



Agency for Public Management
and eGovernment

A national strategy for metadata in the public sector or how to govern public sector data

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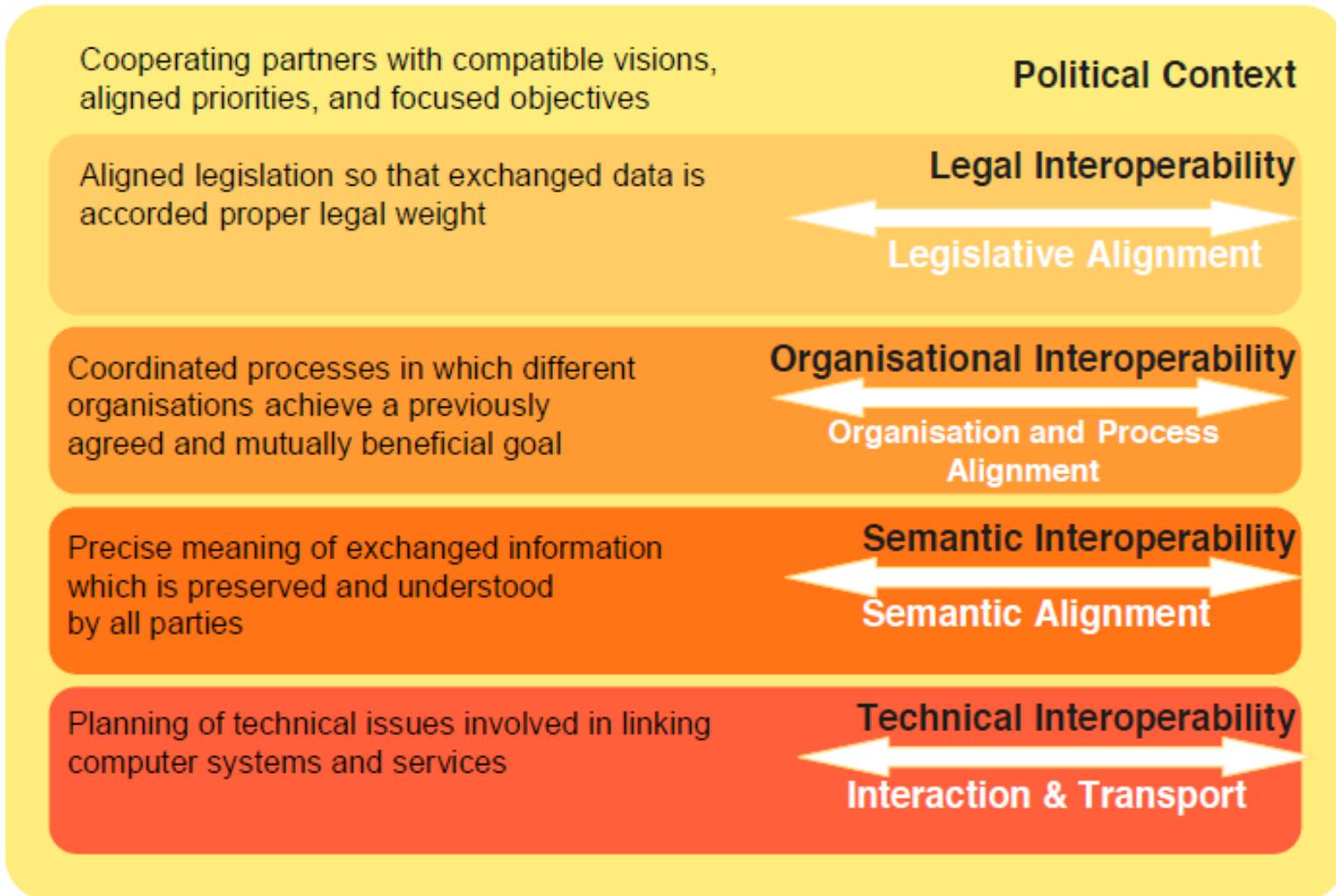
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Why a strategy for metadata?

- The need for “metadata” has been identified in two Reports to the Storting (Stortingsmeldinger)
 - Stortingsmelding nr. 19 (2008-2009)
”Ei forvaltning for demokrati og fellesskap”
 - Stortingsmelding nr. 17 (2006-2007)
”Eit informasjonssamfunn for alle”



