



Danish Ministry of the Environment
Danish Geodata Agency

eGovernment initiatives

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Outline

eGovernment Strategy

Basic Data Programme

Business Cases

The Danish Geodata Agency's road to Open Data

Consequences

And now what?





eGovernment strategy



10 years of eGovernment Strategy

2001 - *Digital collaboration*

- digital signature, e-mails public sector, digital channels of communication

2004 – *Digitalization and efficient payment*

- E-invoice public payment, e-account all citizens and companies

2007 – *Shared infrastructure and one point of access*

- easy log-in, E-income, E-box, mandatory use of shared infrastructure





eGOVERNMENT strategy 2011-2015



eGovernment Strategy – a joint venture

- cross cutting initiatives are financed through the yearly budget negotiations
 - the Ministry of Finance
 - representative bodies of the municipalities and the regions
- a corporation between central government, regions and municipalities
- The model used in NSDI as well – carrot and stick



The Danish eGovernment Strategy 2011 - 2015

Vision:

Digitalisation shall create a smarter public sector, which is simpler, more efficient and coherent

Action:

Cross-cutting themes of **reuse** of data, infrastructure, citizen services, and governance

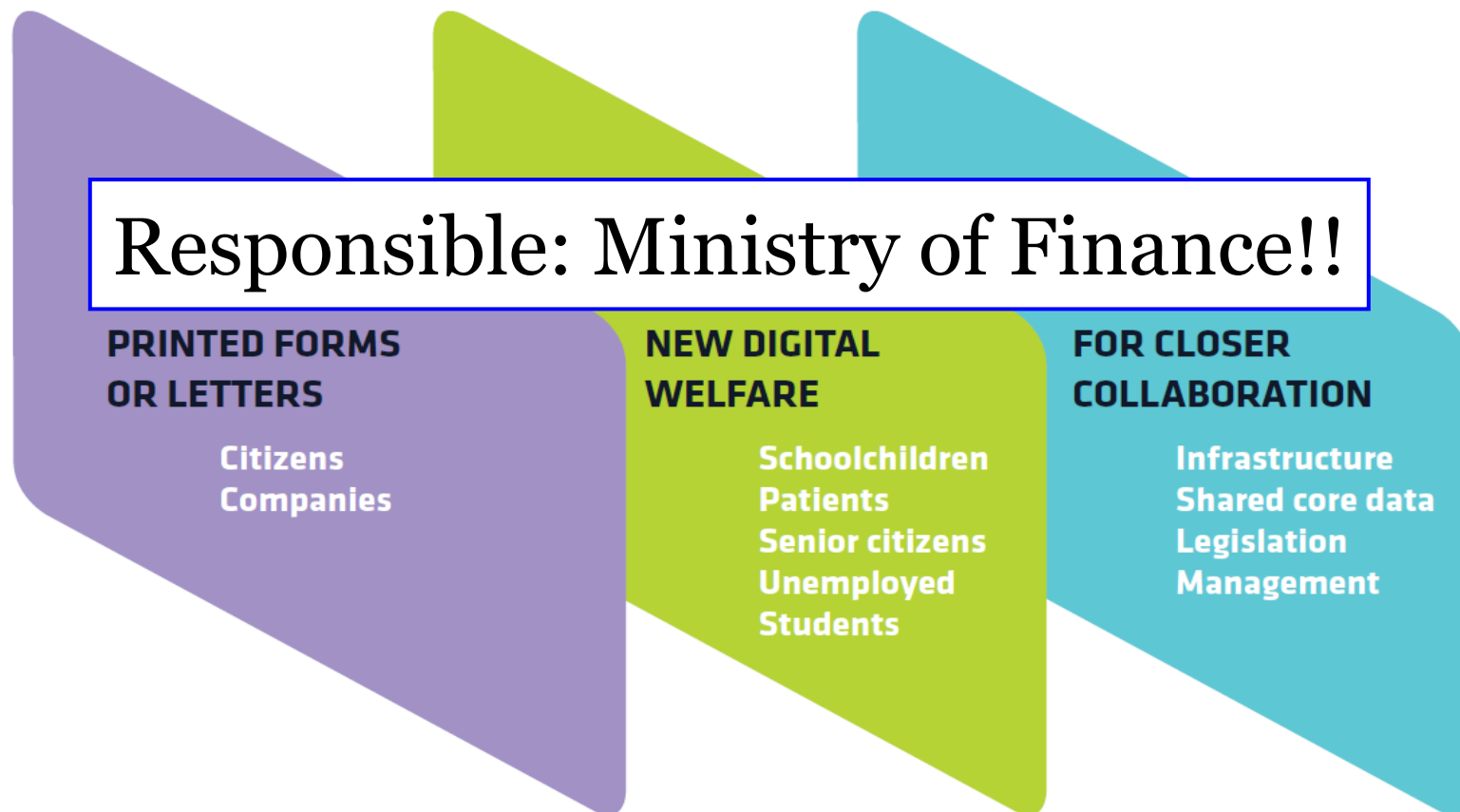
Focus:

Authoritative basic data and a common public data distributor



Danish eGovenment STRATEGY 2011 - 2015

THE eGOVERNMENT STRATEGY - MAIN TRACKS



The strategy is divided into three main tracks.

Each track covers various areas and targets different groups.



