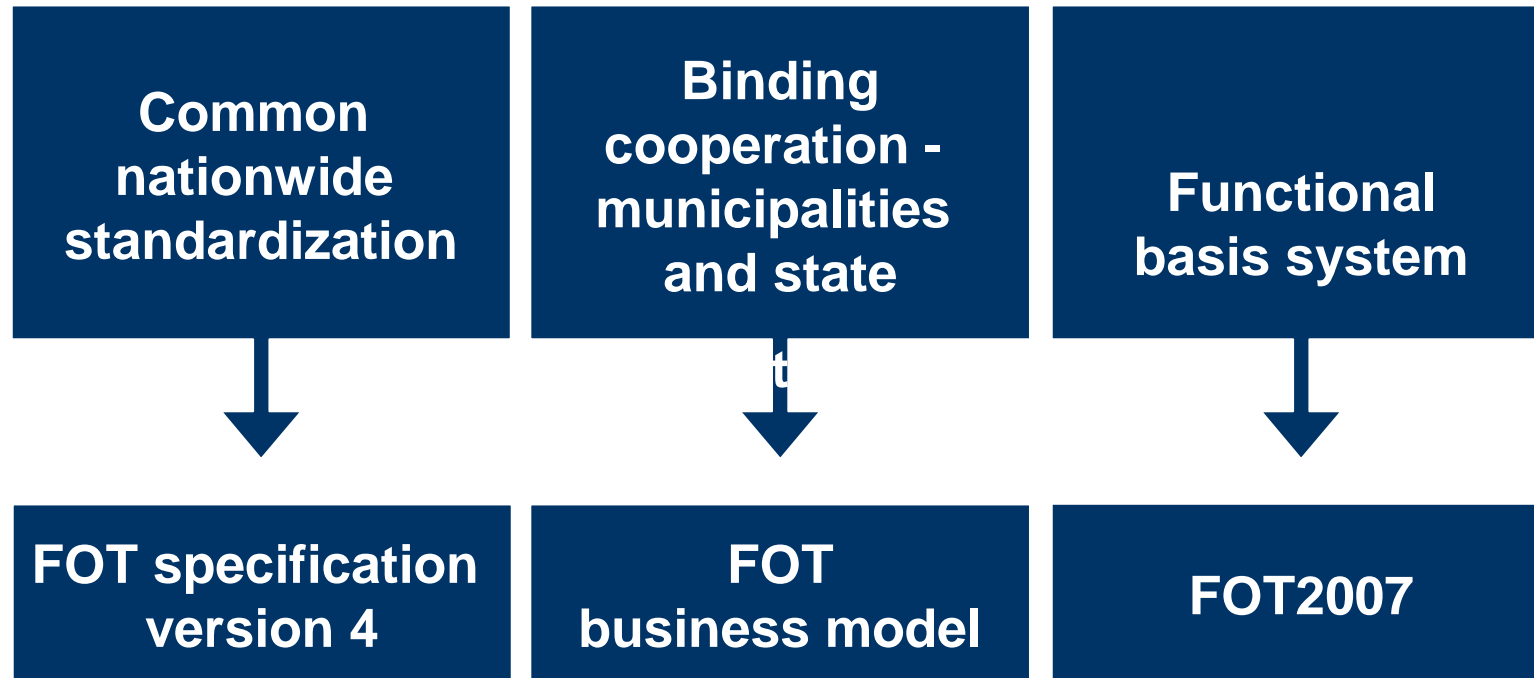
The purpose of FOTdanmark is to create a coherent mapping so that all Danish authorities – state as well as local – have a common understanding and a solid base for cooperation on a local and national scale.

The FOT-specification forms the basis for the creation of a geographic database containing a seamless and uniform set of geodata that covers all Danish territories except the Faroe Islands and Greenland.

Download FOT specification 4.0 from july 2009 - [here](#).