Metadata and semantic interoperability



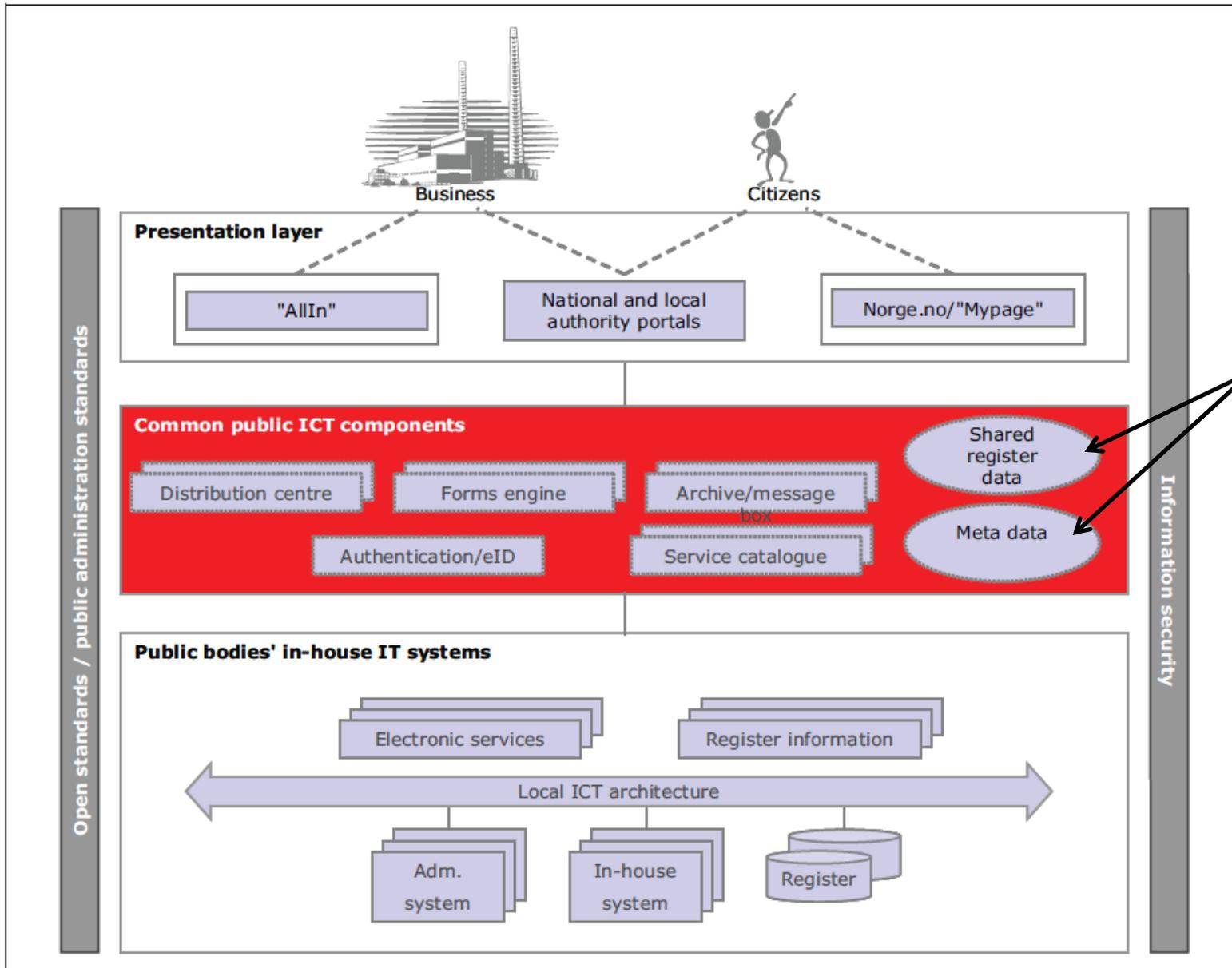
Agency for public management and eGovernment (Difi)

- An agency under the Ministry of Government Administration, Reform and Church Affairs (FAD).
- Responsible for executing the IT politics of the Ministry. Focus on coordination and centralized initiatives.
- Mainly strategic level, but also project management, development and maintenance of IT systems.
- Dependant on collaboration with the public sector for development of strategies.

Background

- There are some existing metadata initiatives in the public sector. These initiatives are mostly sector specific:
 - The health sector, statistics, public reporting from enterprises (Altinn)
- Before more money was given to new and existing projects, the ministries wanted a look at the use of metadata in the public sector.
- Metadata was pictured as a “common component” in a public sector architecture.

An IT architecture for the public sector



METADATA and register data are identified as common components

The initiation of the project

- The project was given to Difi from the Ministry of Government Administration (FAD).
 - The project mandate was coordinated with three other ministries; The ministry of finance, the ministry of labor and the ministry of trade and industry.
- From the mandate: “A project is started to substantiate the need for a general metadata strategy, and more concrete the needs for metadata in connection with Altinn
- The project started in October 2009 and is scheduled to end in November 2010.