Firefox

eGOVERNMENT strategy 2011-2015 | ... x The digital path to future welfare - En... x +

www.digst.dk/ServiceMenu/English/Policy-and-Strategy/~/_media/Files/Digitaliseringsstrategi/Engelsk_strategi_tilgaengeligg.ashx

⚠ Dette PDF-dokument vises måske ikke korrekt.

Side: 36 af 87 Automatisk zoom

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



Basic Data Programme





THE eGOVERNMENT
STRATEGY 2011-2015

THE DANISH GOVERNMENT /
LOCAL GOVERNMENT DENMARK
OCTOBER 2012

**GOOD BASIC DATA FOR
EVERYONE – A DRIVER FOR
GROWTH AND EFFICIENCY**

The Danish government and Local Government Denmark entered into an agreement on basic data

Open access to public-sector basic data for
everyone

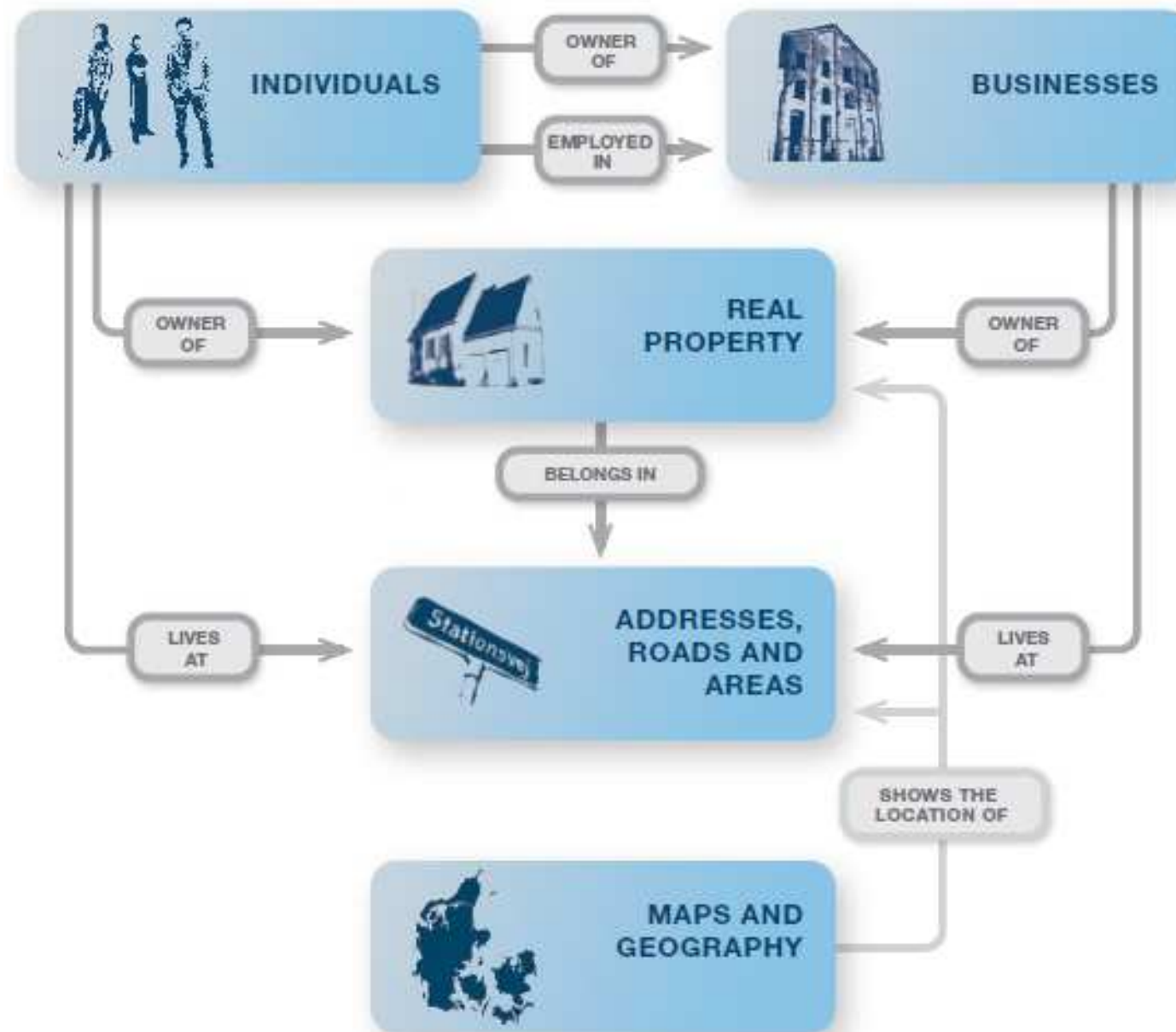
A common Data Distributor

Quality improvements

Basic-data committee

Investments of approx. EURO 125 million up
to 2016



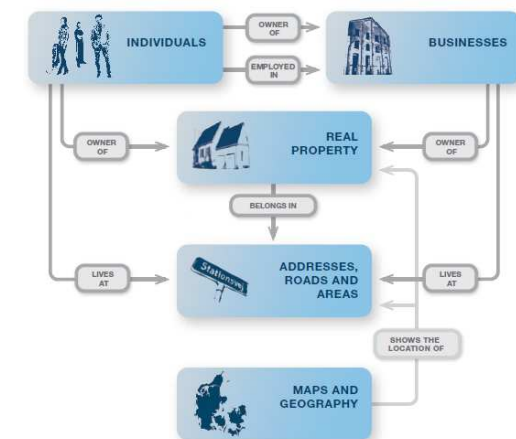


Basic data must

Be as correct, complete and up-to-date as possible

- re-use of data and no double registration or shadow registers

- Be used by the public-sector
- Be made freely available to businesses as well as the public
 - excluding sensitive personal data
- Be distributed efficiently, accommodating the needs of the users.