[appendix L](#), [appendix M](#) and about the changes from FOT3 to FOT4

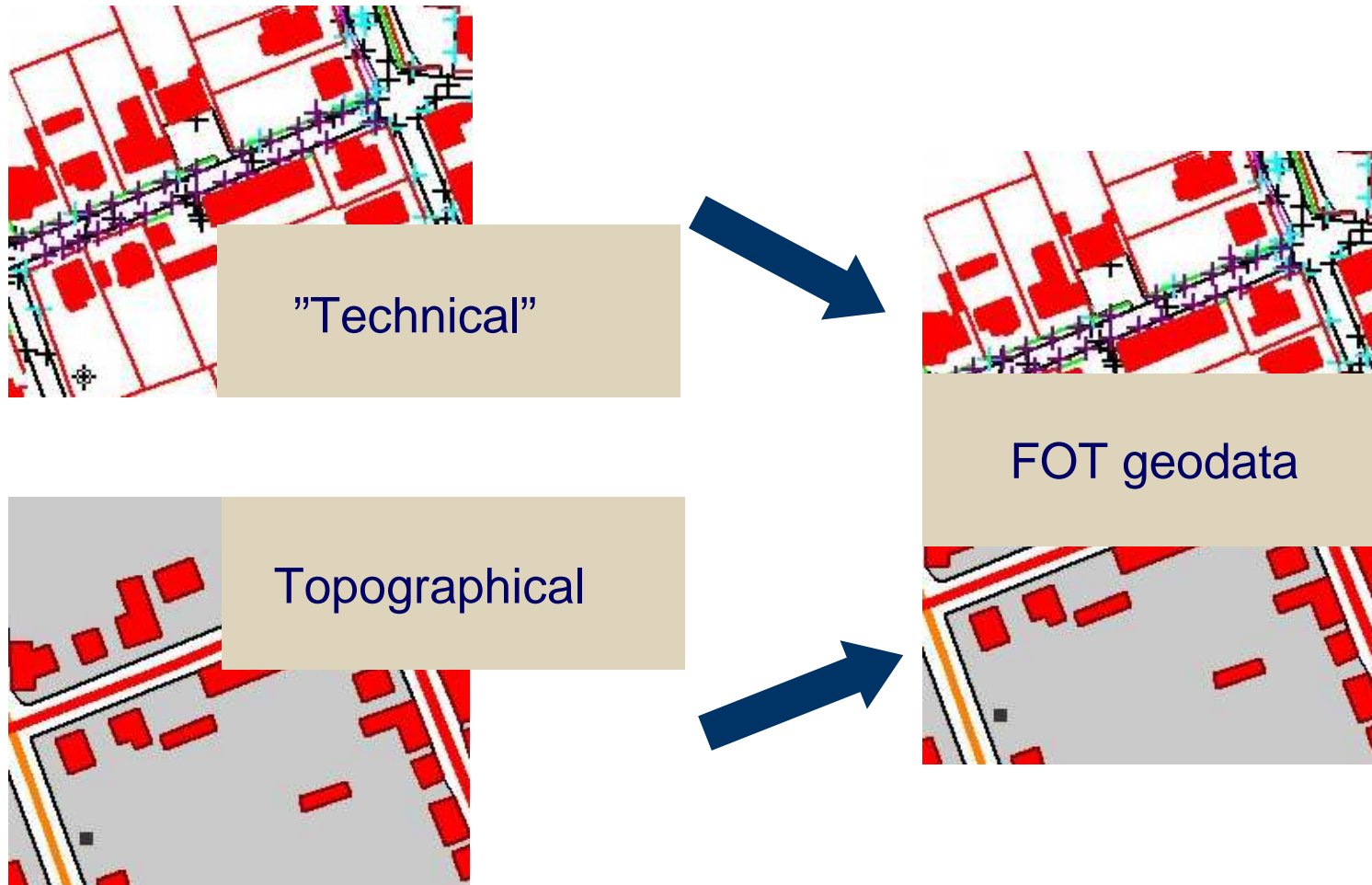
FOTdanmark 2007



Nationwide in 2013!!!

