



omega-x



**Orchestrating an interoperable sovereign federated Multi-vector Energy data space built on open standards and ready for GAia-X**

# Helsinki Workshop

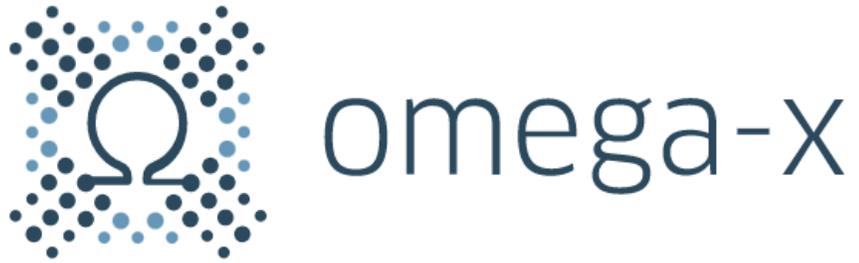
May 28th 2024

## A Glimpse of Europe Innovation

An ontology development  
methodology for Smart Energy

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**START**  
05/2022



**FUNDING**  
8M€

**END**  
04/2025

**LEADPARTNER**  
Atos

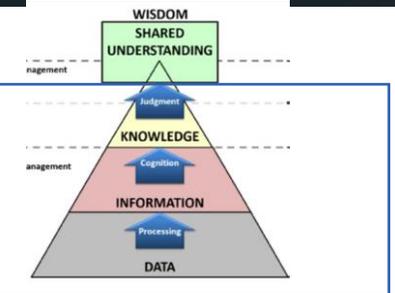


**PARTNERS**  
30



## Purpose

To ensure that data providers and service providers in Omega-X data space have a **common understanding** of shared datasets.

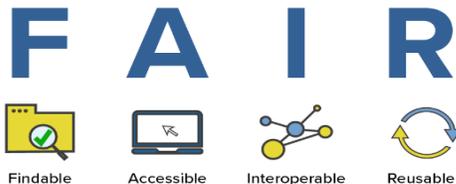


## Drivers

- ✓ Conformance to energy domain **standards** (IEC CIM, IEC 61850,...)

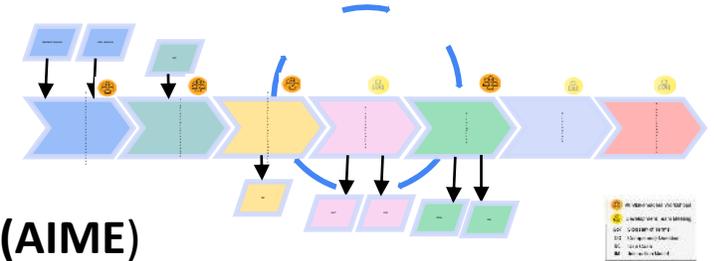


- ✓ Support of **FAIR** data principles (Energy Data Act)

