



Norwegian State of Estate

A Reporting Service for the State-owned Properties in Norway

Ling Shi, Bjørg E. Pettersen, Ivar Østhassel, Nikolay Nikolov,
Arash Khorramhonarnama, Arne J. Berre and Dumitru Roman

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The public sector owns a significant amount of property data. Re-use of public sector information is required by both the EU and the Norwegian government.

EU's DIRECTIVE 2013/37/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information



NYHETER



About Statsbygg

- A public sector administration company
- Responsible to the Ministry of Local Government and Modernisation (KMD)
- Norwegian government's key advisor in construction and property affairs
- Building commissioner
- Property manager
- Property developer
- Open data and big data in Statsbygg
 - Statsbygg participates in survey of the Big Data in the norwegian public sector
 - Statsbygg is considering big data and data in the cloud in the IT strategy for the coming years.

Downsizing: government estate shrinks 10%

It's not just [UK homeowners](#) that are considering downsizing, one of the country's biggest landowners is doing it too: the government. We look at how the state estate has changed since 2011

[Get the data](#)

[More data journalism and data visualisations from the Guardian](#)

Mona Chalabi

Tuesday 21 May 2013 14:34 BST



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📷 Last year, HMRC (Office of Gas and Electricity Markets) got 89,000 square metres smaller. What about other government departments? Photograph: Guardian/Tom Jenkins Tom Jenkins/Guardian

The government has been criticised in the past for its inefficient use of the buildings it owns. From the [plans for small businesses to take over](#) the disused premises to suggestions that they be [turned over for community use](#), there has been pressure from a number of quarters that the government could save space and money.

It appears that they've responded to that pressure. [Data released](#) by the Cabinet

State of the estate UK

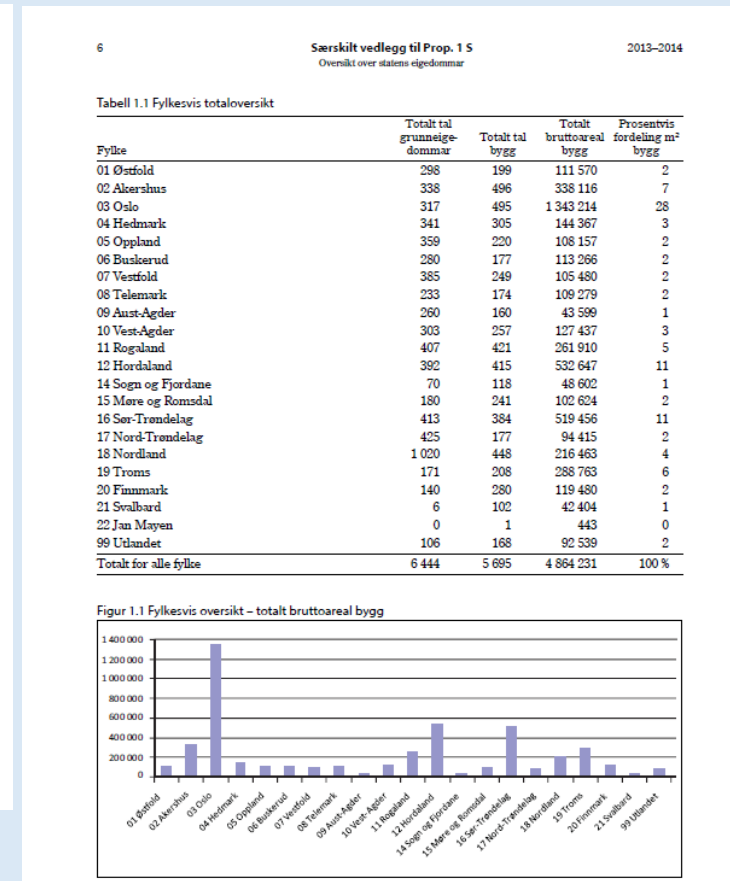
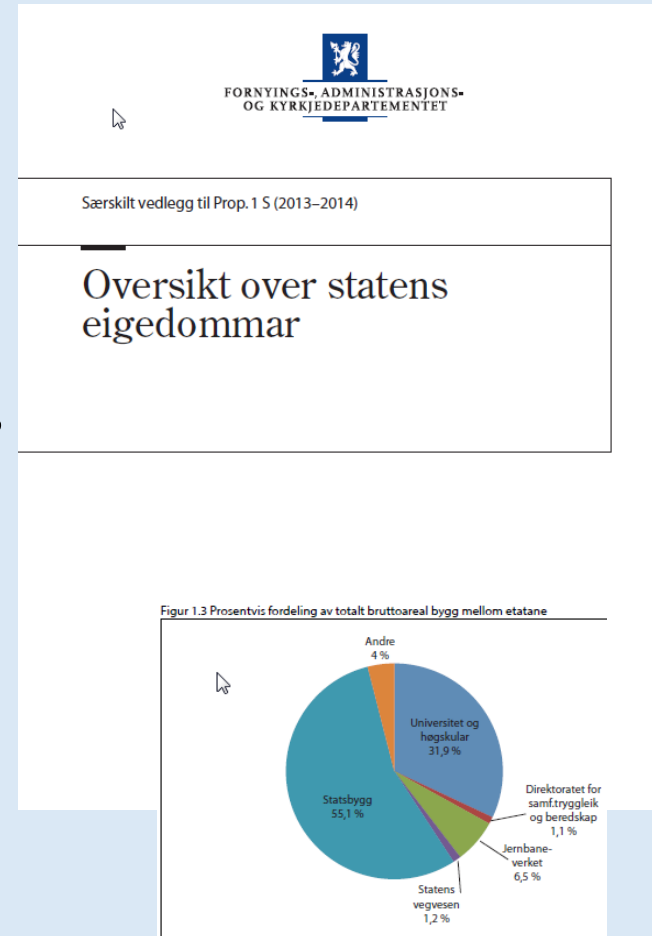
Annual reports that assess the efficiency and sustainability of the property included in the government's civil estate

