

# The social factor in European semantic reusability

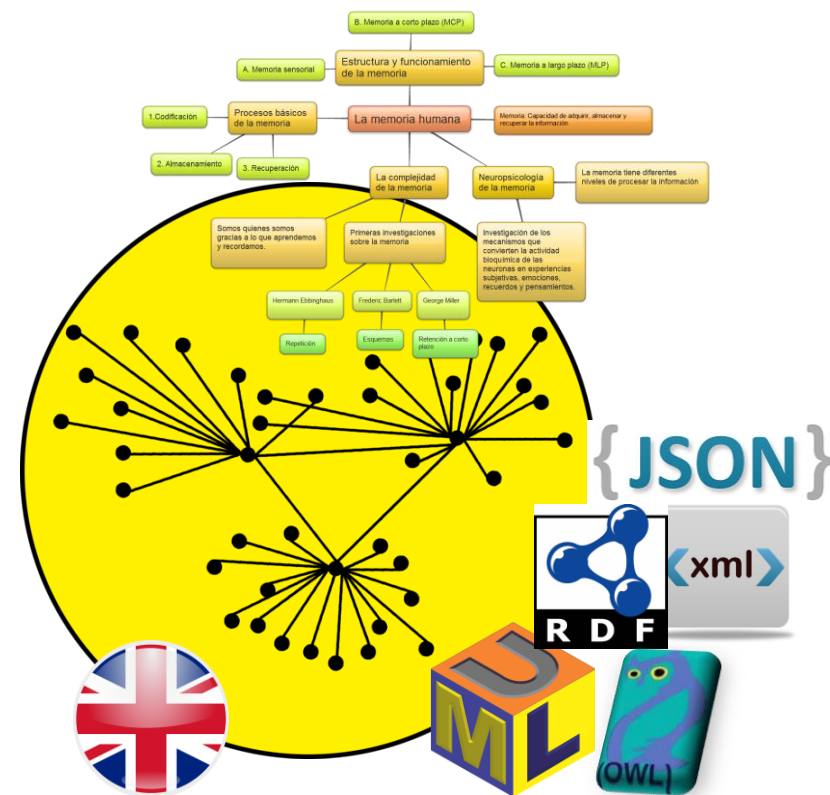
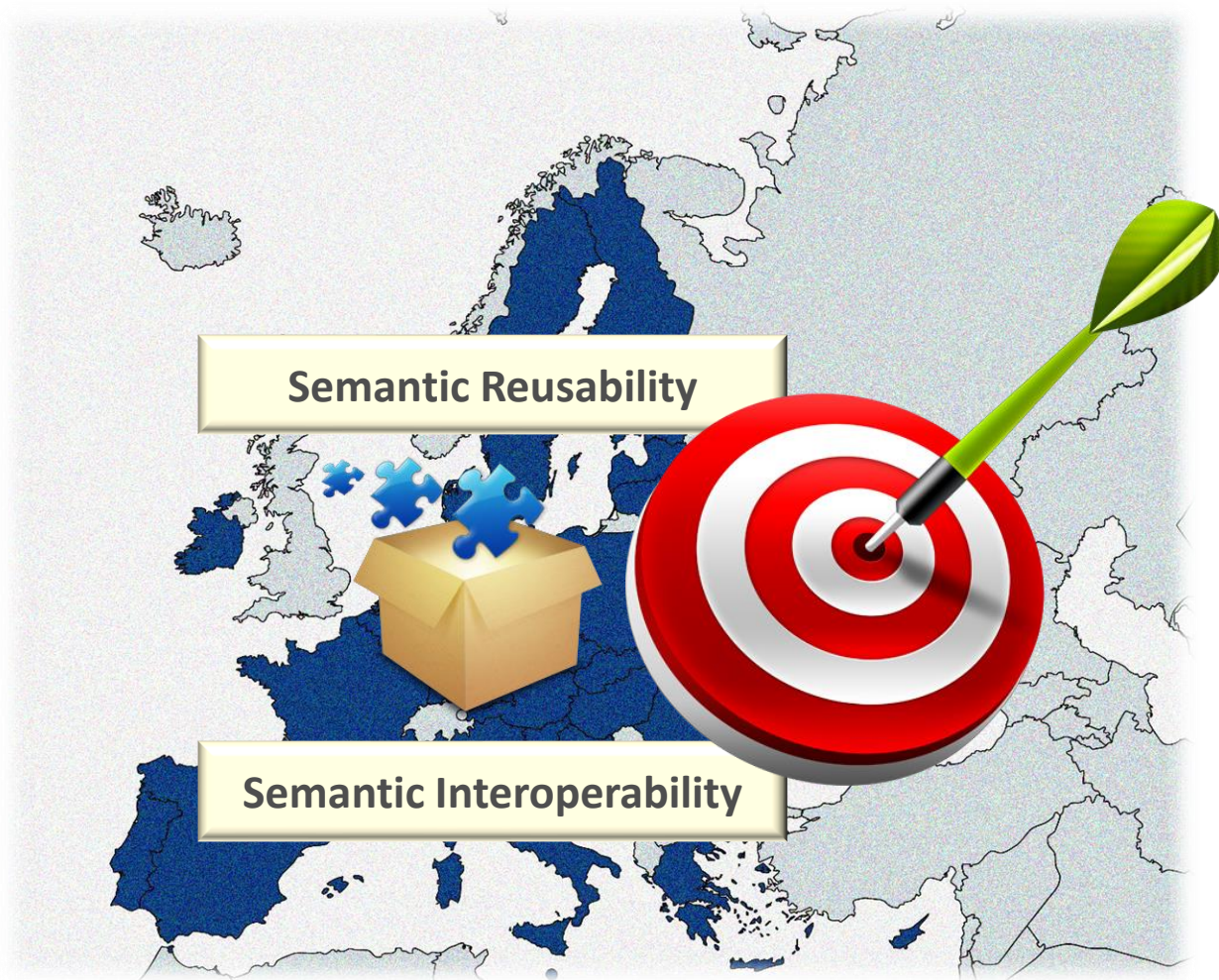
EU wide registry of public sector semantic models