Common data distribution

- Basic data should be available in a simple, efficient and stable manner
- Costs of distribution should be reduced

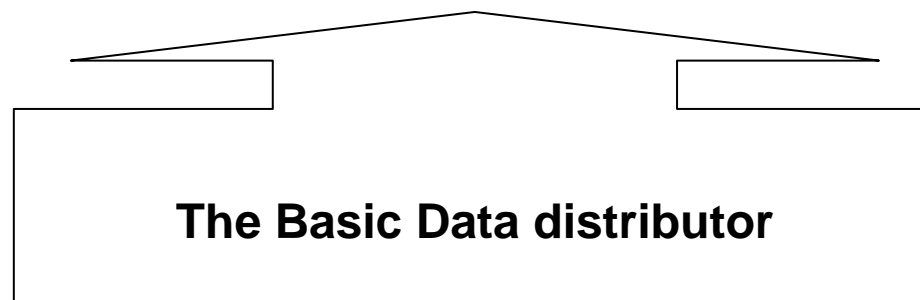


Solution: A common data distribution

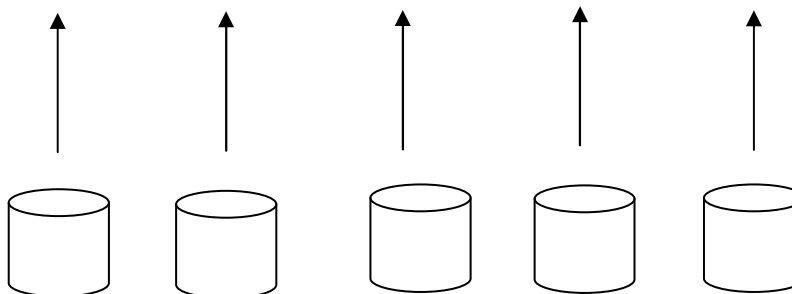
- Guaranteed up time and performance



Users



Replication in near real time



Basic data

Basic Data Authorities



Geographical names (Place names)

Digital elevation model

Administrative units

Geographic grid system

Cadastral Parcels

Location based services

Coastline

Natural areas (forests, etc.)

Roads, Railways and ferry routes

Location based buildings

Location based technical facilities

Streams, waterbodies and sea areas

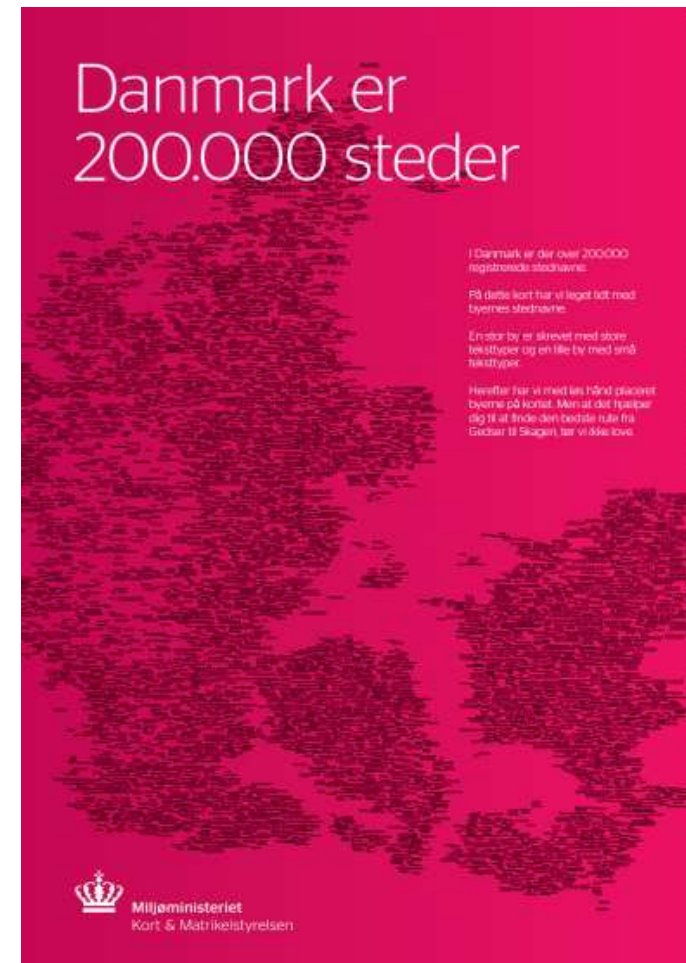
INSPIRE

MAPS AND GEOGRAPHY

Geographical Names (Place Names)

Problem: Geographical names in many different registers - with no unique georeference or uniform way of spelling

Solution: One national register on Geographical Names - authoritative basic data



Hydrography

Problem: Several registrations using different specifications and standards - no consistency across authorities

Solution: One nationwide registry of streams and water bodies



Business Cases



Business cases in DK – we have tried it before

In 2002 address data was made freely available in DK.

Decision was based on a very positive Business Case.

An analysis has been calculated the societal gains in the period 2005-2009 to DKK 471 million

The Public Sector save alone DKK 38 million on not having to negotiate agreements, manage rights, etc..



