The BDVA Note on Dataspaces and Interoperability

Rigo Wenning
ERCIM/W3C Legal counsel
rigo@w3.org

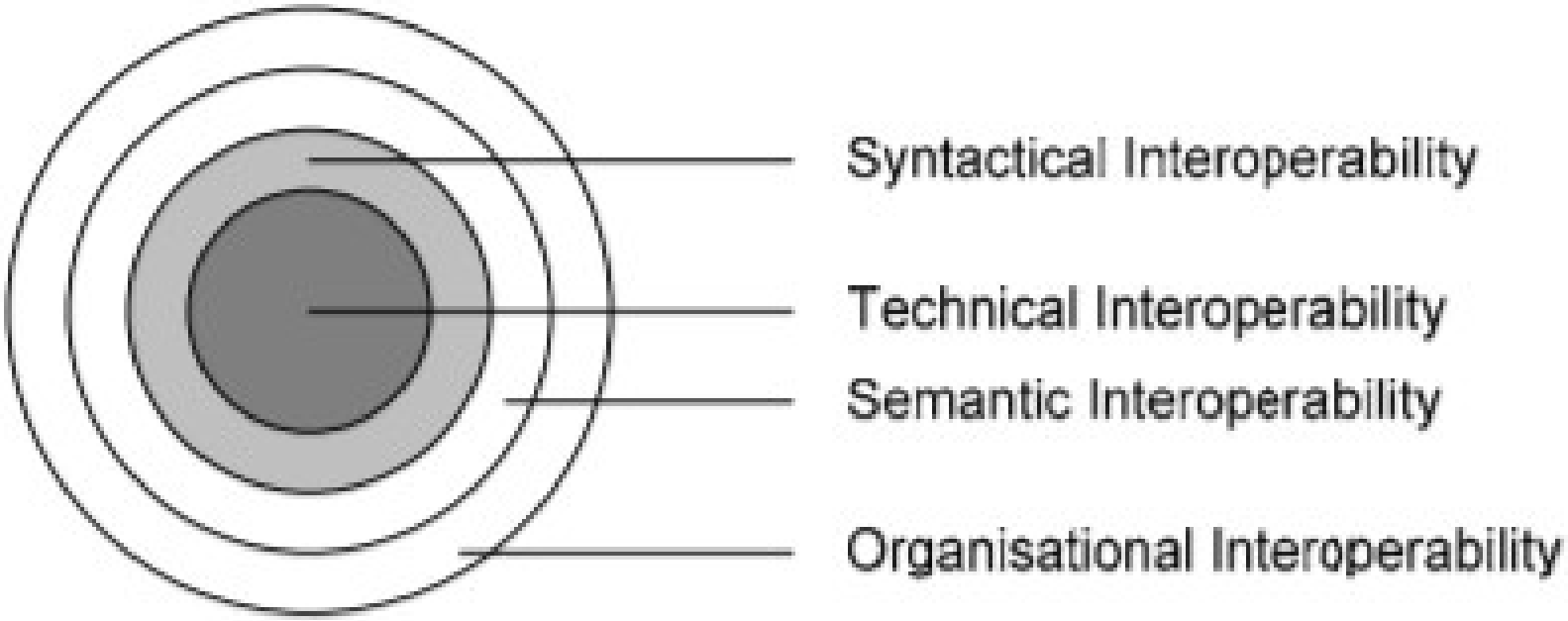
Standards are wider than interoperability

- Standards are about competition
- Standards can be technical Specifications
- Standards can also be on management and processes
- Standards can be the basis for certification
- But it is not excluded that Standards are about interoperability