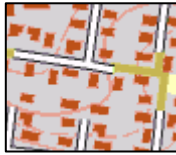


Common object types

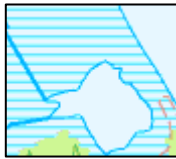




Each month \Rightarrow instantly



Yearly \Rightarrow frequently



Yearly \Rightarrow instantly



When changes

Running improvements of actuality and quality - in connection with use in e-government



The Danish Natural Environment Portal: One gateway to data about nature and the natural environment in Denmark

Environmental data concerning for instance natural resources, soil contamination and water quality is a prerequisite for being able to monitor, manage and safeguard our natural and environmental resources in the best possible way.

The Danish Natural Environment Portal also offers a range of digital solutions that give access to data on the natural environment, including among other things web services, a user administration system and access to legacy archives with data from the old counties.

With the creation of the Danish Natural Environment Portal private citizens and professionals alike have the possibility of drawing on and updating the State, County and municipal databases. At the same time the cooperation between all levels of government with regards to data and digital government lays a foundation for the effective handling of environmental issues in Denmark.

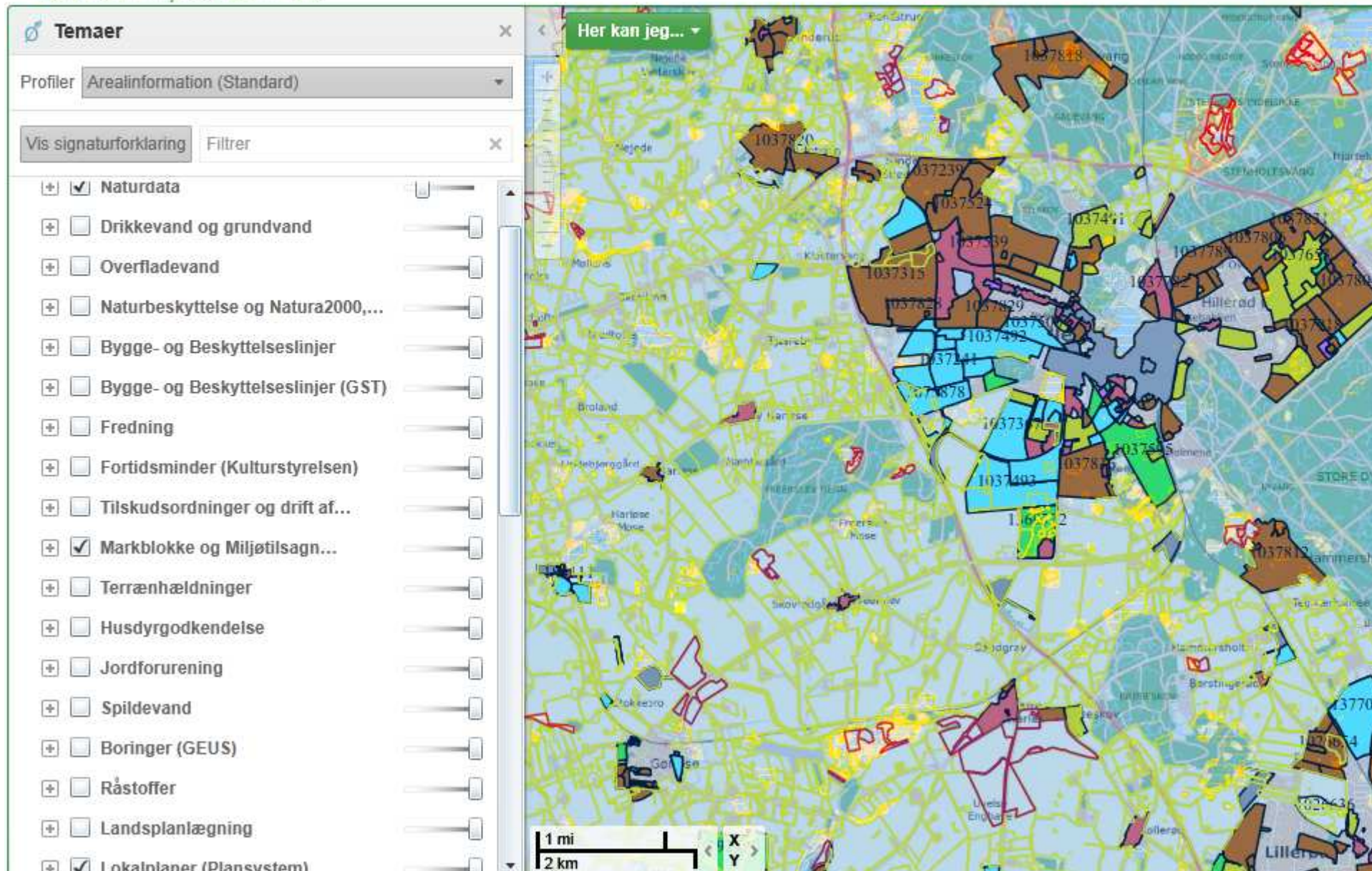
Nationwide data on the natural environment has many benefits