The Danish BC model

Is an updated version of the 2007 model - state, regions and municipalities

Mandatory for government ICT projects > DKK 10m

Recommended for all (Ministry of Finance)!

Make clear the primary purpose of the project
- efficiency, quality improvement or compliance with international law

Focus on benefit realization by systematic follow-up procedures

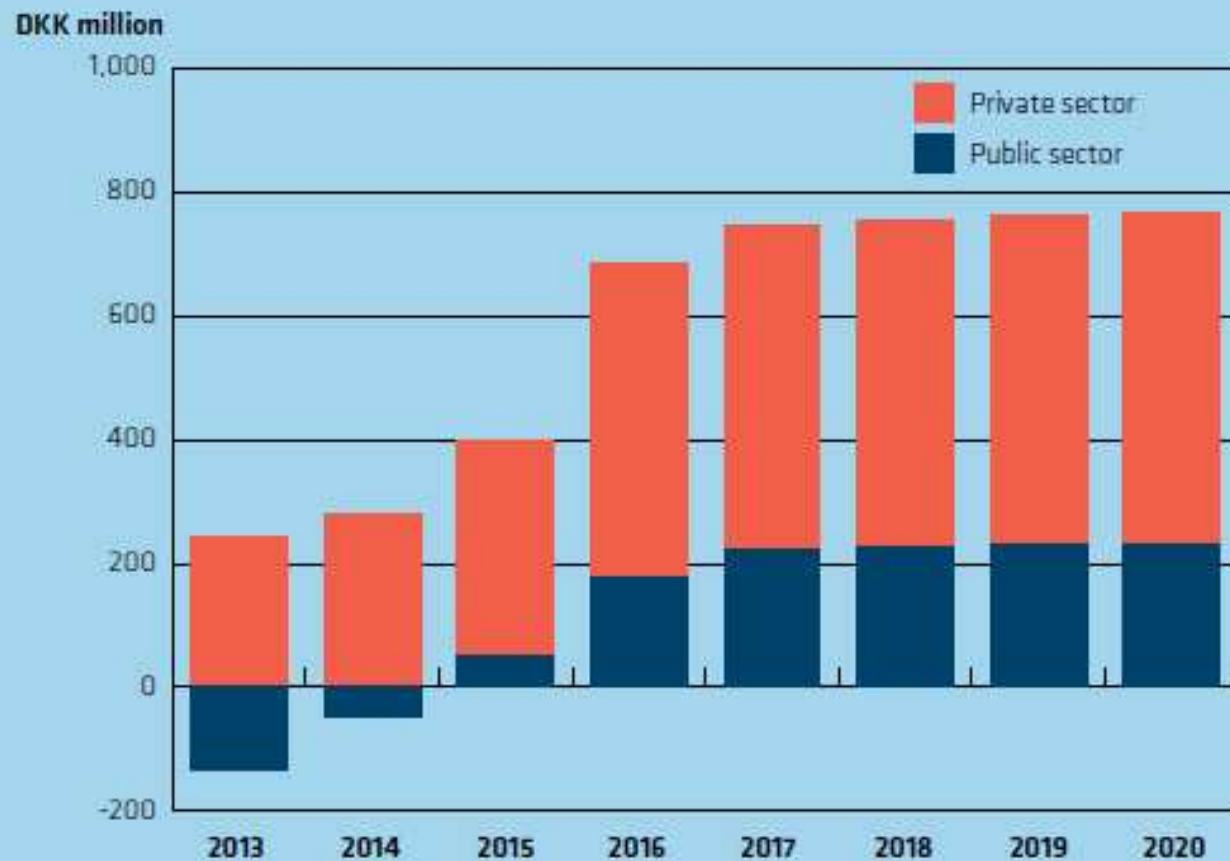
Handle gains that can not immediately be translated into budgetary effects.