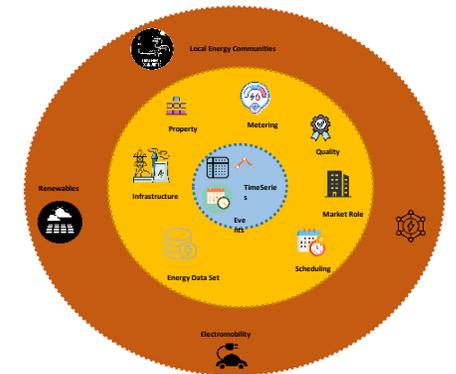


## Achievements

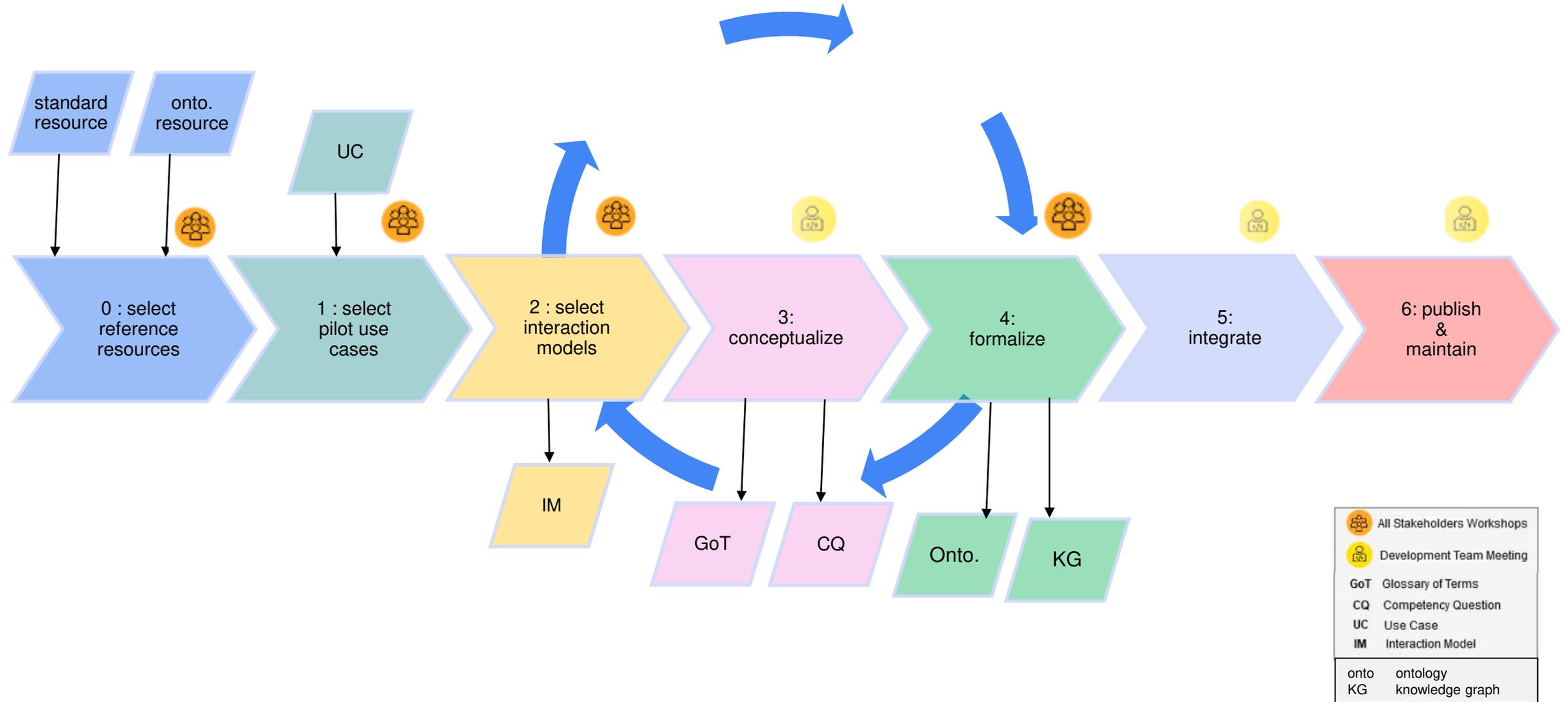
- ✓ **Agile Interaction model-based Methodology for Energy dataspaces (AIME)**  
An agile methodology focused on use case requirements.