The goals of the project

1. To outline a long term goal (in 5-10 years) for the use, governance, coordination and possible technical solutions for metadata, for the support of electronic exchange in the public sector.
2. Suggest a strategy to reach this future goal (A roadmap)
3. Assess some existing initiatives based on this future goal

The mandate

- Prosjektet skal utarbeide et forslag til en nasjonal strategi for metadata som viser og setter i sammenheng de ulike eksisterende initiativene, identifiserer ulike koordineringsbehov og samordningstiltak, skisserer ulike mulige løsninger, foreslår hvordan strukturering, bruk og forvaltning av metadata kan koordineres og samordnes på et nasjonalt nivå og vurdere konsekvensene av forslag på et overordnet nivå. Som et første ledd skal prosjektet gi en kort vurdering av satsningen på metadata på Altinn-området i et nasjonalt perspektiv.

The participants

- Difi – Agency for public management and eGovernment
- Norwegian tax administration
- The Norwegian Labour and Welfare Administration
- The Brønnøysund Register Centre
- KITH – Norwegian Centre for Informatics in Health and Social Care
- KS - The Norwegian Association of Local and Regional Authorities
- National Archival Services of Norway
- Statistics Norway

The task at hand

- The task is twofold.
- One part is to suggest a strategy for the use of metadata and the governance of public data.
- The second part is to make sure that ongoing initiatives are in line with this upcoming strategy.
 - This is really an impossible task since at the moment there is no strategy to evaluate the initiatives against.

Some basic issues

- The mandate and the goals of the project are rather vague and must be interpreted. This has left the project with some dilemmas.
 - Why a strategy for “metadata”?
 - What is the scope for a strategy for metadata?
 - What do we and others mean when we use the term metadata?
 - What should a strategy for metadata support?
 - Should we be specific on technologies and tools?

The scope of a metadata strategy?

- The basic assumption in the reports to the Storing is that metadata is needed to create semantic interoperability.
- What they actually mean is that there must be descriptions of the meaning of data so existing data in the public sector can easily and efficiently be reused in new services and applications, and thereby creating better and more efficient electronic exchange in the public sector.
- The politicians wish is more and easier electronic exchange, and someone has told them that the magic wand is metadata. But what is their understanding of metadata?

The meaning of the term metadata

- There is no common definition of the term metadata in use in the public sector.
- The politicians and the IT-professionals have different understandings of the term.
- When politicians use the term they usually think of a register for the common meaning of a term, that the public sector can use as a key in their electronic exchange.

Formal understanding of metadata

- Some existing definitions:
 - **Dataset** - identifiable collection of data (ISO 191xx)
 - **data element** - unit of data that, in a certain context, is considered indivisible (NS EN ISO 19118)
 - **Data** - reinterpretable representation of information in a formalised manner suitable for communication, interpretation or processing (ISO 191xx with reference to ISO/IEC 2382-1)
 - **Metadata** - data about data (NS-EN ISO 19115)

Our understanding of the terms

Data elements

Data instances

Datas et

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Studentsamskipnaden i Bergen (SiB)	Villaveien 10 5007 Bergen		55 54 50 00	55 54 52 40
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Studentsamskipnaden i Ås (SiÅs)	1432 Ås		64 94 98 60	64 94 98 73

Metadata: All descriptions concerning data elements, data sets and data instances

This is complex

- The strategy is aimed at politicians and civil servants, not metadata and semantic professionals.
- The precise meaning of the term metadata is difficult to communicate and in many instances not needed.
- A narrow metadata description and discussion will not be read, understood or acted upon.
“Metadata as a topic is not hot”
- *To get through to the decision makers we have to be concrete and rebrand the term.*

Our approach

- To get a common understanding of what we should achieve, and have an easy message to communicate, the project created a vision as a beacon for the task.

“All data in the public sector should be described in a structured way, and the descriptions should be publicly available.”

A set of initiatives

- To make the strategy concrete we will suggest some new initiatives.
 1. A model containing “Common information” about persons should be made, and the description should be made available. The starting point is the existing central population register and then added with information from other sources.
 2. The existing central population register, the land register, the employer/employee register and the register for legal entities should be modeled using a common method and tool.

Some more initiatives

3. Support the establishment of data.norge.no
4. Establish “metadata.norge.no” to find the meaning of public sector data. This includes code lists and vocabularies.
5. Map out today’s data exchange for some main agencies to find what data are actually exchanged. The description of data should start with this data.
6. Evaluate standards and methods for unique identifiers for data sets, data elements and data.

We need feedback

- Effects of metadata. What benefits can the use of metadata give the public sector?
- What standards, tools and/or methods can be used for describing public sector data?
- Should we mandate the use of common tools and methods for the structured description of data?
- Proposals for initiatives that can help us reach the vision

This is it!

Questions and comments