TOTAL PUBLIC-SECTOR NET SURPLUS/DEFICIT

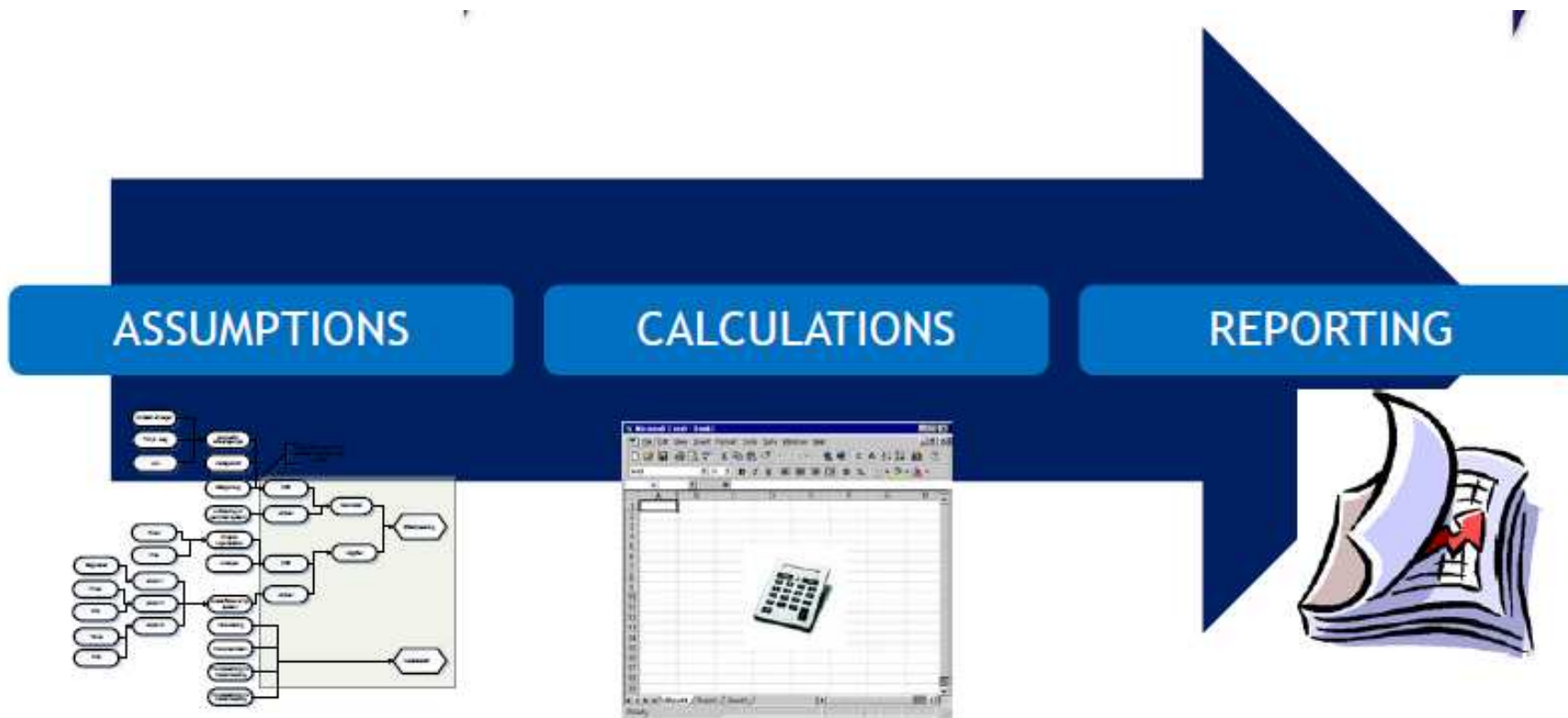
DKK MILLION	2013	2014	2015	2016	2017	2018	2019	2020
Ministries	-108	-81	-50	-26	3	9	29	42
Municipalities	-24	24	79	143	165	169	174	175
Regions	1	11	23	33	43	43	43	43

Danish BNP 2010 DKK 1.743 bn.

