

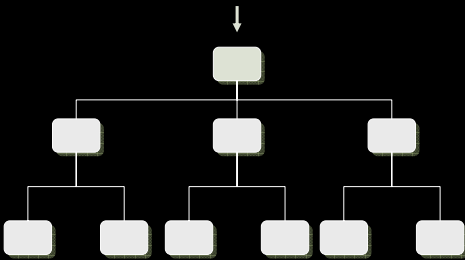
# Semantic Interoperability: The State of the Nation

Robert Keil

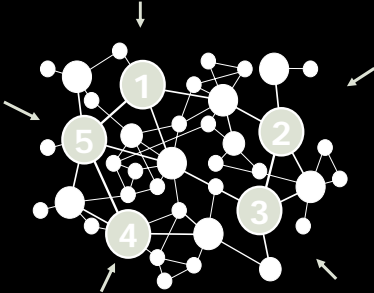
## Content

- The Main Challenge
- Project Examples
  - The Norwegian Parliament  
(Preview of the new Stortinget.no portal)
  - Altinn
- Status
- Conclusion

# User behavior is shifting...

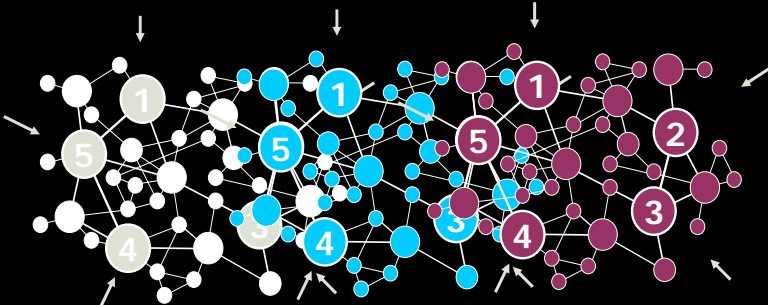


Before: The front page as the only entrance



Now: Many entrances

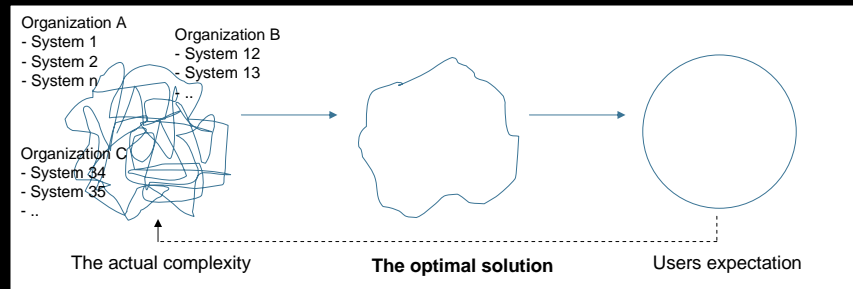
# The Number of Portals is Increasing



Now: Many entrances - Many Portals - Overlapping Content

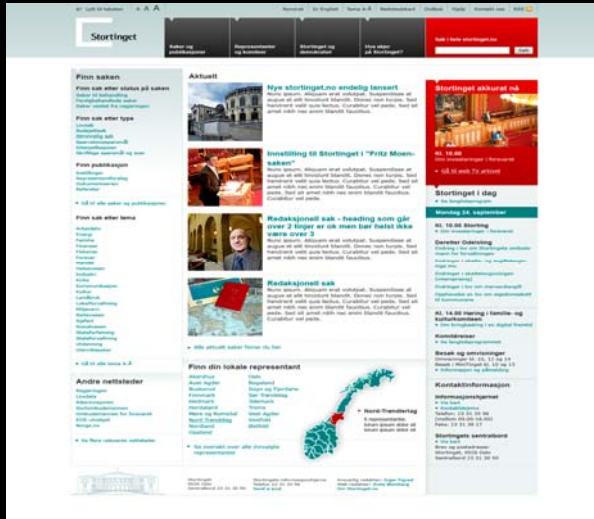
## The Main Challenge

- The main challenge is bridging the gap between technical and public sector complexity, and users' expectations of fully integrated services from what they view as a single coherent entity: "THE GOVERNMENT"