Data on nature and the natural environment is used in many connections by authorities, companies and private citizens. Also scientists, organizations and real estate agents use the portal to easily gain access to relevant and clearly presented information.

Danmarks Miljøportal

Data om miljøet i Danmark

Nyheder Service status Driftsstatus Vejledninger Søg efter objekt





Driftsmeddelelser

October 15, 2013, 11:18 am

Bemærk: d.17.10.13 efter kl.18 er der ordinært systemarbejde. Der kan opleves ustabilitet i Kortforsyningens drift. Primært WMS tjenesterne.

October 8, 2013, 1:02 pm

Tirsdag d.15. starter en software opdatering på bagvedliggende servere.

WMS:topomat kan blive påvirket. Kontakt evt. <http://t.co/PcEJ3ayKBT>

October 8, 2013, 10:50 am

VIGTIGT NYT om RestGeoKeys: Sådan udfases v. 1.0 og sådan tilgås v. 1.1. Det sker ved udgangen af oktober. Læs her: <http://t.co/38x6r2wtnt>



Driftstatus

WMS
Geo Nøgler
WFS
WMTS
CSW (Geodata-info)
Ticket (log in)



Frie norske data



Her er nøglen til ...

G E O

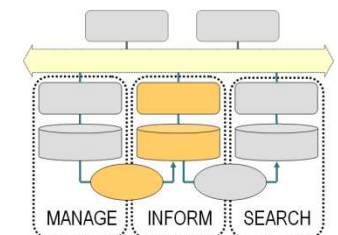
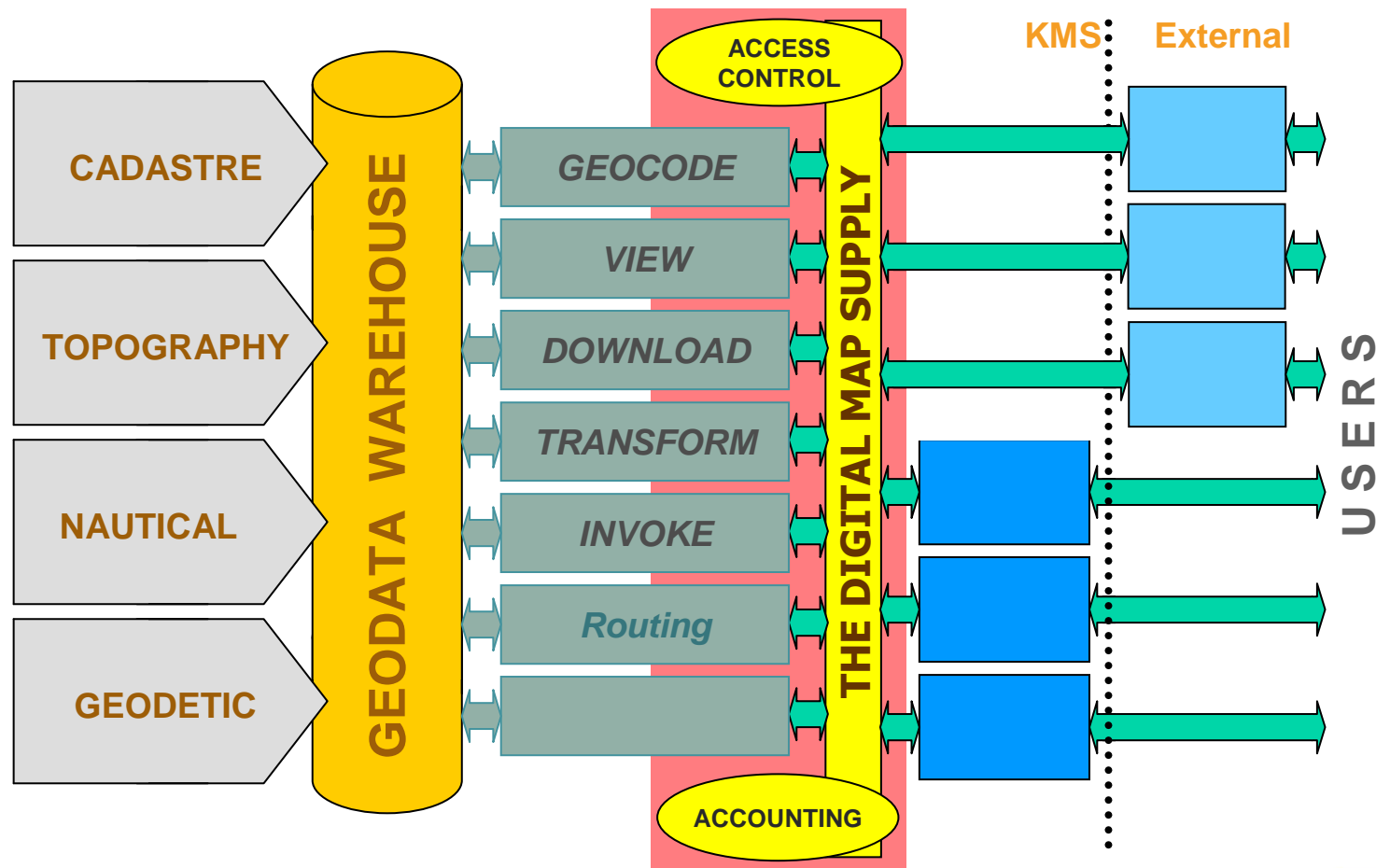


ATOM feeds



på vej
ATOM feeds

The Digital Map Supply – Data and Functionality





Miljøministeriet
Geodatastyrelsen

KORTFORSYNINGEN
DOWNLOAD

› Geodataprodukter › Vilkår og betingelser › Hjælp › Om Kortforsyningen/Download

Korttype

- Alle -

Aktualitet

- Alle -

Datastruktur

- Alle -

Data skema

- Alle -

- Alle -

Nationale

INSPIRE



Danmark 1:1.000.000

Et topografisk oversigtskort i målestoksforholdet 1:1.000.000. Det primære indhold er byer, veje, jernbaner, lufthavne og færgeruter.

Korttype: Topografiske kort, Datastruktur: Vektor, Aktualitet: Aktuelle, Dataskema: Nationale



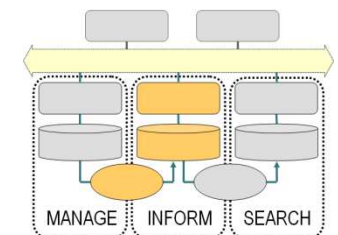
Danmark 1:200.000

Et topografisk kort i målestoksforholdet 1:200.000. Det primære indhold er byer, vejnettet og turistinformationer og kortet egner sig derfor godt som oversigtskort

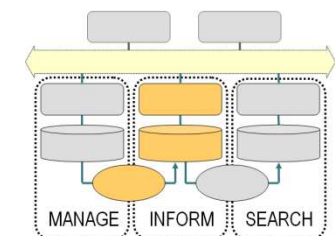
Korttype: Topografiske kort, Datastruktur: Vektor, Aktualitet: Aktuelle, Dataskema: Nationale