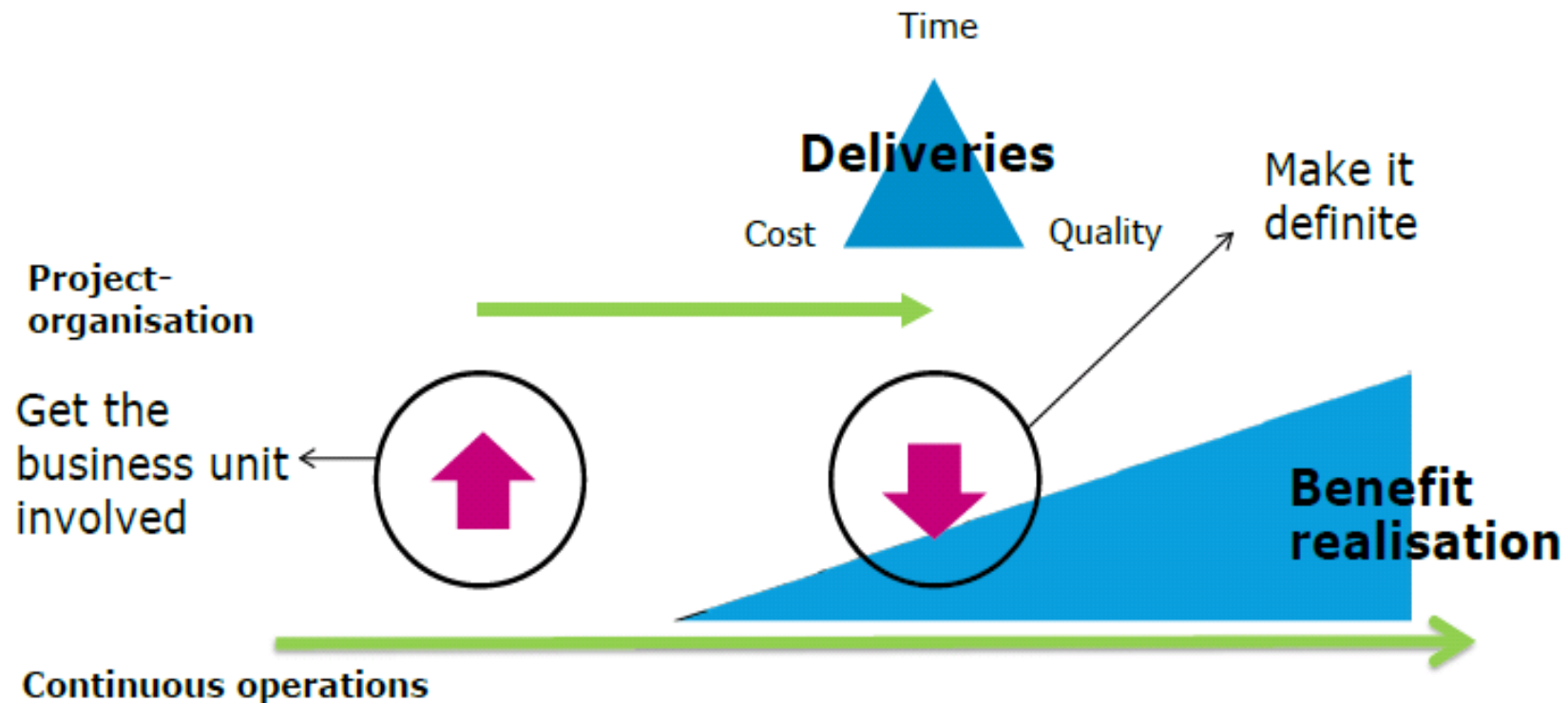
TOTAL NET SURPLUS/DEFICIT, BY SECTOR



Three step BC model



BC-MODEL AND BENEFIT REALISATION



- The BC-model identify assumptions and demonstrates benefits
- In the benefit-realisation plan it is made definite how the benefits are to be realised and by whom



BC Geographical names

PROJEKTETS PRIMÆRE FORMÅL

Marker og kopier

Marker værdier og kopier

Tabel 1.1: Projektets primære formål

Projektets formål	Effektivisering	Kvalitetsløft	Implementering af international lovgivning
	x		

ØKONOMISKE NØGLETAL

Marker og kopier

Marker værdier og kopier

Tabel 1.2: Økonomiske nøgletal (2012-pl)

Nr.	Beskrivelse	Risiko-justeret	Ikke risiko-justeret	Best case	Worst case	Risikojust. forrige fase
1	Nettonutidsværdi, mio. kr.	6,6	5,4	22,1	-7,5	-
2	Intern rente	16,3%	15,0%	39,3%	r/i	0,0%
3	Samlede projektudgifter, mio. kr.	2,3	2,3	2,0	2,9	-
4	Udgifter hvis ikke projektet gennemføres, mio. kr.	39,4	37,9	50,4	29,9	-
5	Udgifter, ekskl. projektudgift, hvis projektet gennemføres, mio. kr.	28,3	28,4	21,1	35,2	-
6	Samlet bruttogeinst, mio. kr. (= 4 - 5)	11,1	9,5	29,2	-5,3	-
7	Samlede udgifter med projekt, mio. kr. (= 5 + 3)	30,7	30,7	23,1	38,2	-
8	Samlet nettogeinst, mio.kr. (= 6 - 3)	8,7	7,2	27,3	-8,2	-

FASEOPDELTE UDGIFTER

Marker og kopier

Marker værdier og kopier

Tabel 1.3.a.: Faseopdelte udgifter i mio. kr. (2012-pl)

	Total	Tot. %	2013	2014	2015	2016	2017	2018	2019
1. Ide	-	0%	-	-	-	-	-	-	-
2. Analyse	0,4	17%	0,4	-	-	-	-	-	-
3. Anskaffelse (=3.1+3.2)	0,5	21%	0,5	-	-	-	-	-	-
3.1. Specificering	0,5	21%	0,5	-	-	-	-	-	-
3.2. Udbud	-	0%	-	-	-	-	-	-	-
4. Gennemførsel	1,5	62%	1,5	-	-	-	-	-	-
5. Realisering	-	0%	-	-	-	-	-	-	-
Total	2,3	100%	2,3	-	-	-	-	-	-

ØKONOMISKE NØGLETAL

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8	Samlet nettogeinst, mio.kr. (= 6 - 3)	8,7

BC - releasing the Geodata Agency

Basic dataand the rest

A positive BC over 8 years

Feed into the common pool of Basic Data BCs

Result = positive BC for the release of basic data in DK

The BC on Basic Data was negotiated between the Municipalities and the government

Agreed - redistribute the costs of basic data, so that public authorities contribute to basic data via their allocation or block grant

2013 the Regions negotiate



The Danish Geodata Agency's road to Open Data



Taking it a bit further

Danish Geodata Agency and local governments is expanding free data:

- current and historical topographic data
- cadastral map
- Danish Elevation Model with updating
- Other relevant administrative geodata
- financed through the yearly budget negotiations



How was it possible

International trend - PSI, Inspire, Open Government...

Longtime co-operations in the public sector

Awareness of the role of geographical data in eGov

Co-operation with the private sector

Close contact to political decision makers and the Ministry of Finance
(Agency for eGov)

Economic crisis – budget cuts – effective public sector



No business in charging

More than 400 contracts have been terminated and credited



The road to open geographic data



1. The Act on the Danish Geodata Agency (**unanimously passed** at the Danish Parliament)
2. Licensing – open commercialisation
3. The contracts
4. Access to data – download and accessibility
5. Communication
6. Measuring the effect (user registration)

Respons on open data?