A preview of Stortinget.no

# Stortinget.no



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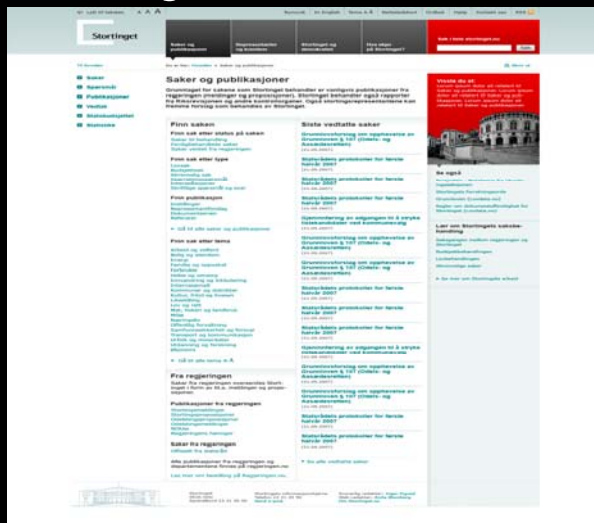
Portal Objective:

- Establish an objective picture of the Norwegian Parliament's political processes and results
- Strengthen the public's understanding of the Norwegian Parliament's role in society, its activities and its function

Target group:

- "The man on the street" i.e. everyone

# Stortinget.no



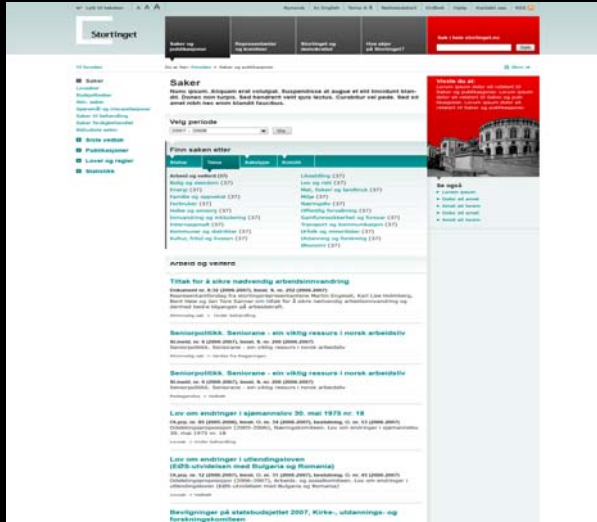
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Approx. 1000 matters/cases are handled by Stortinget every year

The main portal challenges:

- Users should be able to quickly find all publications and relevant pieces of information connected to a matter
- It should be simple and easy for users to track the handling of a matter by the Parliament
- The information should be organised for, and accessible to, all user groups

# Stortinget.no



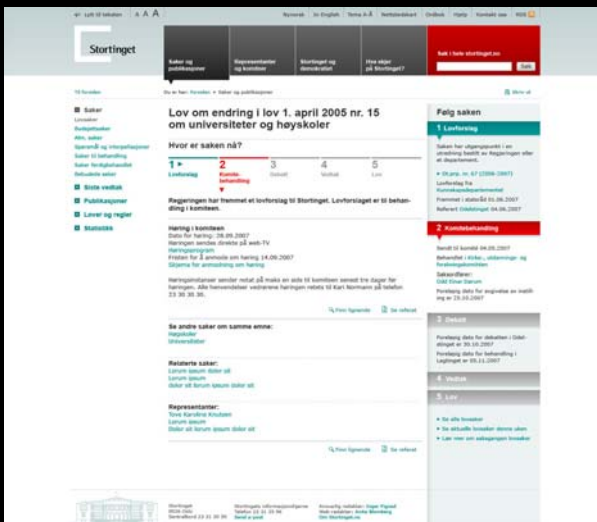
Challenge:

- Users should be able to quickly find all publications and relevant pieces of information connected to a matter

Solution:

- A combination of a comprehensive search and Topic Mapped navigation with grouping and filtering mechanism help users find all relevant matters

# Stortinget.no



Challenge:

- It should be simple and easy for users to track the handling of a matter by the Parliament
- The information should be organised for, and accessible to, all user groups

Solution:

- The status of a matter is presented in a graphical way. Hyperlinks to all relevant documents are shown for each phase of the process.

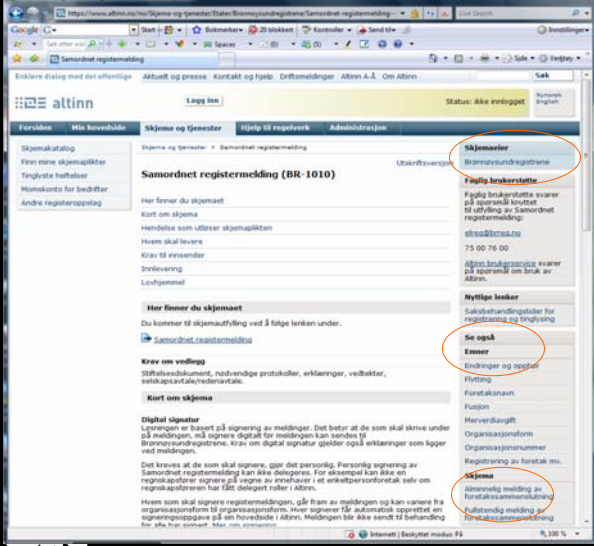
## One coherent entity?