*SEMIC Pre-Conference Workshops*

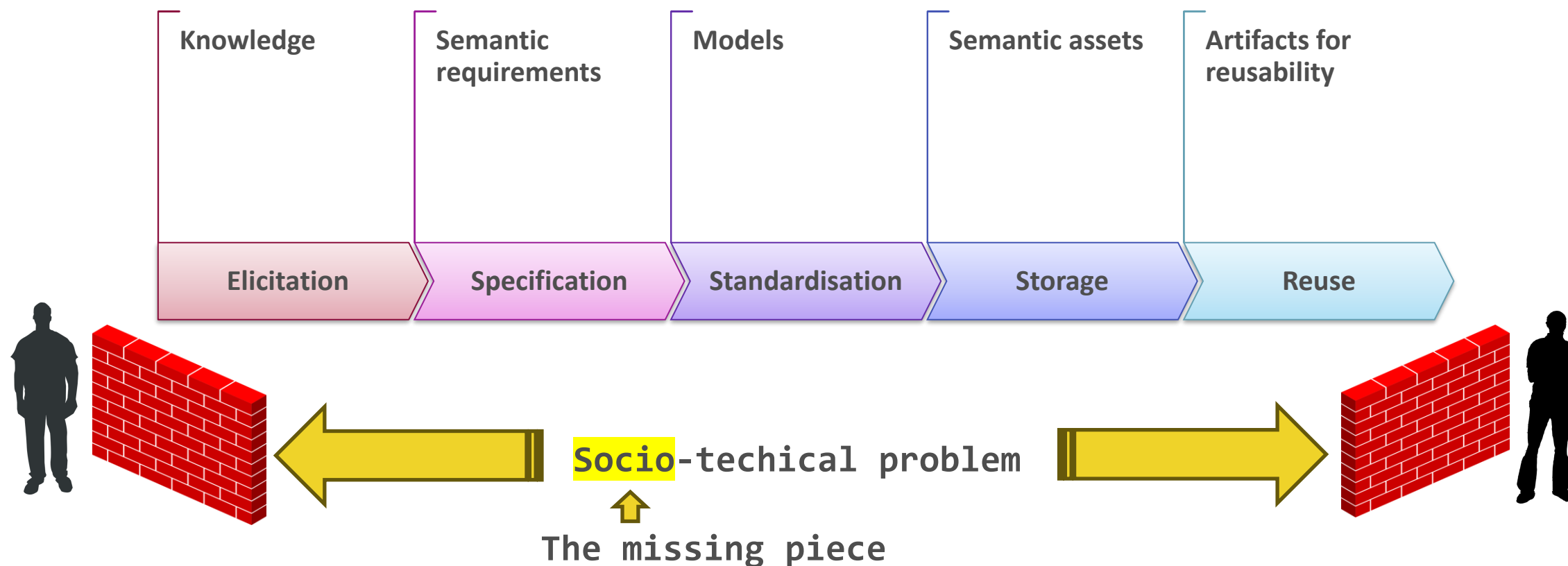
October 17, 2023



# WHAT WE HAVE IN MIND: THE SEMANTIC EXPERT VISION



# WHAT IS THE SEMANTIC WORK ABOUT





# EXPERTS ON THE KNOWLEDGE DOMAIN OF PUBLIC SERVICES



- Diversity of:
  - Languages & Concepts
  - Cultures & Legal frameworks
- English as common language
  - Not native language (mostly)
  - Nuance issues
  - Accuracy issues
  - Bigger misunderstandings
- Psych-sociological issues
  - Human biases
  - Elicitation issues
  - Onboarding and commitment issues
- Little to no EU harmonisation of the knowledge domain
- Experts on the national context
  - Laypeople in other contexts
  - Laypeople in semantics

New  
knowledge

Existing  
knowledge

# EU-WIDE ELICITATION FRAMEWORK FOR THE PUBLIC SERVICE KNOWLEDGE DOMAIN



## Methodology

Socio - technical  
European - national  
Agile – Structured  
Collaboration – Traceability  
Elicitation - Creation



## Outcomes

Accuracy  
Contextualisation  
Multilingualism  
Versioning  
Findability