Challenge: Combining Data from everywhere

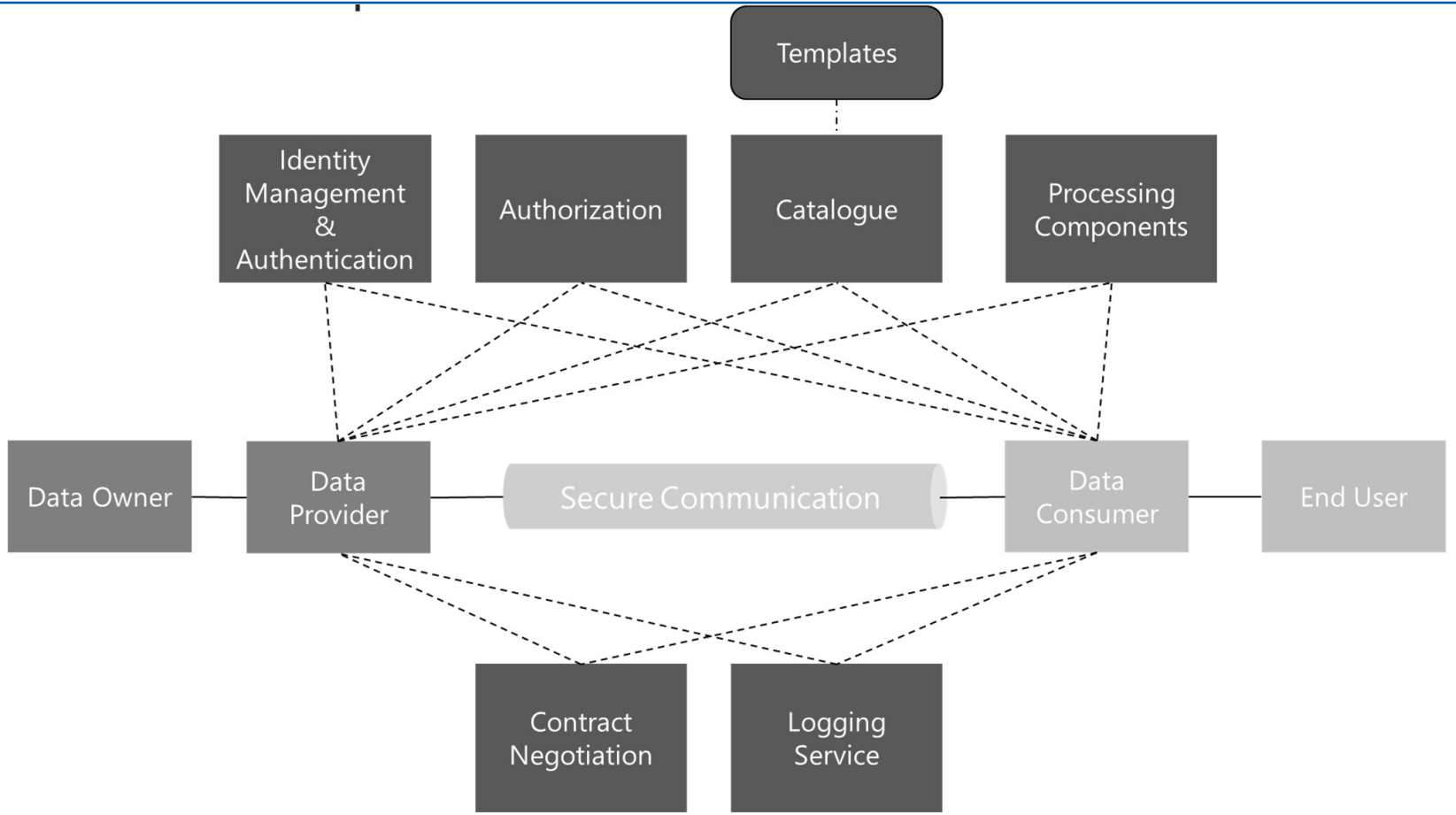
- Production
- Retail
- Profile Information
- News feeds
- Life cycle management

