



European
Commission



SEMIC 2018



National Metadata Architecture in Finland & Interoperability Workbench



#SEMIC2018
@EU_isa2

Initiative supported by the ISA² Programme

National Strategy for Digitalisation and Data Sharing and (re)Use in Finland

- Main framework and goals have been set in the strategic **Government Programme** of 2015–2018
 - <http://valtioneuvosto.fi/en/sipila/government-programme>
 - Implementation – the strategic objectives are realized in the framework of 26 key projects
- Finland's **Information Policy**
 - Responds to changes in society and to the significance of information in the changing society. The memo, published in 10/2017, proposes that information policy be reinforced alongside other policy areas. It is proposed that information policy be based on a value cycle, where information policy measures increase the economic and social value of information to individuals and society.



The Joint Metadata and Information Management Key Project (2016-2018)

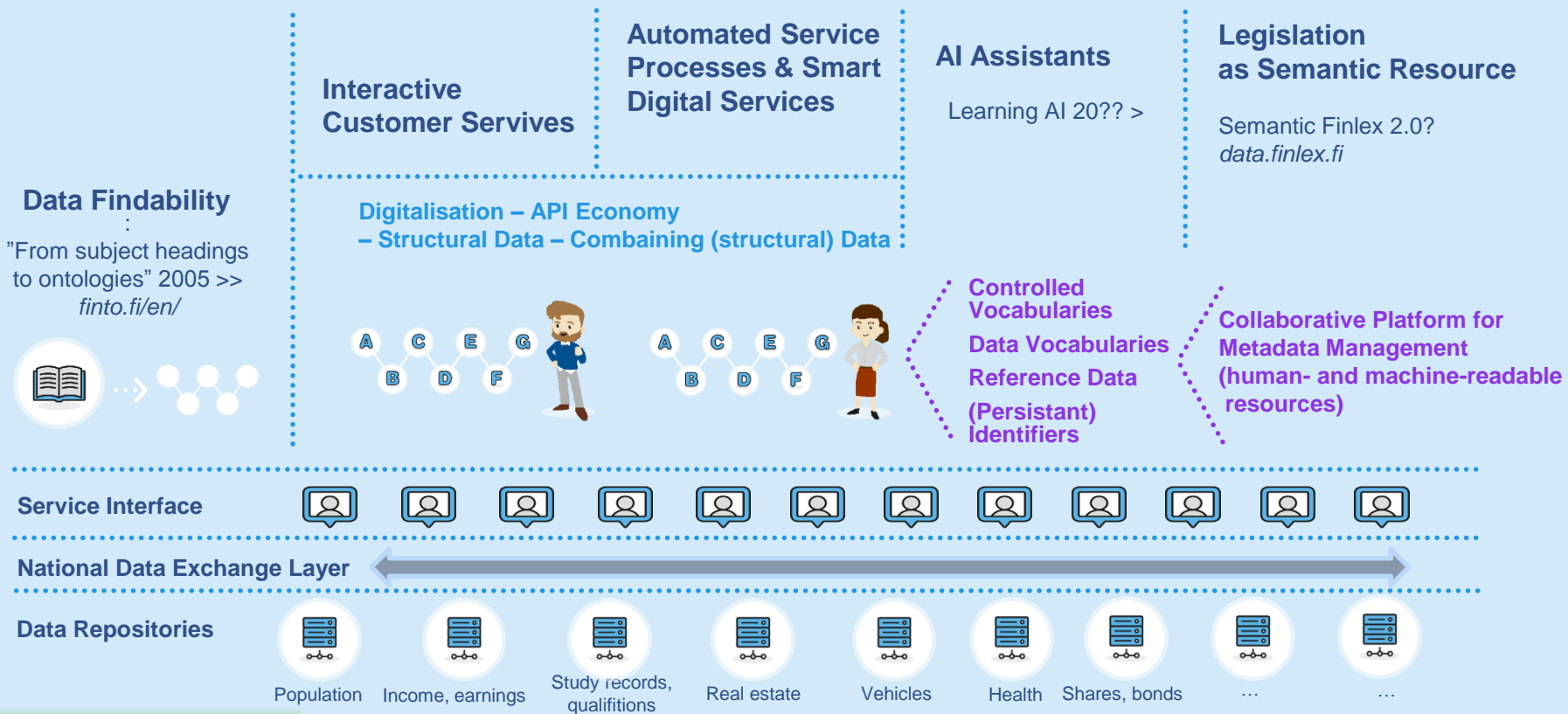
- The “once-only” principle applied to government information requests; using said information for various legitimate purposes.
- Reinforcing citizens’ right to access their own information (MyData principles) and officials’ access to information for official use.
- **A management solution for the core and metadata in the public administration will be implemented**; publishing of and easy access to open public data will be improved (incl. National Metadata Service).
- This work is funded and steered by the Ministry of Finance. The operative responsibility is in the Population Register Centre, in partnership with CSC – IT Center for Science and the National Library

#SEMIC2018
@EU_isa2

The more we rely on digitalisation in our transaction and businesses, the more we need to ensure that *machine to machine communication* can take place at high speed.