Application Provider Partner Program

- Access to
 - development environment
 - Support
 - marketing materials
- Promotion on the Geodata Agency's homepage
- Annual business/technical seminar



Application Provider Partners

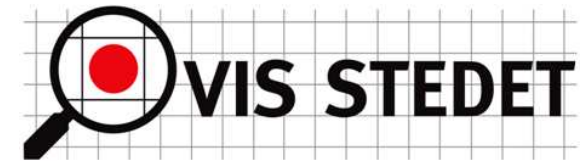




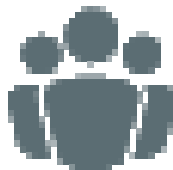
Other examples



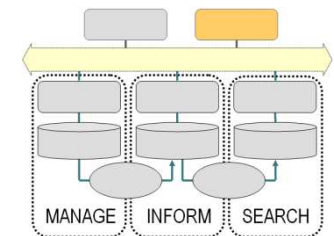
”Show the Location”



- * A component-based toolkit that allows viewing of maps.
- * Mobile App so you can enjoy maps on your mobile
- * Search - Place Names, Addresses and cadastral parcels
- * Easy to copy into your own code



Community – private and public developers



Find the location



Brugstedet.dk - Mozilla Firefox

FilerRedigerVisHistorikBogmærkerFunktionerHjælp

Brugstedet.dk

brugstedet.dk

Google

BRUGSTEDET.dk

FORSIDEOMINDSEND EKSEMPELKATEGORIER

Søg her på siden...Søg

Konkrete og aktuelle eksempler på hvordan geografisk information skaber værdi for virksomheder, privatpersoner og offentlige myndigheder.

GUIDE TIL NATUROPLEVELSER

Hvis du gerne vil vide, hvor I kan slå lejr, finde en god mountainbike-rute eller en rundvisning i de danske skove, så kan du besøge Naturstyrelsens hjemmeside.

Alle

Klima & Energi

Kultur & Turisme

Ledelse & Økonomi

Medier & Formidling

Natur & Miljø

Sundhed & Service

Teknik & Byggeri

Transport & Infrastruktur

Giro d'Italia

DIGITALE KORT VISTE VEJEN VED GIRO-STARTEN I HERNING OG HORSENS

LUFTKVALITETSMODEL EVALUERER EFFEKTEN AF MILJØZONER

Geografiske kortinformationer

FORBRUGERNE FÅR HJÆLP TIL AT SPARE PÅ VARMEN

NY NATIONAL TRAFIKMODEL FORUDSIGER FREMTIDENS TRÆKKEMØNSTER

start

2 Microsoft Office...

INSPIRE_konf2012...

Outline INSPIRE.do...

Microsoft Word

Søgeresultater

Brugstedet.dk - Mo...

DA

13:37

National geoportal

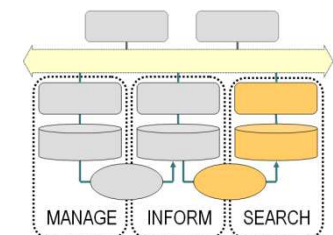
We continue the fruitful Nordic open source cooperation