<https://www.gov.uk/government/collections/state-of-the-estate>

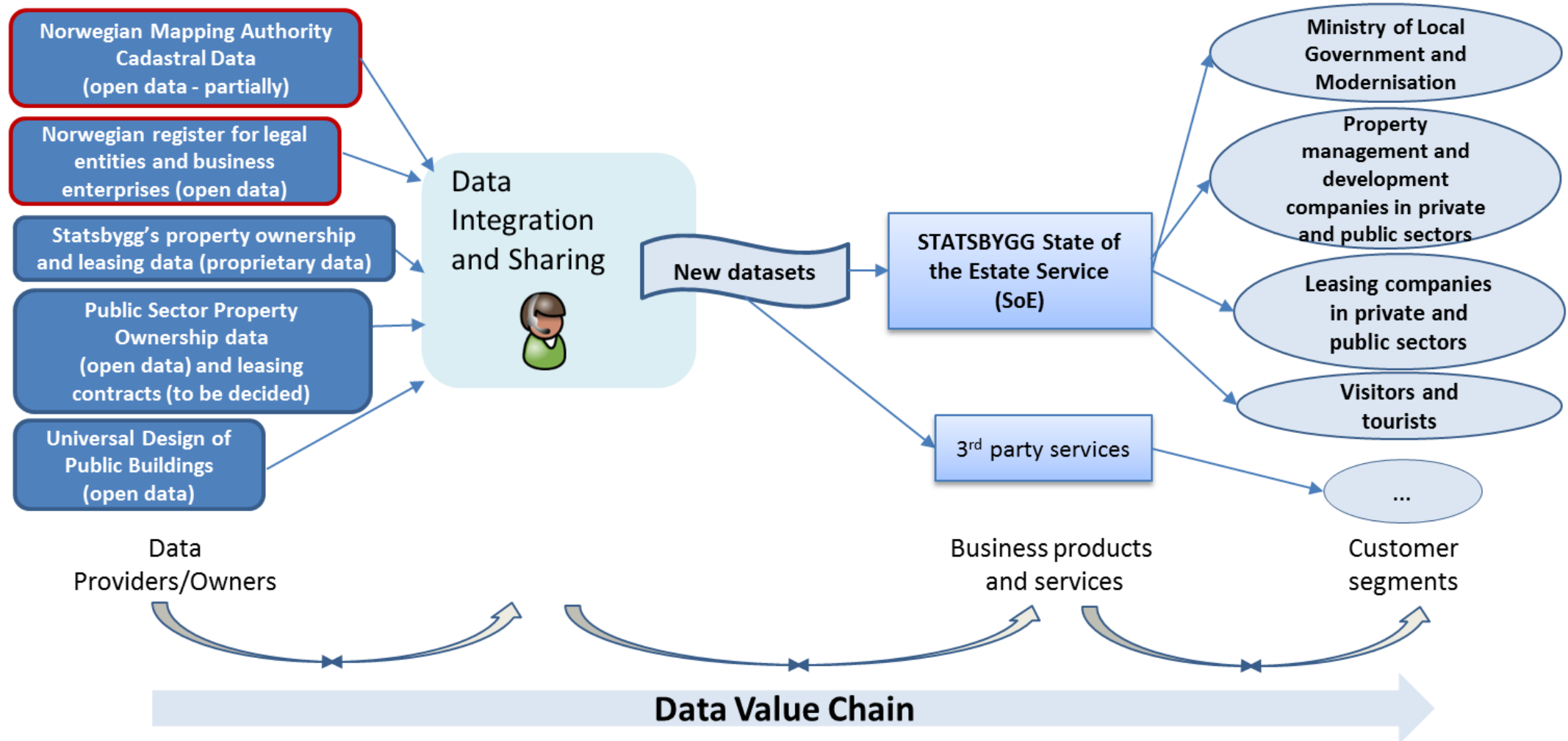
<http://www.theguardian.com/news/datablog/2013/may/21/downsizing-government-estate>

Reporting state-owned real estate properties in Norway

- Statsbygg has been responsible for the task
 - A hard copy of 314 pages and as a PDF file
 - 6 Person-Months
 - Data collection with spreadsheets
 - Quality assurance through e-mails and phone correspondence
- Pains
 - Time consuming
 - Poor data quality
 - Static report without live updating

