



# int:net

Interoperability Network for  
the Energy Transition

# Creating the conditions for interoperability in Europe

**Antonello Monti**

Fraunhofer FIT – Center for Digital Energy

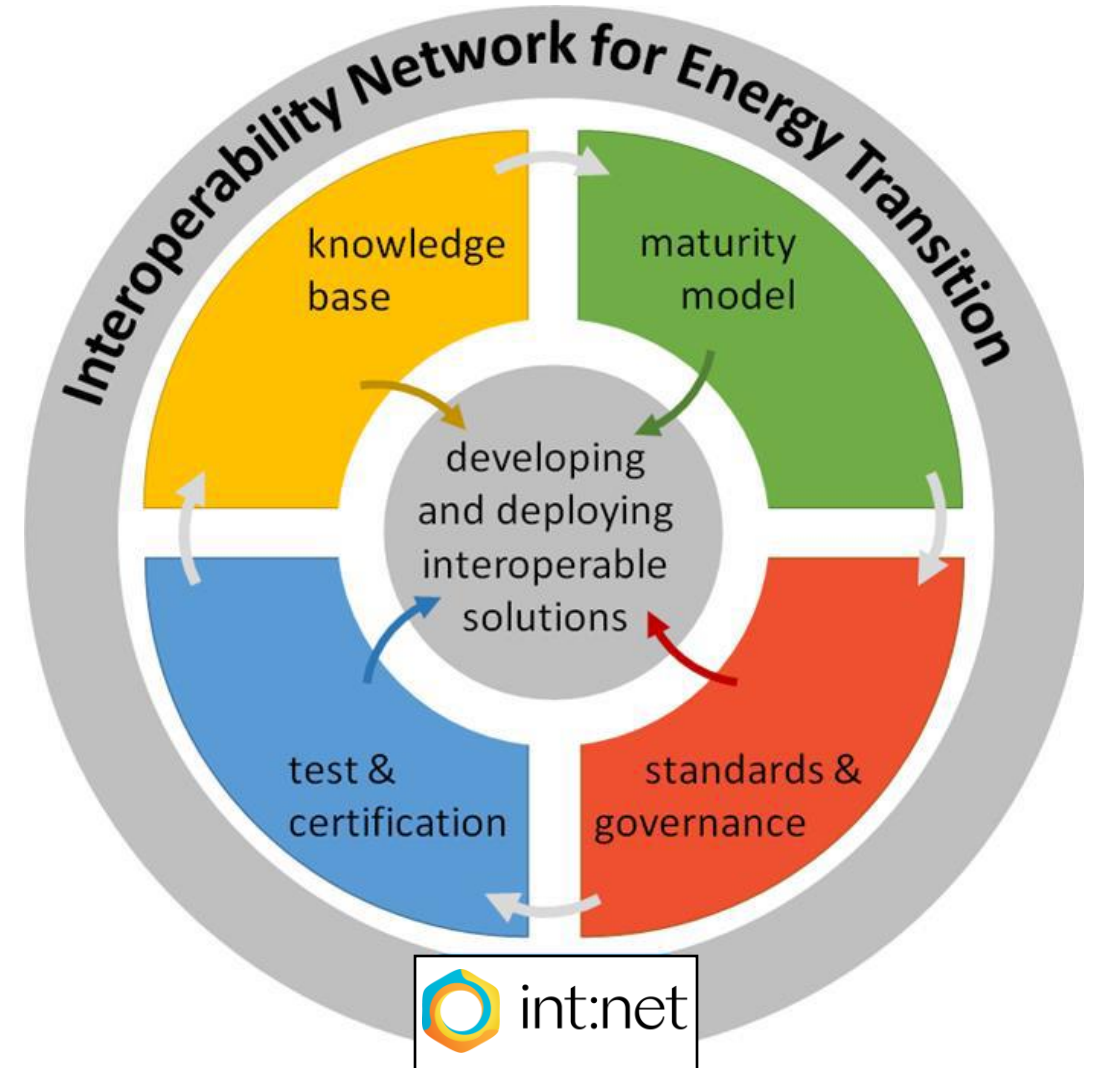
Aachen, Germany



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101070086

## Project objectives

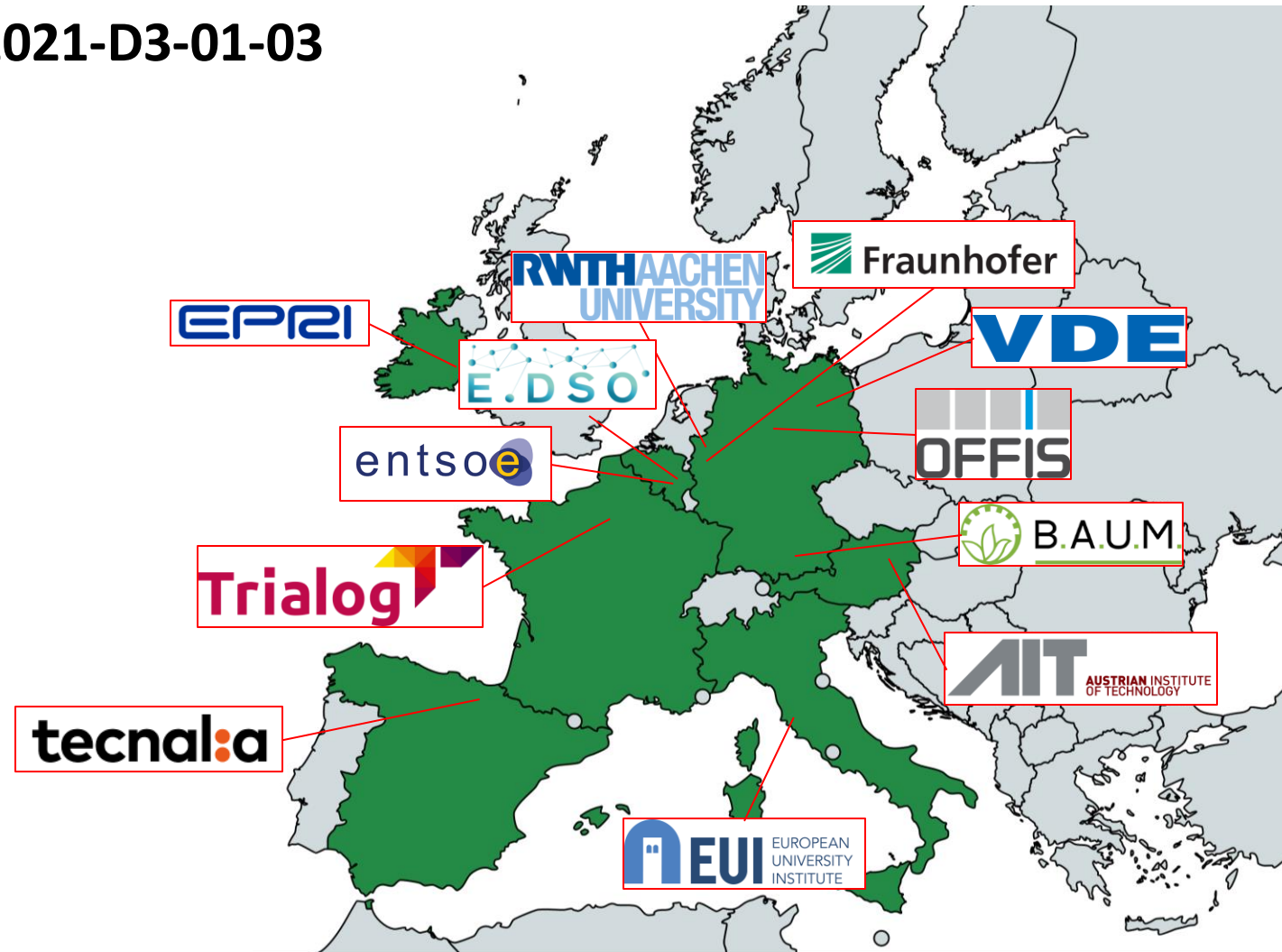
- Consolidating a common knowledge base for interoperability activities on energy services in Europe
- Developing a comprehensive and accepted Interoperability Maturity Model (IMM)
- Deploying a framework for interoperability testing in a network of interoperability testing facilities
- Fostering a community network of standards and regulatory environment for a European interoperability ecosystem