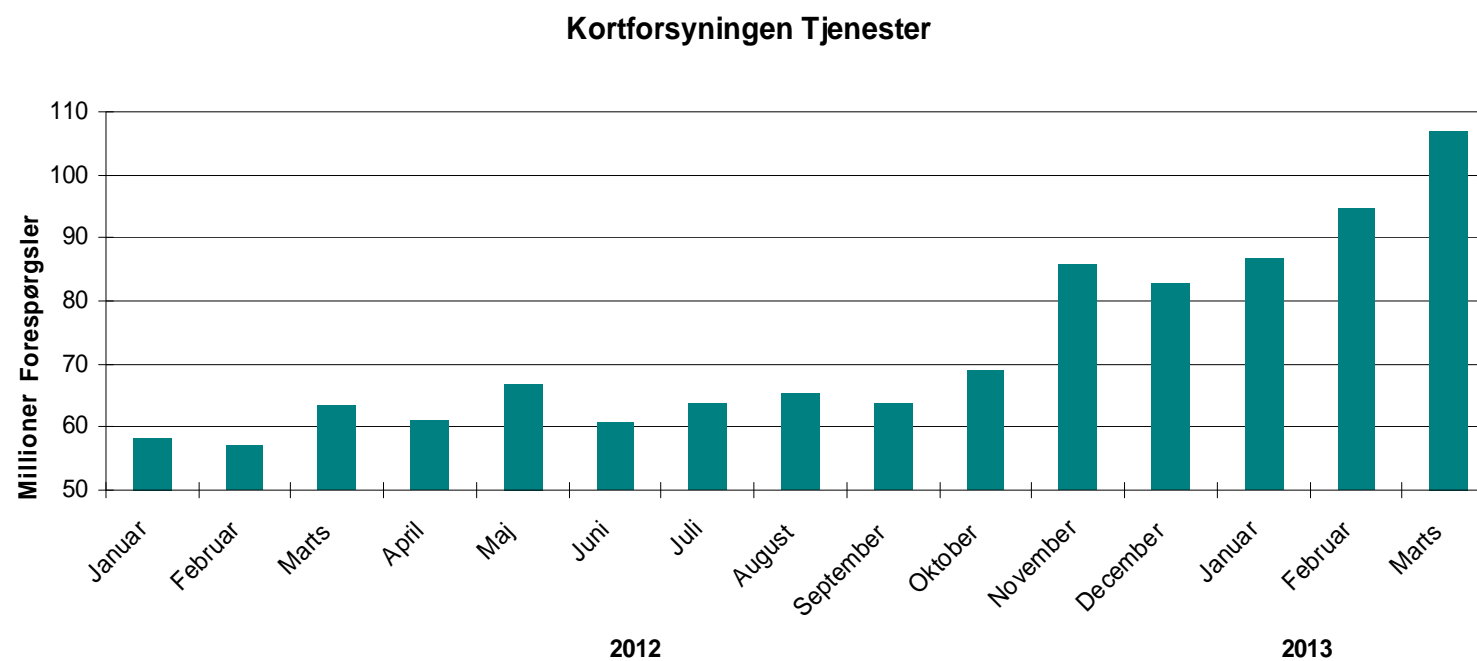
How many?

*Map distribution service (download) - 5600 **new users***



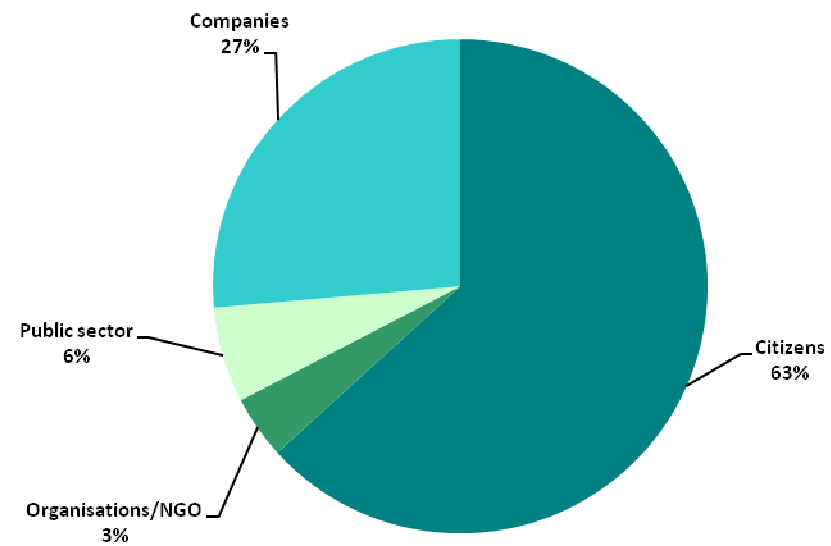
How many?

Map distribution service (WMS)