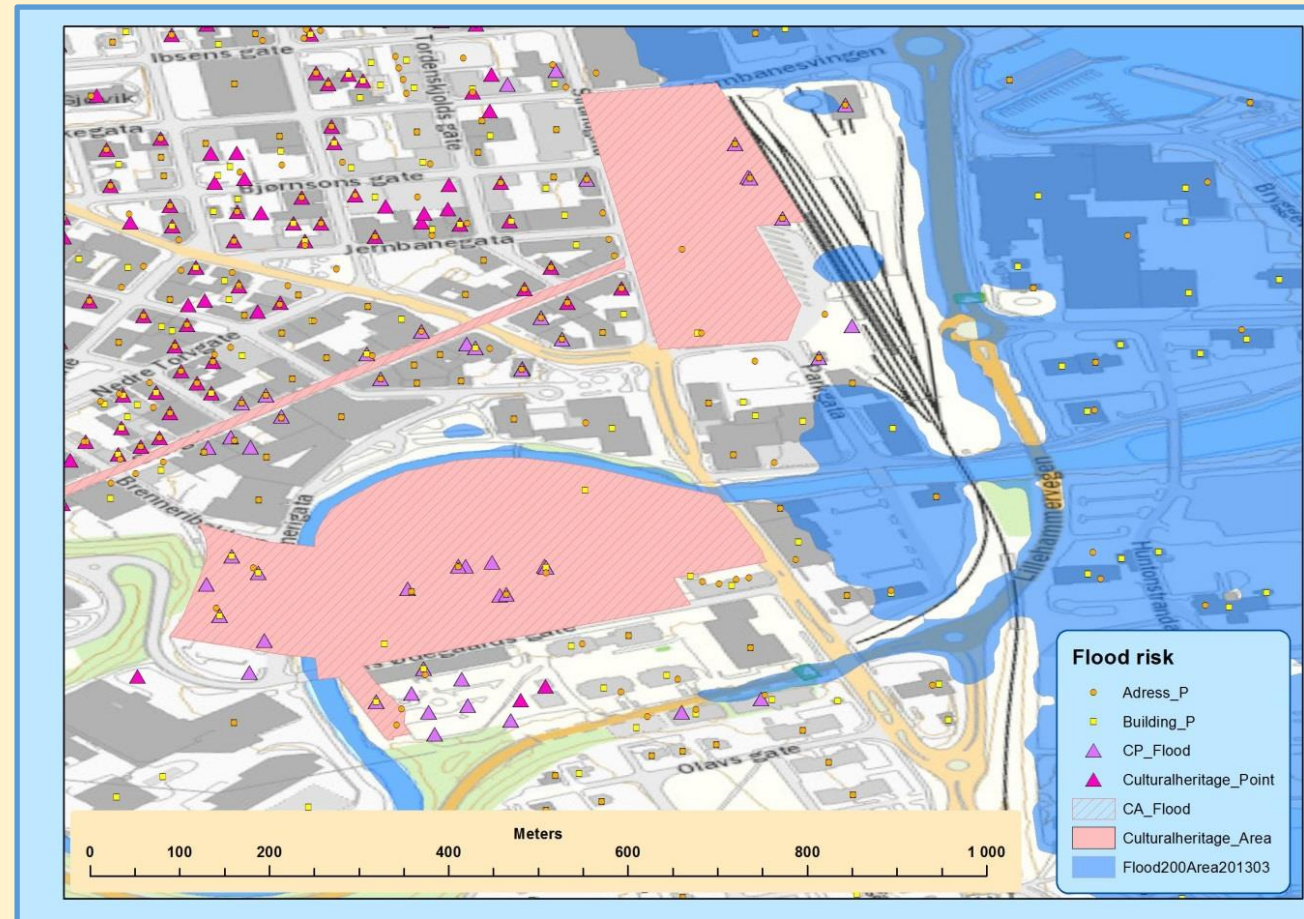


The new SoE reporting service



Scenarios supported by SoE

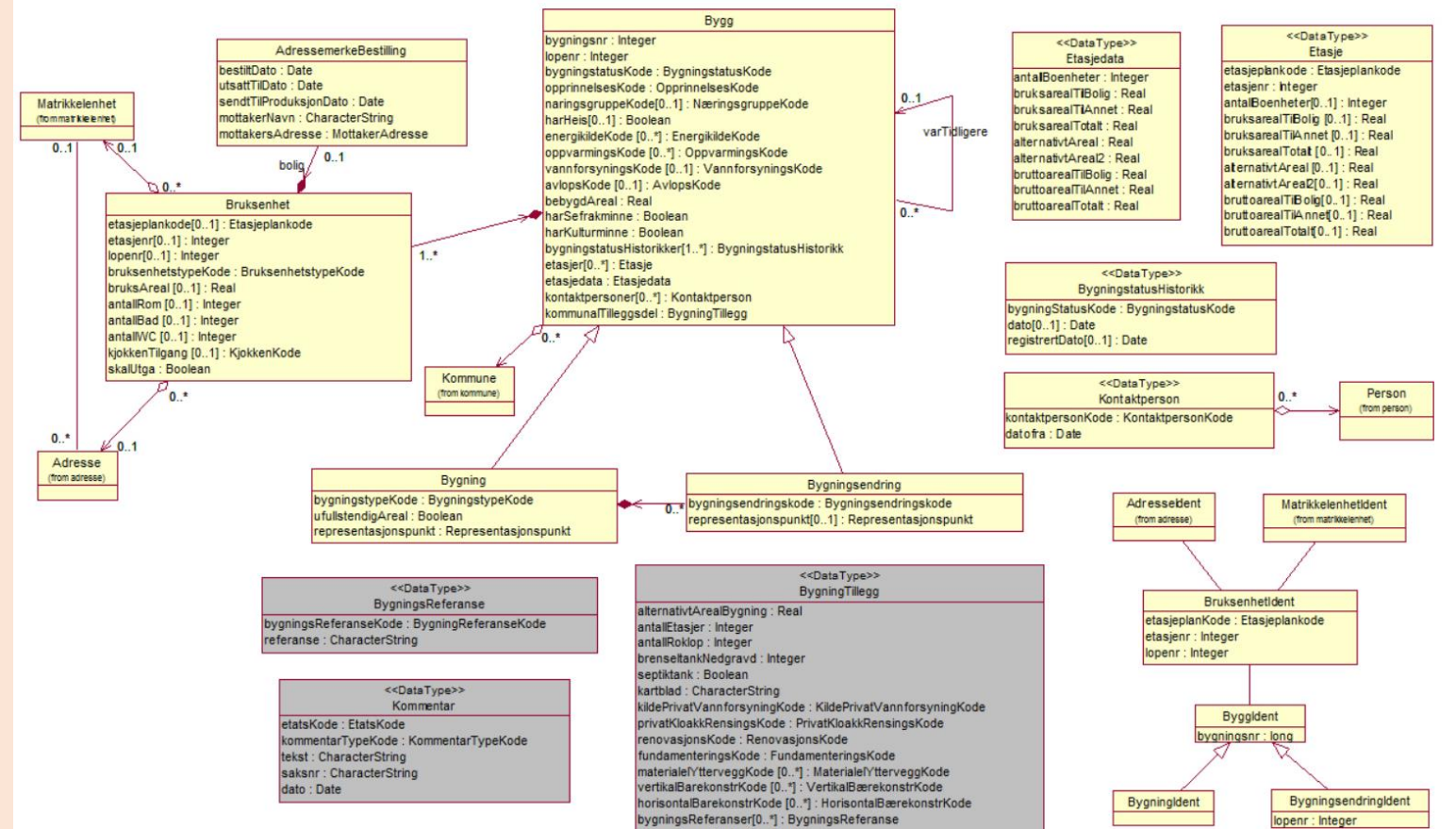
- Reporting the state-owned properties
- Analysis of accessibility of office locations
- Risk and vulnerability analysis
 - E.g. buildings affected by flooding
- Analysis of leasing prices
- 3rd party services



Challenges in distribution and complexity

- Data distribution
 - Public and private
- Data complexity
 - Rich in attributes and location based
 - Time dimension
 - Example of data model from the Norwegian Mapping Authority

2.7 Analysemodell for Bygg



Challenges in data integration and data quality

- Original data formats vs. alternative data formats
- Different domain focus and scope
- Missing unique identifier in some of the systems
- Data updating and consistency

The screenshot displays the 'Se eiendom' (View property) web application. The main window shows a detailed view of a property in Oslo, with a map on the right and a table of property information on the left. The table is titled 'Eiendomsinformasjon (1)' and contains the following data:

Type	Grunneiendom	Areal/Oppgitt areal	633,6
Kommune	0301 Oslo	Arealmerkna	
Gårdsnr	208	Grunnforurensing	Nei
Bruksnr	877	Tinglyst	Ja
Festnr		Seksjonert	Nei
Seksjonsnr		Har festegrunner	Nei
Bruksnavn		Punktbeste	Nei
Koordinater	597517.77 6643156.44 (32632)		
Kulturminne	Ikke registrert	Bekreftet grunnboksutskrift	Bestill
		Grunnboksinformasjon	Vis

Below the main table, there are sections for 'Adresser (1)', 'Bygninger (1)', and 'Teiger (1)'. The 'Adresser (1)' section shows the address 'Grensen 9 B' in '0159 Oslo'. The 'Bygninger (1)' section shows a building with 'Byggsnummer 80839391' and 'Type 311 - Kontor- og adm.bygning rådhus'. The 'Teiger (1)' section shows the 'Type Eiendomsteig' and 'Koordinater 10.74395767 59.91434564 (4326)'. The map on the right shows a street view of the property, with a yellow highlight on the building. A small window titled 'Oslo 0301-208/877' is open over the map, showing the same property details as the main window.