# int:net - Interoperability Network for the Energy Transition

- **Horizon Europe call HORIZON-CL5-2021-D3-01-03**

- **Coordination & Support Action (CSA)**
- **Duration:** 36 months
- **Runtime:** 01.05.2022 – 30.04.2025
- **Consortium: 12 Partners**
  - 7 Countries
  - 1 Associated Partner
- **Budget: 5 M€**



# Energy data spaces projects cluster & ecosystem

Energy Data Spaces Projects



Enershare




DATA CELLAR



EDDIE  
EUROPEAN DISTRIBUTED  
DATA INFRASTRUCTURE  
FOR ENERGY



omega-x



SYNERGIES



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gaia-x



DATA SPACES  
SUPPORT CENTRE

And other CSAs:



GREAT  
Green Deal Data Space



PrepDSpace4Mobility

Energy Interoperability  
Task Force

INTERNATIONAL DATA  
SPACES ASSOCIATION

Position paper in October  
2023



ETIP SNET  
PLAN. INNOVATE. ENGAGE.

Report on data spaces  
deployment

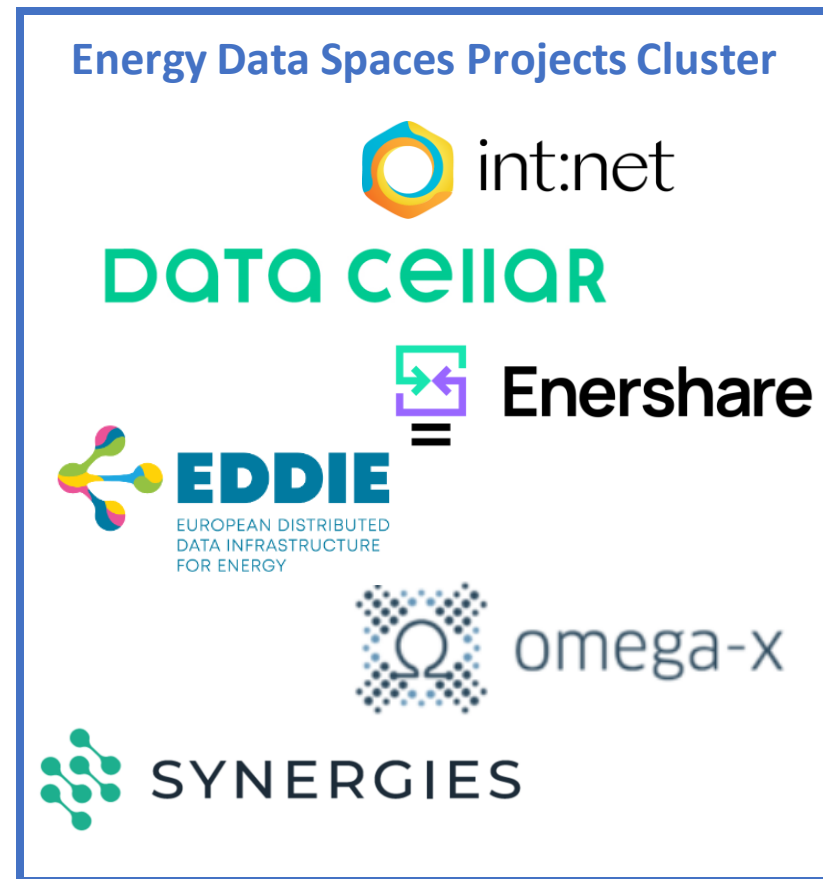
Data Management WG  
+ other WGs



bridge

## Objectives of energy data spaces projects cluster

- General objective: pilot innovative solutions to prepare the ground and building blocks for deploying the common European energy data space.
- Specific cluster objectives :
  1. Priority use cases including roles and scope of data sharing
  2. Target data sets (i.e. what data and metadata should be made available in the common energy data space) and the respective providers of data.
  3. Common building blocks (e.g. standardized market roles, identification and authentication arrangements, data traceability, data sharing and reuse arrangements)
  4. Interoperability requirements (e.g. data models and formats, open APIs, protocols)
  5. Key data hubs/platforms that should be federated.
  6. Drive consensus across key stakeholders on defining the governance arrangements, and (where appropriate) investment needs.