- A simple case: A formal question from one of the members of the Parliament is raised to the Government. After a while the Government answers the question, and both Regjeringen.no and Stortinget.no have to manually publish the whole process, included every document attached to the matter
- A better solution would be that Stortinget.no publish the question, Regjeringen.no publish the answer, and both portals shows the whole process automatically



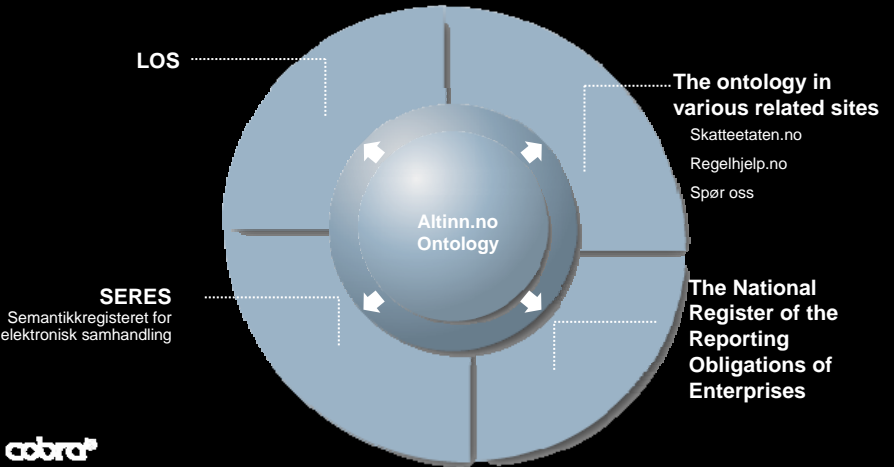


# Altinn



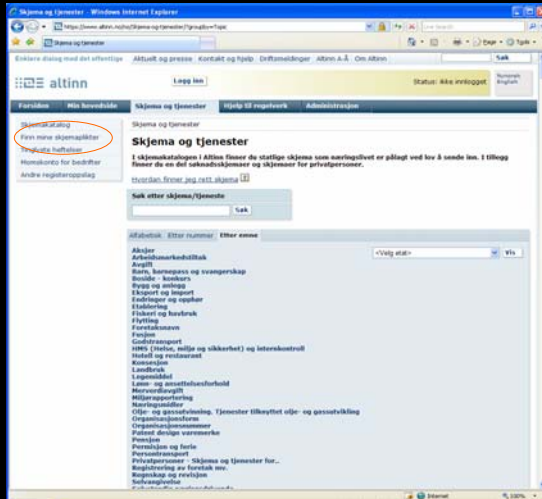
- The Topic Map gives related information regarding each form and service automatically, e.g. owner, rules and regulations, related topics, related Forms etc.

# Influences on the design of the ontology in Altinn





## Altinn – Mandatory Forms



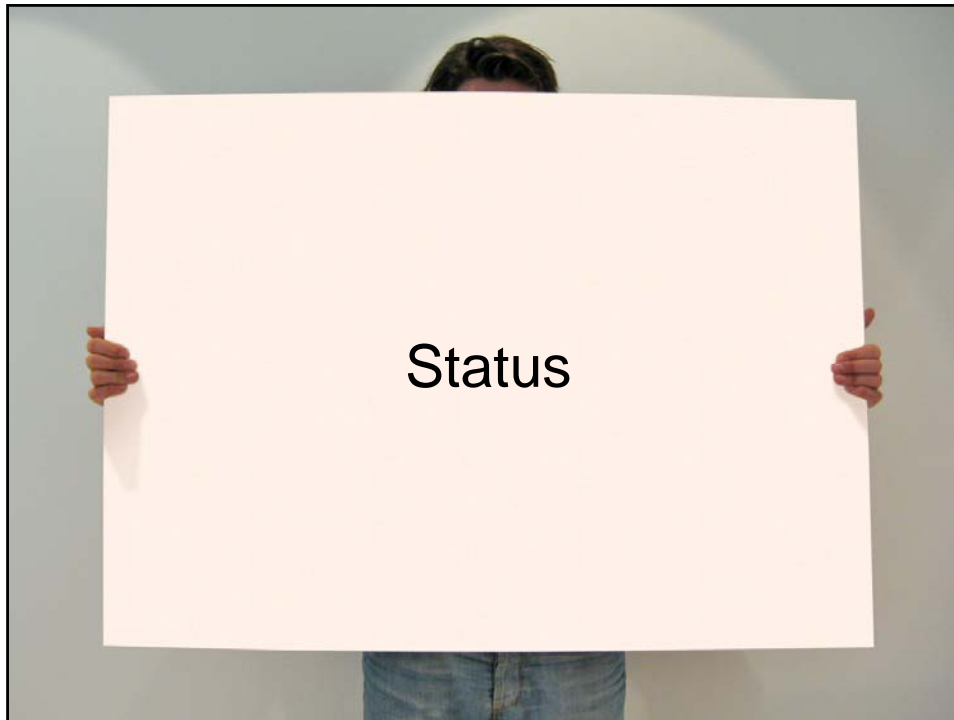
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- Different companies may have to deliver different forms – depending on the type of business
- Mandatory forms are listed in The National Register of the Reporting Obligations of Enterprises – With a given organization number you can get a list of mandatory forms based on the type of business