# OBSTACLES IN DISCOVERY OF REUSABLE SEMANTIC ASSETS



- Huge amount of assets
- Asset scattering
- Overlapping of concepts
- Context/country-dependent meanings
- Labels and descriptions in different languages
- Lack of accuracy on meaning description
- Lack of metadata at every level of an asset
- Findability of proper semantic assets
- Semantics as barrier for domain experts
- Semantics as barrier for IT developers

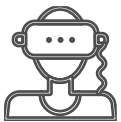
# ToDo FOR DISCOVERY OF REUSABLE SEMANTIC ASSETS



Multilingualism  
for labels and  
descriptions



Rich metadata  
for assets and  
their elements



Metadata  
Multilingualism  
Linked-data

## ARTIFICIAL INTELLIGENCE

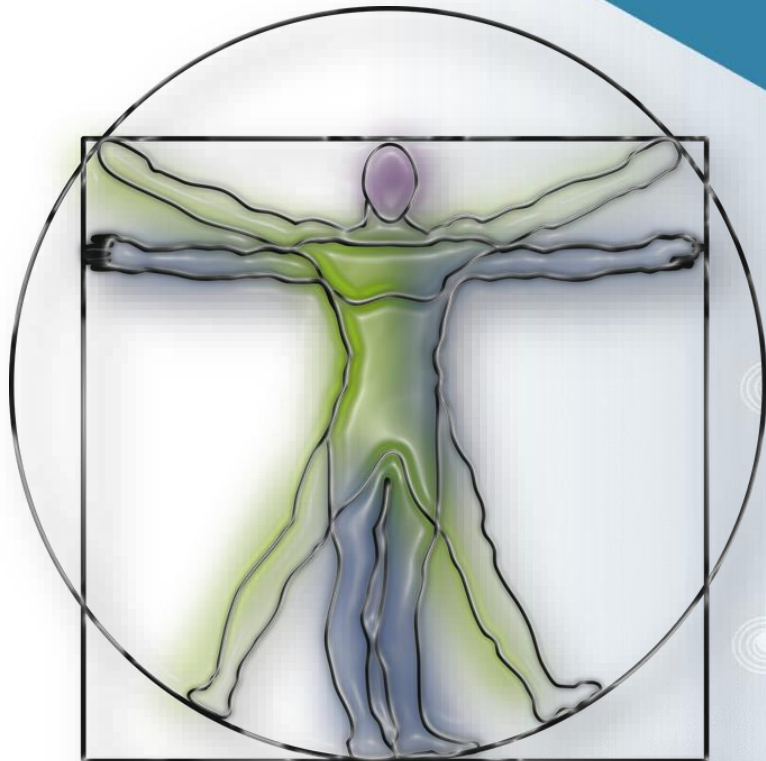
Guided machine  
learning

Generative IA

Code generation



Discovery  
Reusability



# HUMAN-CENTRED TECHNOLOGIES

## Thank you for your attention

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Ministry of Economic Affairs and Digital Transformation



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