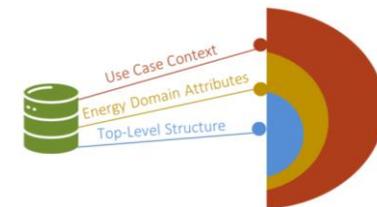
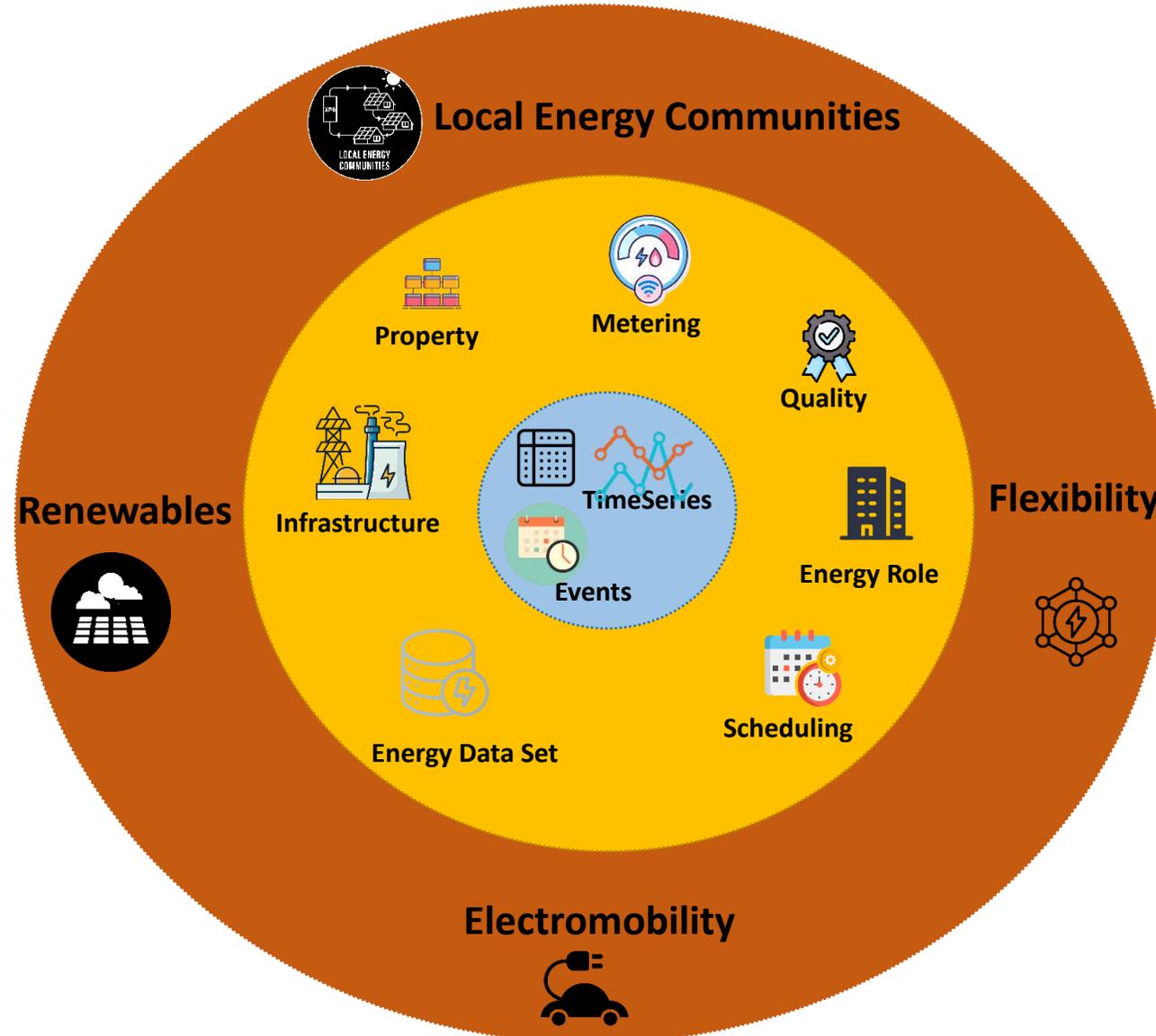
- ✓ **Common Semantic Data Model (CSDM)**  
A knowledge representation organized in multiple dimensions.



# Agile Interaction Model based Ontology Development Methodology (AIME)



- 12 ontological modules
  - 8 common modules shared by all UC Families
  - 4 specific modules dedicated to each UC Family



## For more detailed information

AIME and CSDM published on [omega-x.eu/](http://omega-x.eu/)

CSDM modules available on [w3id.com/omega-x](http://w3id.com/omega-x)

## Four Interoperability levels

### Intra-UCF

4 modules dedicated to  
Omega-X Use Case Families

REN, LEC, FLEX, EM

### Inter-UCF

8 common modules to  
support a shared access to  
all datasets:

ETS, EDS, PROP, INFRA,  
ROLE, EME, SCHED,  
QUAL

### Sister Projects

Exchange about AIME and  
CSDM with Enershare,  
Eddie ...

AIME, CSDM

### Standards

Semantization of data  
models: IEC CIM, IEC  
61850, IEC DLMS-COSEM

Alignment with reference  
ontologies: seas, saref

Implement recommendations  
of IEC SRD 63417



Thank you very much for your attention.  
Questions?