Challenges in data sharing and data security

- Data security, which data to share and with whom
 - Personal identifiable information
 - Some special types of properties



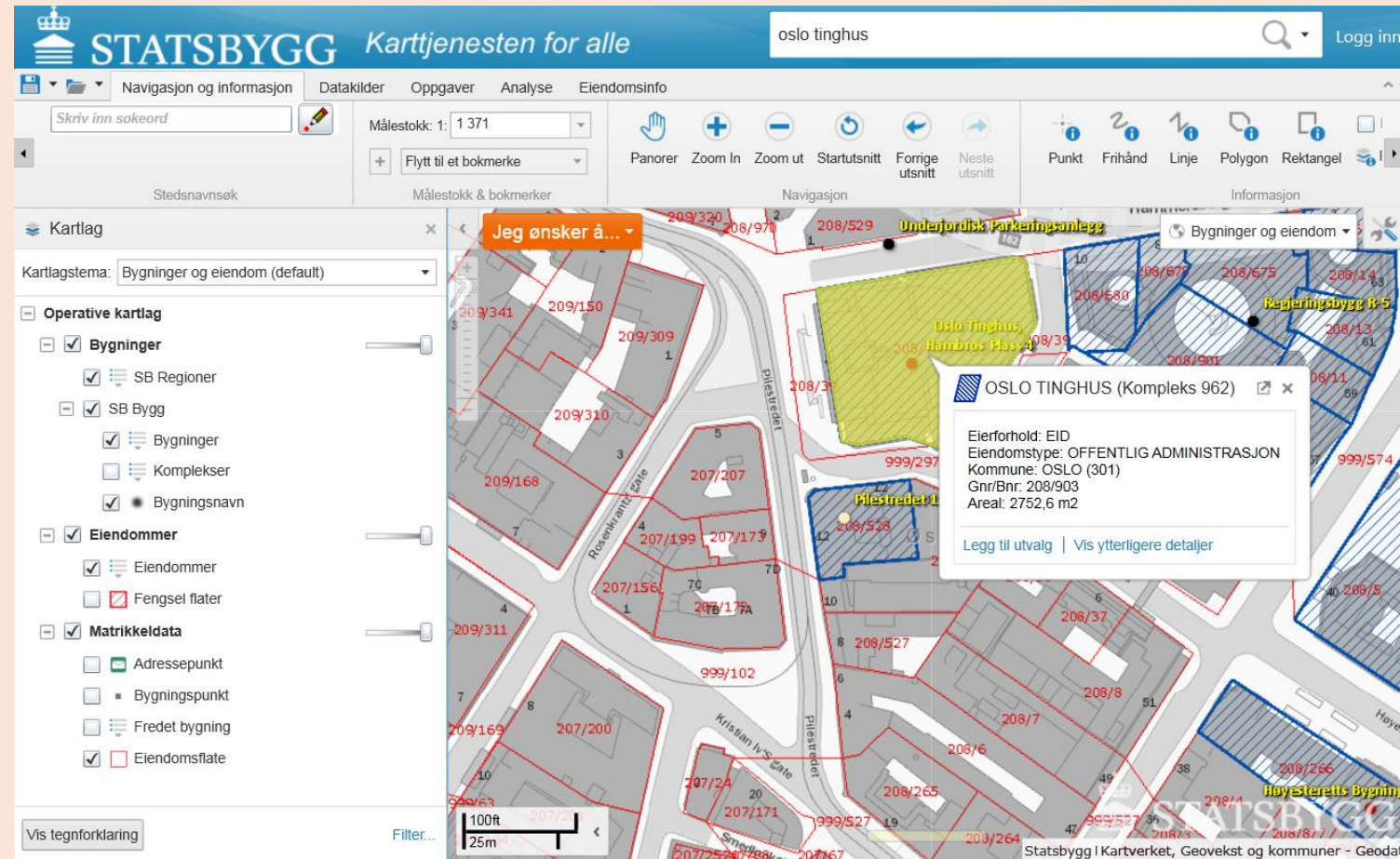
Challenges in data analysis

- Data analysis based on data
 - from different sources, both authorized and non-authorized
 - with different quality
- Trustworthiness of the integrated data




Statsbygg's existing GIS portal


- An existing GIS software procedure
 - Integrate cadastral data and property management data
 - Results are shown as a map layer in the GIS portal
 - Example rule for integration: the address of a building in different source systems shall be identical or with known spell variations
- Goal: extend the existing procedure into an interactive reporting service for properties data