Interoperability



Stolen from Franck Bossière

Dataspaces in a nutshell

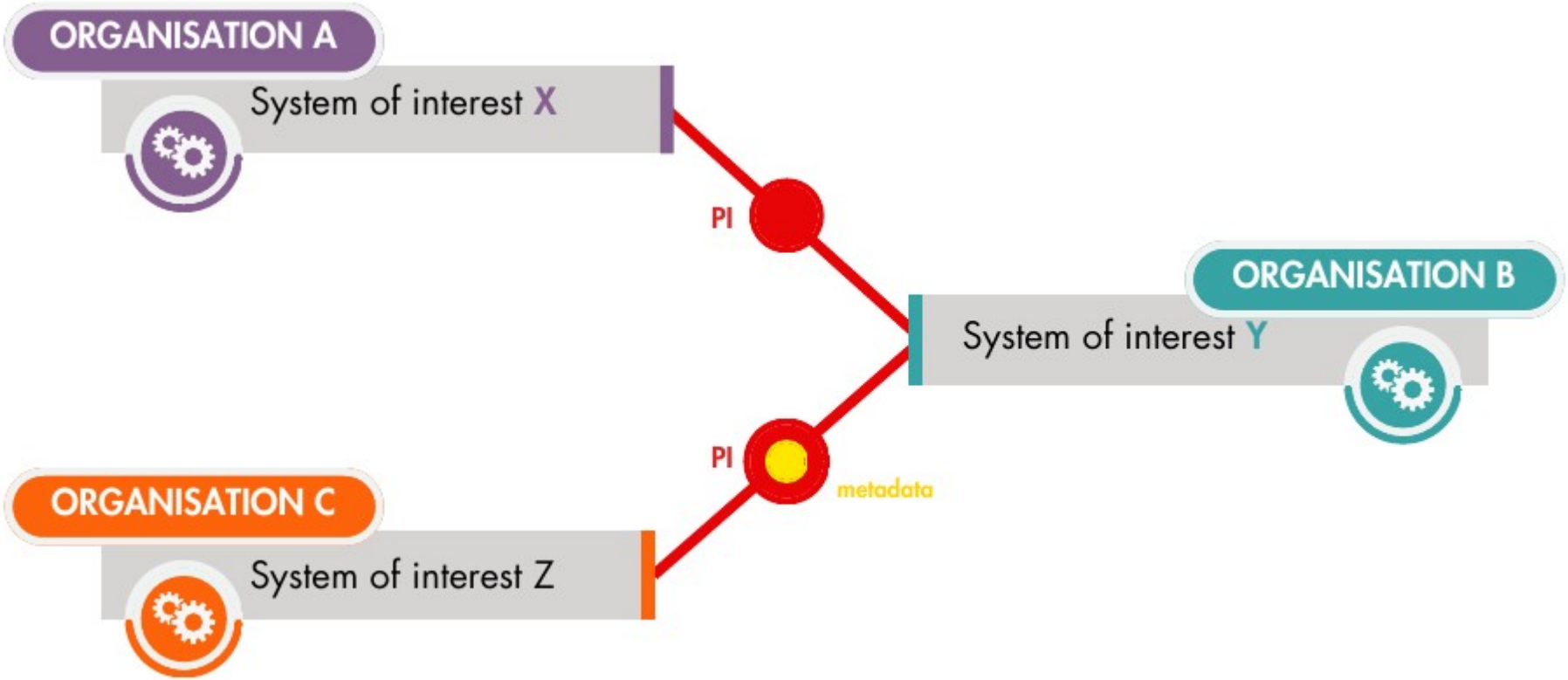


Wanted: Automatic data import

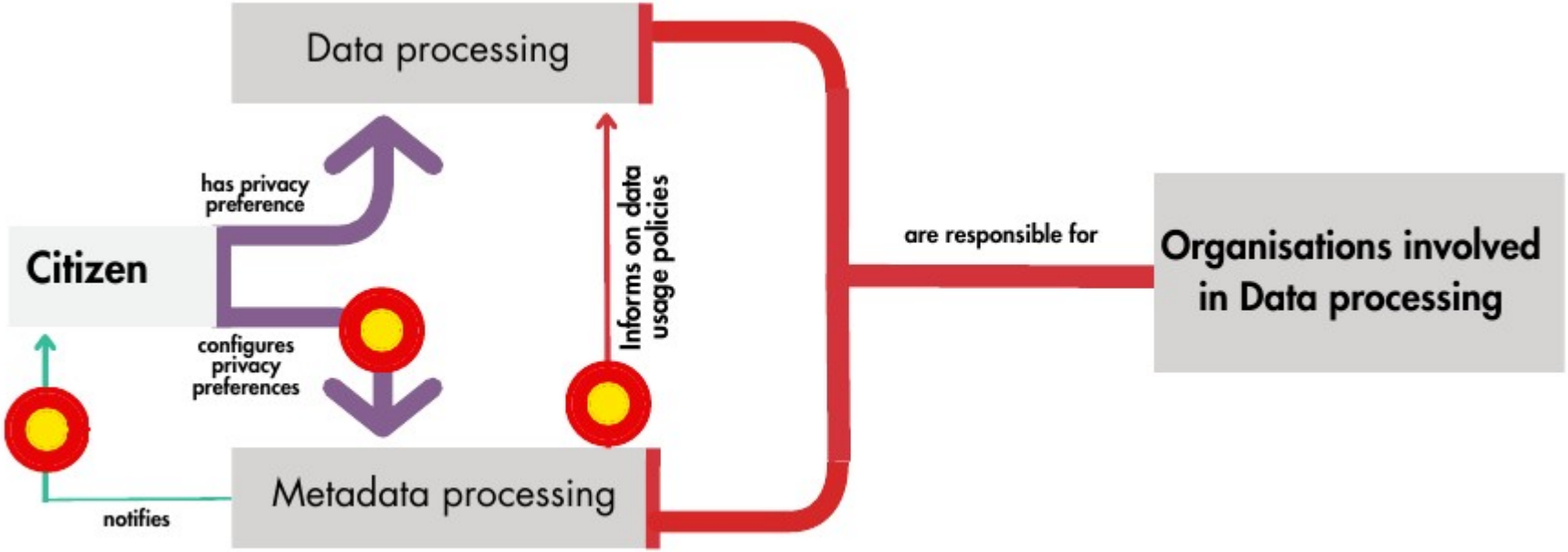
- Context
- Usage data
- Constraints
- Certifications

Challenge: Variety of input-data can be met with Dataspace Connectors or Linked data