And that we humans still *understand the data and its meaning* flowing in these transactions.

Building Digital Information Infrastructure



= "interoperable.finland.fi"

yhteentoimiva.suomi.fi

**Tool for maintaining
(terminological)
controlled vocabularies
and defining concepts.**

<http://sanastot.suomi.fi>

**Controlled
Vocabularies**

**Reference
Data**

**Tool for maintaining and
publishing code lists and
reference data.**

<http://koodistot.suomi.fi>

**Inter-
operability
Platform**

*Integrated set of tools
or use of one part of it –
depending on the need*

**Data
Vocabularies**

**Tool for maintaining and
publishing data vocabularies
and data models. A tool for
shared data vocabulary
libraries and application
profiles for data semantics of
APIs and other various data
resources.**

<http://tietomallit.suomi.fi>

Modern platform for collaborate metadata management. Based on Linked Data principles and W3C technical standards and semantic technologies.

Formal linkages between metadata elements based on machine readable URIs.

Metadata as human and machine readable data web – turning in future into a smart data catalog.

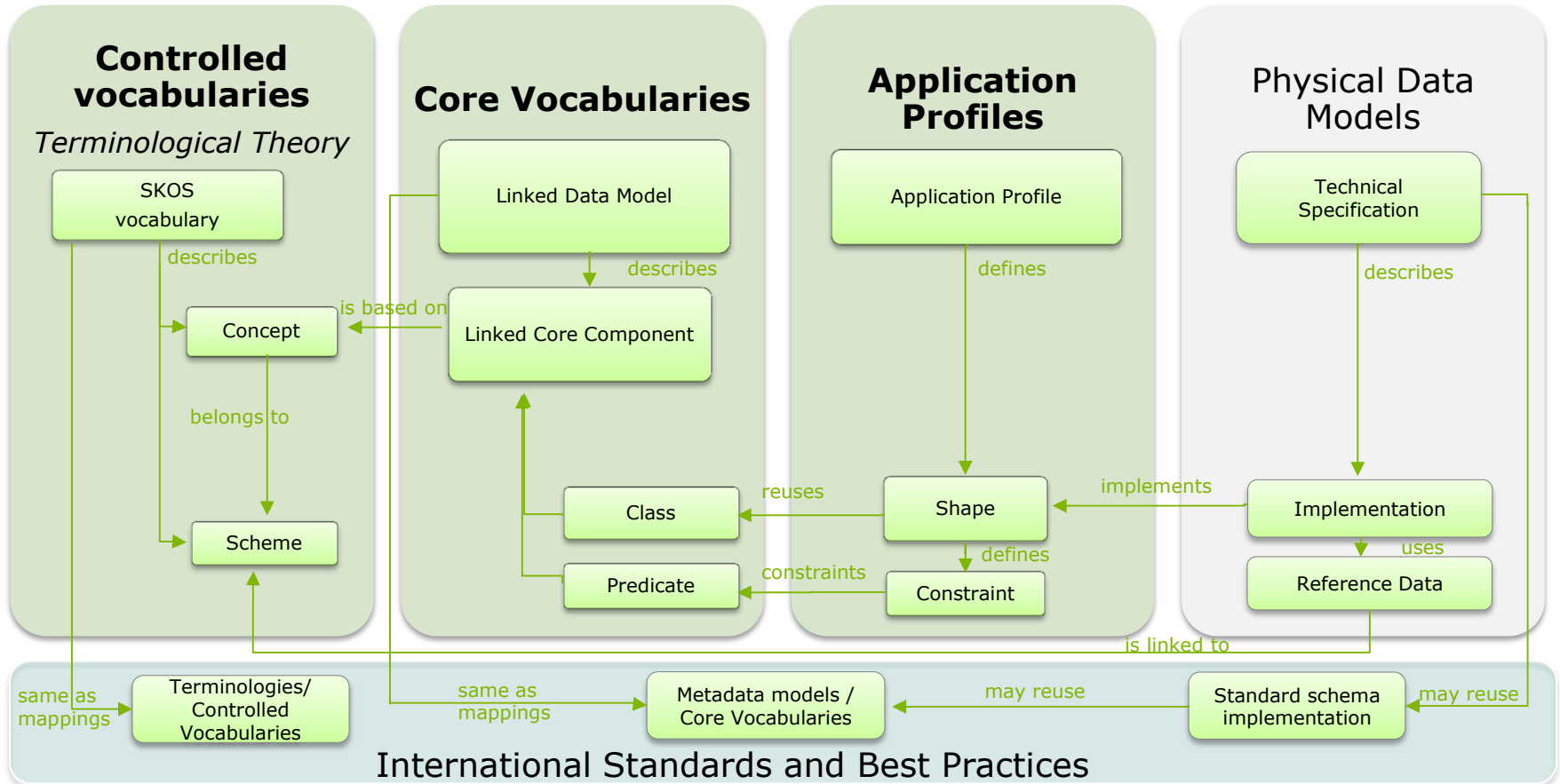
#SEMIC2018

@EU_isa2



European Commission

The Method in a Nutshell

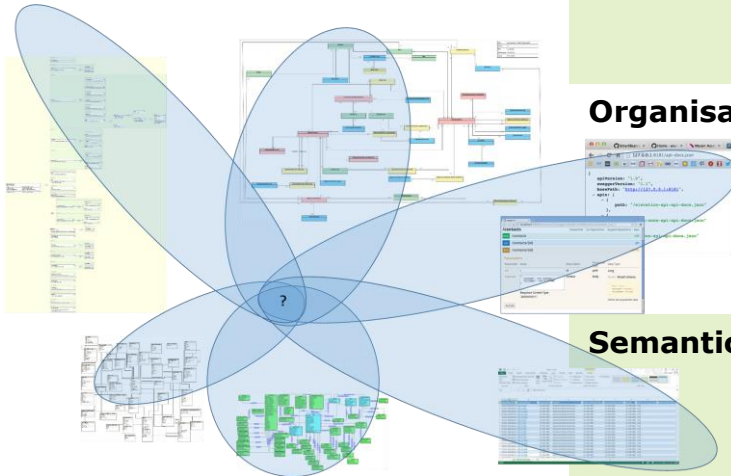


#SEMIC2018

@EU_isa2



Promotes Interoperability on all its Levels



Legal Interoperability

Act on Information Management Governance in the Public Sector (2011) >> Information Management Act (into force 2019)

Possibilities to support “vertical” semantic interoperability by providing semantic resources suitable both for law drafting and ICT development