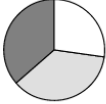
Envisioned Service Frontend






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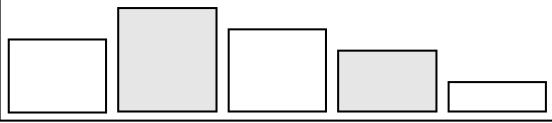
State of Estate

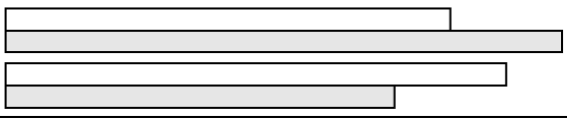

Report







Maps


KPIs

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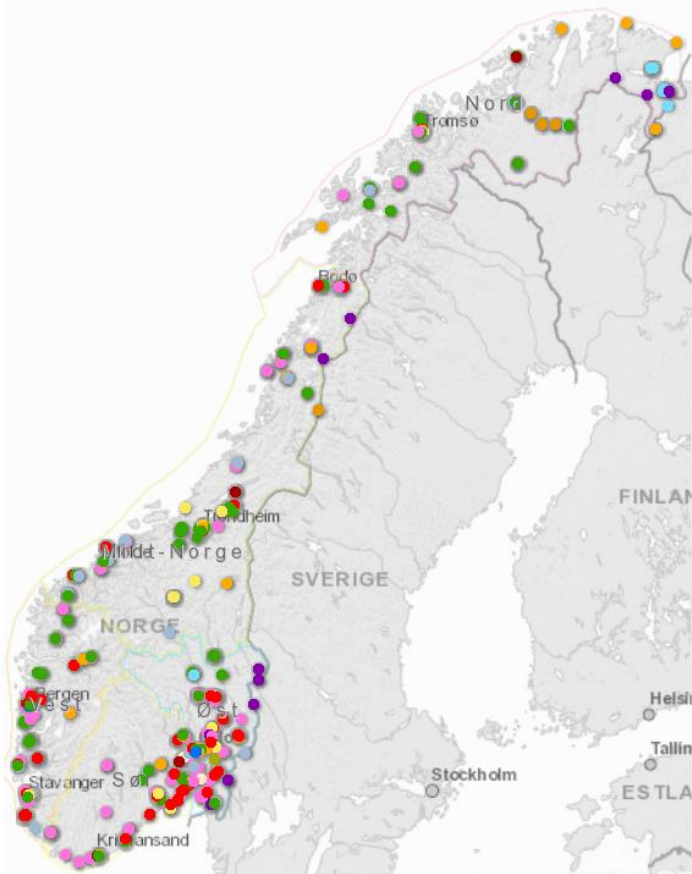

Area per organisation


Area per county/municipality

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☐ Choose Location
☒ Oslo
☒ Akershus
☒ Skedsmo
☐ Bærum

☐ Accessibility
☒ Cultural heritage



Map showing locations in Norway (NORGE) and Sweden (SVERIGE). Key locations marked include Oslo, Akershus, Skedsmo, Bærum, Trondheim, Mjølde-Norge, Bergen, Stavanger, Kristiansand, Tromsø, and Stockholm. Neighboring countries FINLAND and ESTONIA are also visible.