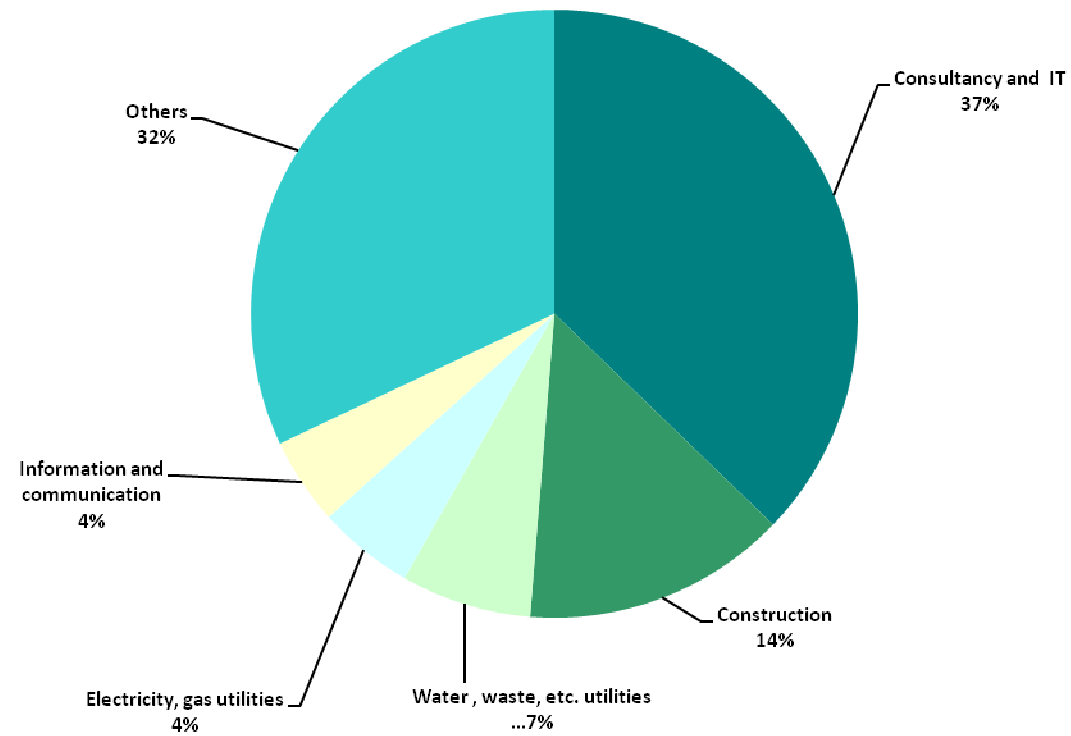


Who?

Distribution of user groups



Companies



Happy users



Peter Brodersen @peterbrodersen

Jamendog. Masser af data fra Geodatastyrelsen til brug i #OpenStreetMap - det bliver en fest! pic.twitter.com/Z2nWfUAV

Retweeted by Bente Steffensen

[View photo](#)



OpenStreetMap



Measuring the effect



Open data in Denmark is an **investment** (positive BC)

- Growth in the private sector (100 mio. d.kr. pr year)
- More effective public sector ('paying the party')

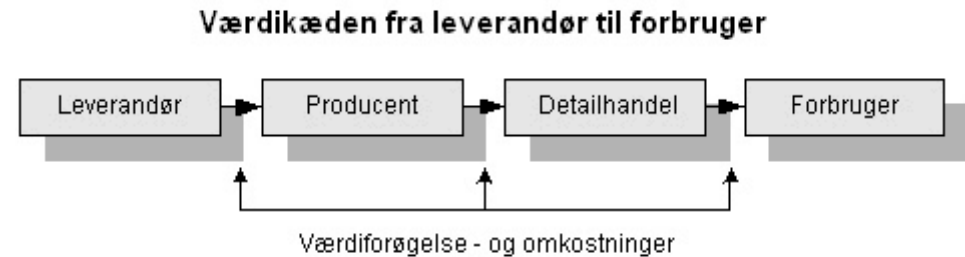
Setting up a baseline survey (2012) (work in progress)

Objective:

who used, which data, for what, and what value did it generate?



Measuring the effect



‘Functional’ tender (request for proposal - autumn 2013)

- Case studies in selected sectors (current users and emerging markets)
- Value chain – description and measuring all part of the chains with
- different types of measurements
- Data aggregated to the national level (macro economic indicators)

Post measurement in 2016



The Act on the Danish Geodata Agency

The Bill amending the Act on the Danish Geodata Agency was **unanimously passed** at the Danish Parliament (the Folketing) on December 19th, 2012



Conditions

“Conditions for use of open geographic data”

- **Open commercialisation** + distribution to third party
- Acknowledgement of Danish Geodata Agency

Huge change and **simplification** of Danish Geodata Agency data rights...



Accessibility

Broad understanding of accessibility – access not enough

Transparency

Comprehensibility

Usability



Another way of communicating value



An efficient way of communicating value



Reflections



How open is Open??

Transparency

Comprehensibility

Usability

The collage consists of several screenshots from the IKEA website:

- Top Left:** A living room interior featuring a dark grey sofa. A price tag for the 'BESTA' coffee table is visible, showing 'kr 3.650'.
- Top Right:** A grid of various sofa models with their prices. Examples include 'EKTORP' (kr 2.899), 'KARLSTAD' (kr 2.000), and 'KARLSTAD' (kr 6.399).
- Middle Left:** A screenshot of the 'Hjelp til installation' (Help with installation) section, showing a list of tools and a diagram of a person using a tool.
- Middle Right:** A screenshot of the 'Hjemtransport' (Home delivery) section, featuring a yellow IKEA delivery truck and the text 'Vores servicepartner kan hjælpe dig med at transportere dine varer hjem' (Our service partner can help you transport your goods home).
- Bottom Left:** A screenshot of the 'Find den rigtige madras' (Find the right mattress) section, showing a diagram of a person lying on a mattress and a list of mattress types.
- Bottom Center:** A screenshot of the 'Hvordan plejer du at sove?' (How do you usually sleep?) section, showing a diagram of a person lying on a mattress and a list of sleep positions.



Open data – an Investment!?

Growth in the private sector – 100 mio. d.kr./year



More efficient public sector



What is happening ?

Private

- 3 out of 5 'classic' geodata companies expects growth
- 1 new company
- A private sector 'in shock'
- No strategies – no investments - yet



Open data in Denmark ESRI UC 2013

Efficient public sector

- Most continues as usual
- New role – new governance
- Takes time to turn a super tanker
- Nothing is free – maintenance?



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