Organisational Interoperability

From duplication of effort to consistent workflow and use of shared platform as a support service

Decentralised governance model and responsibilities

“Circular metadata economy” – boosting trust on resources others have produced & fellow-modellers

Semantic Interoperability

Method to define technology independent documentation for all type of data representations

Method to define data semantics by systematic use of terminological concept analysis (ISO 704)

Technical Interoperability

Support for bridging (semantic) data content documentation with (JSON & XML) technical schemas



European Commission

Planned Governance Model

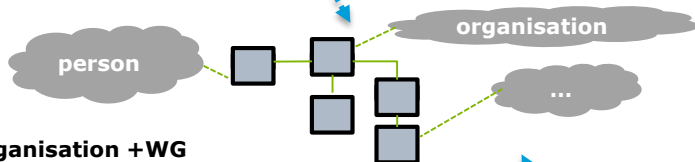


International level

EU Core Vocabularies

Thematic Vocabularies

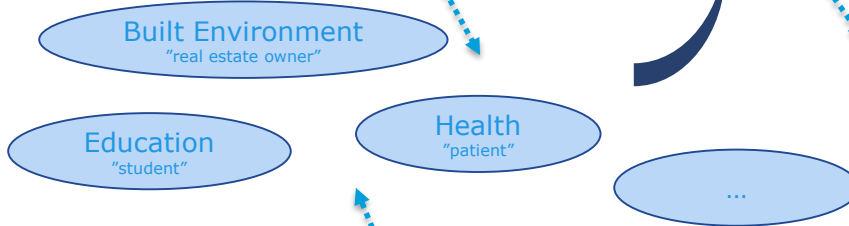
National level
(Core Data Vocabulary + Terminological Vocabulary)



Steering: Ministry of Finance
Operational work: responsible organisation + WG

generalised harmonised

Cross-organisational level
(Thematic Core Data Vocabularies + Terminological Vocabularies *N)

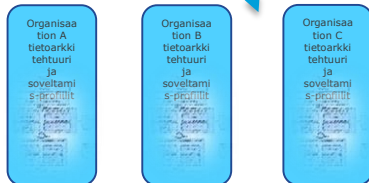


Steering: Ministries
Operational work: responsible organisation + collaboration groups/players/WGs

Applying rule: "No resource without administrator"

Organisational level
(Application Profiles, Technical Specifications)

applied, specified harmonised



#SEMIC2018
@EU_isa2



Questions?



European
Commission



SEMIC 2018

Suvi Remes

Senior Adviser, Ministry of Finance

firstname.lastname@vm.fi

@SuviRemes



#SEMIC2018

@EU isa2

Initiative supported by the ISA² Programme