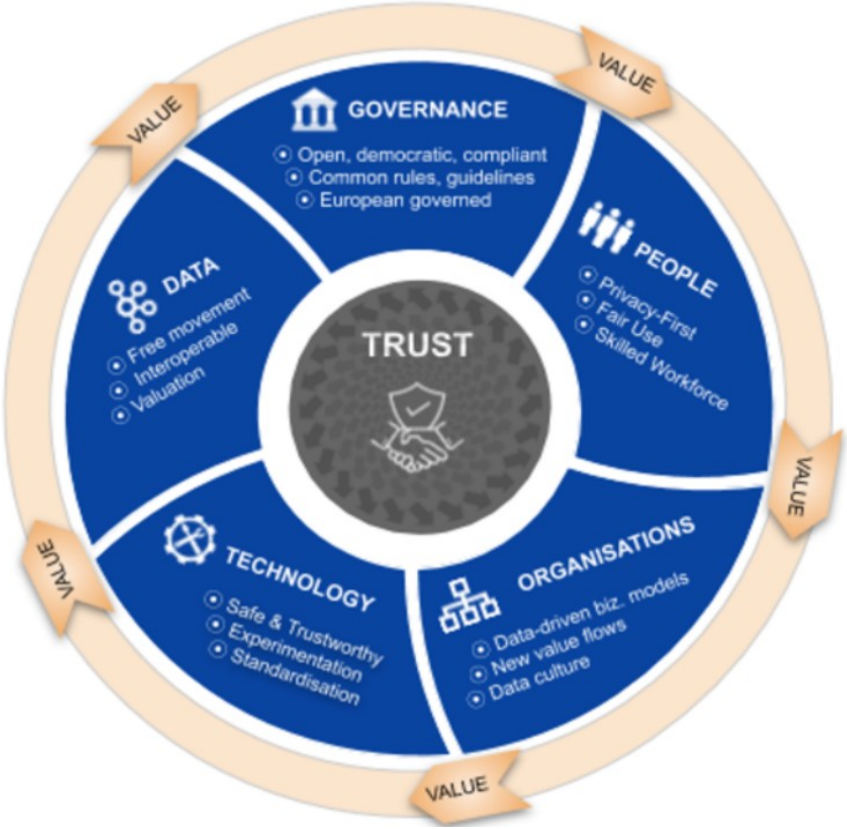
Concept: Point of Interoperability



An Analysis for Data protection

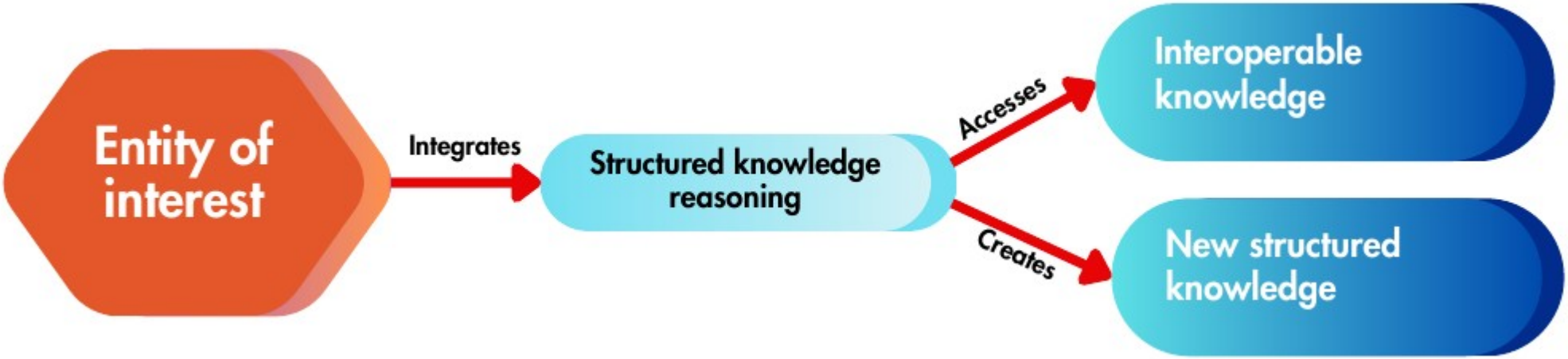


Metadata is essential



- For compliant reuse
- To mix own with other data without losing control
- To have more than 1-2-1 Relations

From Data economy to Knowledge Economy



- Requires
  - Dataspace connectors
  - Interoperability layer for multi-dimensional relations

Use cases

- Smart cities
- Digital Twins
- Cyberphysical Systems
- Artificial Intelligence
- IDSA
- Gaia-X
- FIWARE
- Achievements of research projects

Challenges

- Collaborative Work on :
  - Ontologies, Vocabularies, Semantics
  - Minimum data points in Verifiable Credentials
  - Standardising DID methods for data exchange
- Avoiding the unification trap
  - Life has to much variety for unification
  - New things come up and need integration without roll-out