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☐ Choose Location

☒ Oslo

☒ Akershus

☒ Skedsmo

☐ Bærum

☐ Cultural heritage

☒ Flood

☒ Storm

Q Search

▼ Buildinginfo

Eidsvoll's building

▼ Level of Risk

Medium

▼ Exposure Index

EIF 0.3

EIS 0.5

TEI 4

▼ Buildinginfo

Eidsvoll's building

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☒ Flood

☒ Storm

Q Search

Flood risk index for the municipalities

Flood risk index for Akershus

Total risk index for the municipalities

Total risk index for Akershus

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☐ Choose Location

☒ Oslo

☒ Akershus

☒ Skedsmo

☐ Bærum

☐ Cultural heritage

☒ Flood

☒ Storm

Q Search

Flood risk index for the municipalities

Flood risk index for Akershus

Total risk index for the municipalities

Total risk index for Akershus

25mi

50km

Ullensaker

Gjø

Raufoss

Mo

Marken

Glå

Hallingdal

Nimedalslån

Mosvatn

Tinnsjø

Nume dal

Tyr

Senwi

Hokksund

Drammen

Kingsberg

Holm

Norsjø

Nisser

Helane

Blåsjø

Torak

Horten

Tønsberg

Sandefjord

Arvik

Agers

Glomma

Fredrikstad

Halden

★ Valgte resultat (28)

<< Vis historikk

Vis utvalg >>

Avgrens resultater

Listevisning

Diagramvisning

Zoom til alle

Rapport

Bygninger

KOMPLEKSNAVN	KOMPLEKSNR	KOMPLEKSTYPENAVN
HØGSKOLEN I GJØVIK	93	UNDERVISNING- OG FORSKNING
HØGSKOLEN I HEDMARK, RENA	987	UNDERVISNING- OG FORSKNING
HØGSKOLEN I HEDMARK, RENA	987	UNDERVISNING- OG FORSKNING

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Impacts and outcomes



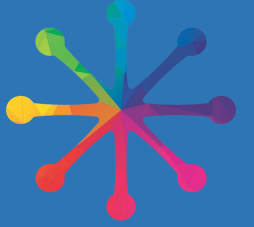
- **Sharing** of Statsbygg's internal property datasets in novel ways
- **Exploitation** of cadastral data and other cross-sectorial data
- **A pilot** SoE web service using Statsbygg's data and the integrated cross-sectorial data
- Data collection survey for ownership and, possibly, leasing of property data from government agencies
- **Sharing** the survey data results in novel ways
- **An extended pilot** to include survey result, i.e., the public sector's owned and, possibly, leased properties
- **Reporting function** based on SoE web service
- **Internationalization** process

Internationalization

- The Norwegian SoE is based on reusing and integrating the existing data from different organizations in the public sector
 - Many datasets from the public sector in Norway are open
 - The service creates new values by sewing the data together
- The integrated dataset and SoE service will make it easier for other service providers to make new innovative services.
- Every country has the similar need for SoE service
 - Can the experience and methods from Norway be reused?
 - What's the main challenges in the other countries?



proDataMarket project goals



- To make property data more accessible, more usable and easier to understand
- To make it easier for:
 - **Property data providers** to publish and distribute their data
 - **Data consumers** to find and access property data needed for their businesses

proDataMarket project in numbers

8

European partners

SINTEF - EVRY - Statsbygg. Norway
The Tragsa Group. Spain
Ontotext. Bulgaria
Cerved - SPAZIODATI - Istat. Italy

7

Products &
services

€4.5M

2.5 Years
(2015-2017)

20+
Datasets

Thank you!

Contact: ivar.osthassel@statsbygg.no

<http://prodatamarket.eu>

<http://www.statsbygg.no>

@prodatamarket



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