## ETIP SNET report on Energy Data Spaces

- ETIP SNET Working Group 4 “Digitalisation of the electricity system and customer participation”
- Scopes of the policy paper:
  - Assessment of the **current status of evolution** of Energy Data Spaces
  - **Policy and regulation recommendations** to facilitate the large deployment in Europe
- int:net coordinates with the Energy Data Spaces HEU projects: (i) the key challenges and (ii) the policy and regulation recommendations
  - Survey to collect also external inputs



ETIP SNET  
PLAN. INNOVATE. ENGAGE.



ETIP SNET

European Technology and Innovation Platform  
Smart Networks for Energy Transition

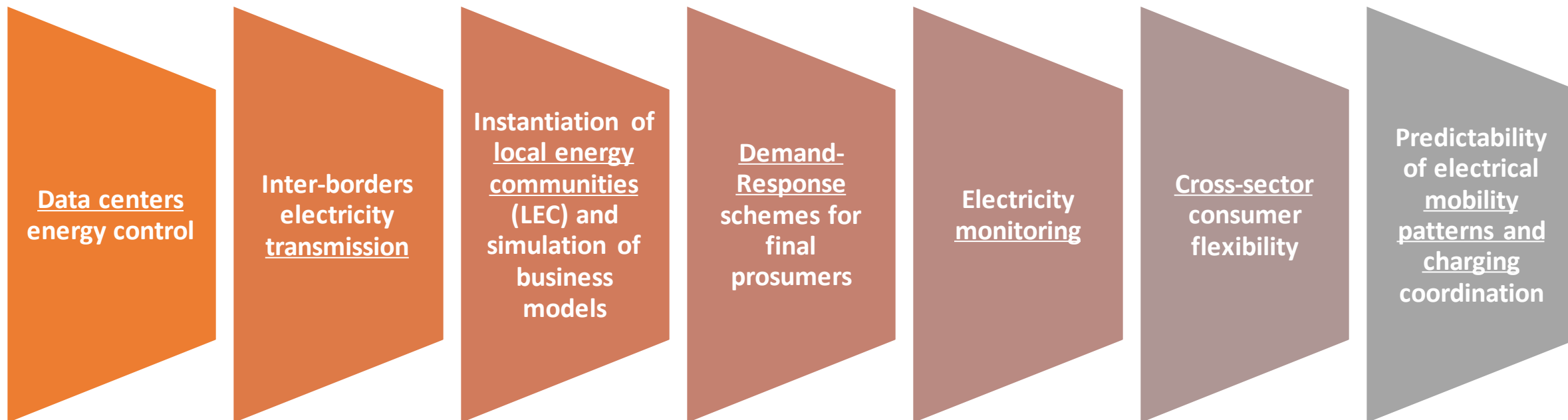
WG4  
Policy paper on  
Energy Data Spaces

## Use cases from the ETIP SNET report

### Main categories:



### Some of the addressed use-cases:



## **Foster harmonization of mechanisms, ontologies and standards**

Most of the functionalities are covered by existing various data models: effort in aligning them

## **Federation of data spaces in the ecosystem**

Interoperability of different (sub-)data spaces and dockerized services and applications

## **Regulation for the functioning of data markets.**

- Accessibility to smart meters data (EU directive 2019/944 to be put in place)
- Differences among member states → common minimum regulatory framework

## **Long term maintenance of data spaces**

Measures for risks, e.g. abandonment of a key actor

## **Data valorization challenges: seamless incentive mechanisms and data markets covering B2B and B2C scenarios**

Monetary and non-monetary, social sciences and humanities (SSH)



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## News and material from int:net project:



<https://intnet-project.eu/>



<https://www.linkedin.com/company/int-net-project/>



[info@intnet-project.eu](mailto:info@intnet-project.eu)



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