## Altinn – List of Mandatory Forms

- One challenge with the list of mandatory forms is that some forms are not periodically. However, they may become mandatory for a given type of business if a specific incident occur, e.g. workers accidents, a blow out etc.
- By combining Statistics Norway's NACE register (Standard Industrial Classification - SIC2002), The National Register of the Reporting Obligations of Enterprises and The Central Coordinating Register for Legal Entities with the topic map and the logon information in Altinn, it is possible to give a more accurate list of mandatory forms to the end user.

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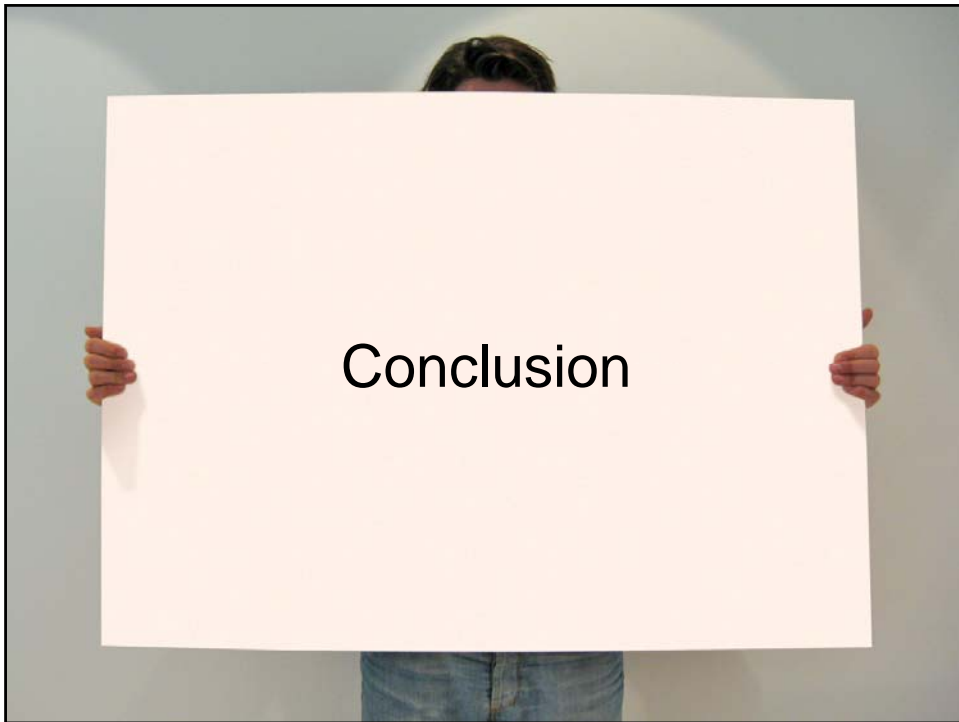


## Status

According to Petter Thorsrud, a few minutes ago:

"Before systems can exchange data, the *people behind the systems* need to exchange information"

- Even though there is no clear or formal policy from the Government regarding semantic interoperability (and even less on using Topic Maps) in common internet portals, there are many initiatives under way
- People in the public sector do communicate and share information and knowledge
- IT consultancy firms are also involved in, and contributing to, "semantic interoperability" as a concept.



## Conclusion

- The examples we have seen so far are just the beginning. Several public sector portals are actively working on projects related to semantic interoperability. Shortly, many of them will have fully functional solutions in place
- Semantic interoperability is not just yet another "hype"

We are past the "Tipping Point"!