Go get - it's free, open and easy



INSPIRE CONFERENCE ISTANBUL JUNE 2012





Perspectives and mega trends



Government role

Ensure that geo data provides as much benefit to society as possible

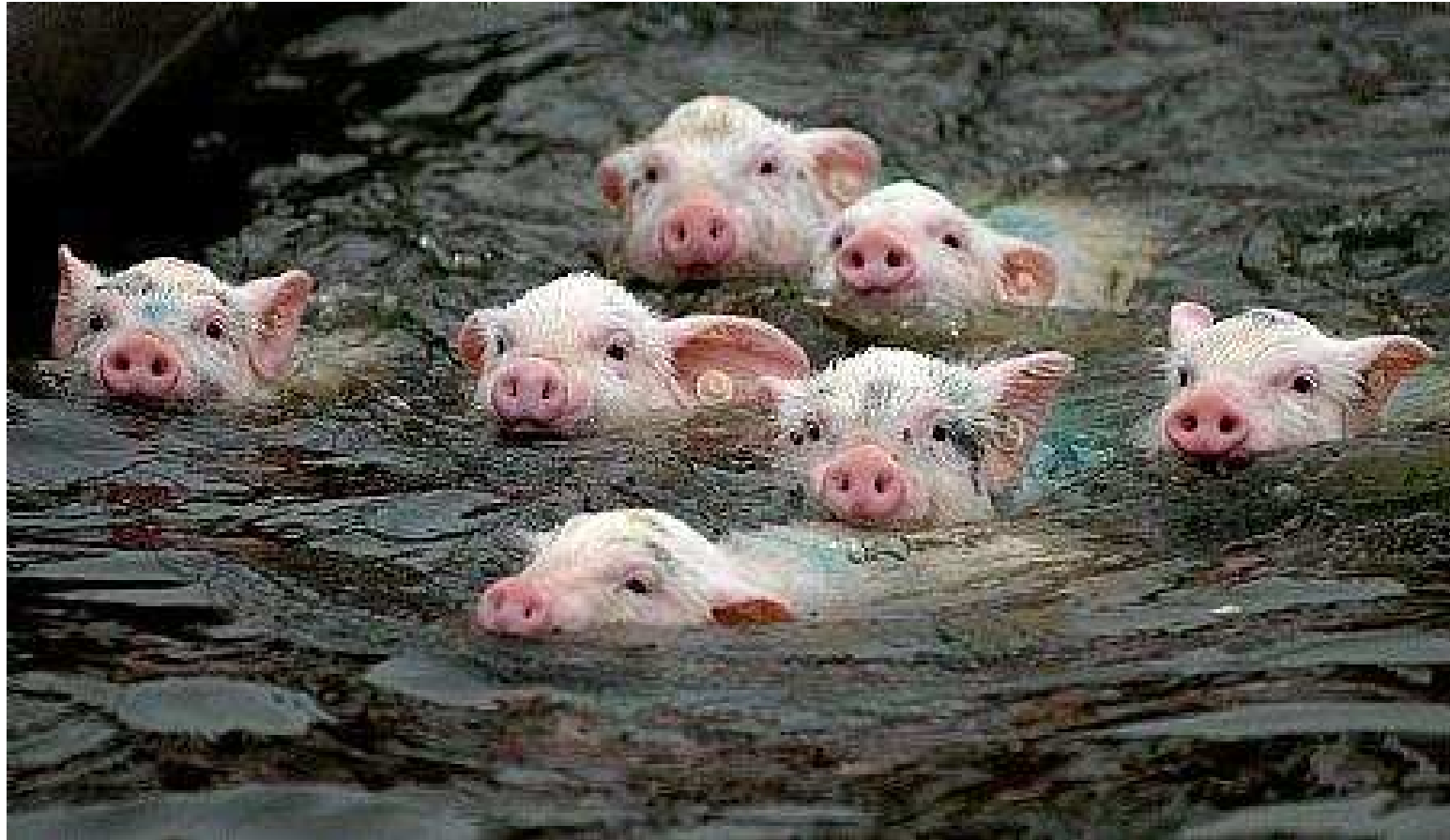
Expand the use of geodata to support digitization of the public sector – and thereby achieve greater efficiency and lower costs

Secure geo data is used in a coordinated way by the public sector
Increases quality and efficiency in the public administration
to the benefit of citizens and corporations

Address user needs

Use the taxpayers money best and provide the private sector
possibilities to grow

Are we heading in the right direction?



Surrounding Conditions

- Financial crisis
- Greening the economy
- Demand for free data
- Efficient administration
- Geodata's potential in public administration
- Democracy and easy access



How to balance...



Efficiency

- Few formats or many
- Do or do not applications
- Leave it to the private sector

Growth

- Standards and common (open source?) components
- Re-use and share
- Distribute to “new” users/sectors



He who knows all the
answers has not yet been
asked all the questions.

- Author unknown





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