

BDTs and Smart Grids – How to connect both worlds

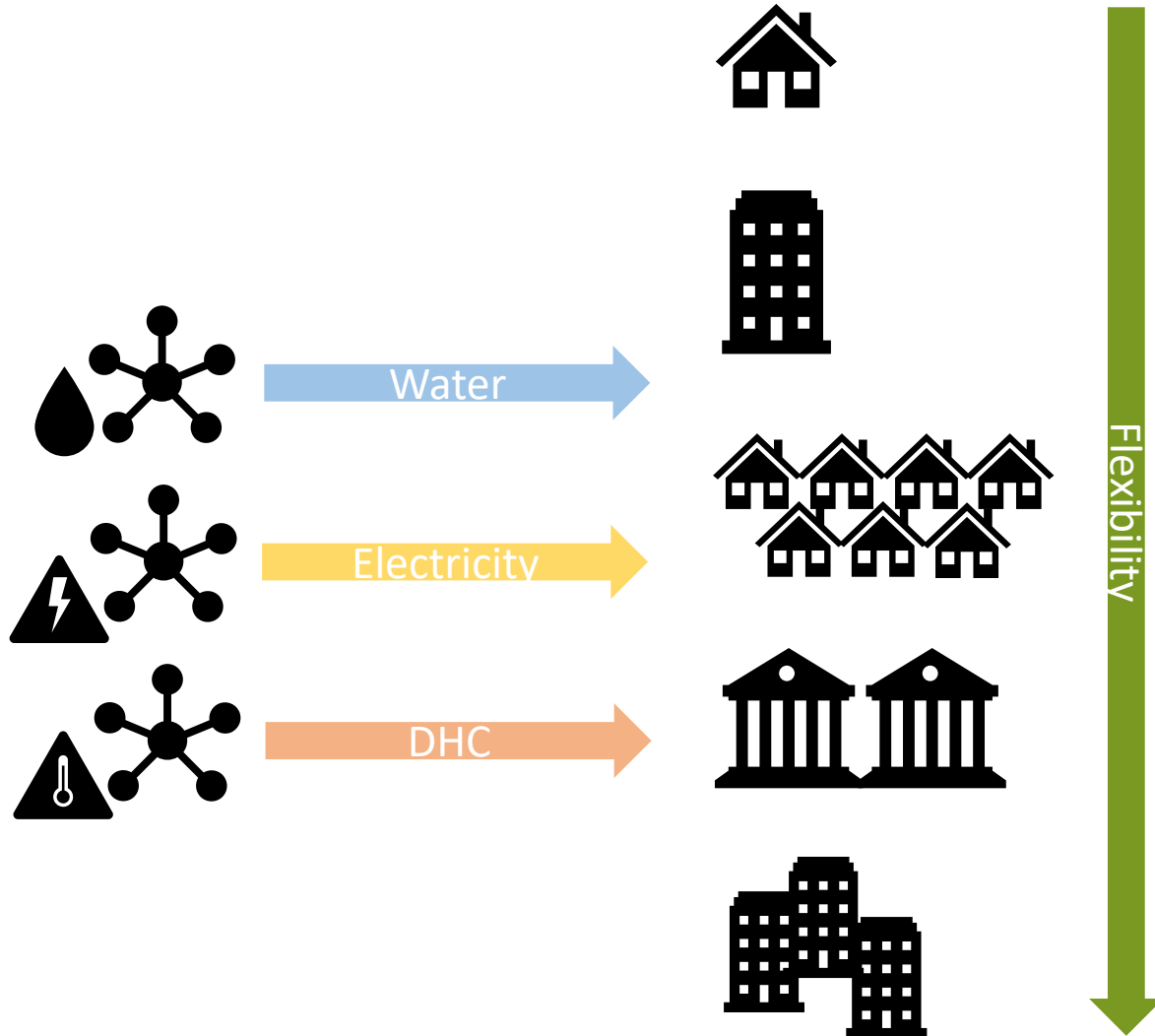
Javier Valiño

Head of Energy, Climate and Decarbonization Unit
Atos

ORGANIZED BY:



THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S H2020 PROGRAMME UNDER GRANT AGREEMENT NO. 820805.



1. P2P (with and without auctioning)
2. Load Demand Side Management
3. DSO Flexibility Services
4. Social Energy Supply
5. Energy Storage
6. Control of power Exchange
7. Electric Vehicle

Data and Services MARKETPLACE

Identity

Vocabulary

Discovery

Maintenance

Connector

Building

Connector

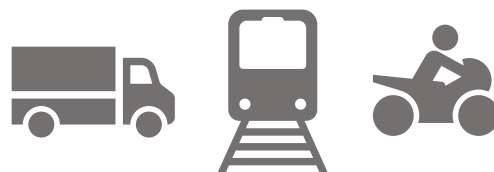
MOBILITY

Connector

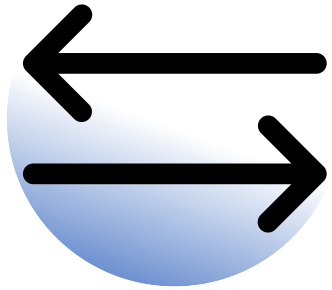
AGRIFOOD

...

ICT Ingestion Engine



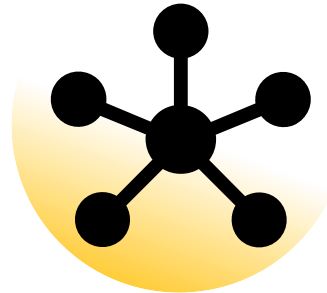
Data Flow



Data can Flow within the EU and across sectors

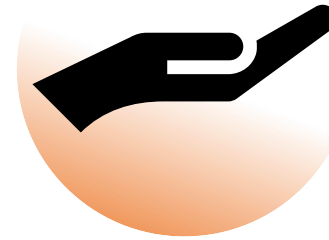
Free Flow of non-personal data regulation

Availability of high quality data to create and innovate



Quality

EU values



European rules and values are fully respected

Rules for Access and use of data are fair, practical and clear.

Clear data governance mechanisms are in place



GDPR

Where we are and where to go [Source: acatech IMPULSE]

	7	European system of laws and values	Cybersecurity, cryptography, e-identity, EU certification (consumer protection) and standards
	6	Software technology	App development, Office, ERP, AI, middleware, robotics software, blockchain, algorithms, EU open source, VR/AR, QC
Target	5	European Data Spaces	E.g. for mobility, health, public sector, digital public space
	4	Platform-as-a-Service (PaaS)	Application and development ecosystems B2B and B2C (abstraction layer, container technology) QC, AI, IoT
Now	3	Infrastructure-as-a-Service (IaaS)	Virtual, distributed cloud ecosystems, edge technology, QC, AI-HPC centres
	2	Communications infrastructure	Broadband infrastructure, mobile networks (Open RAN), Galileo navigation
	1	Components	Microchips, sensors, actuators, production and enabling technologies, 3D printing, QC, AI
	0	Raw materials and intermediate products	Rare earth elements, ...

Energy

Finance

Agriculture

Health

Industry 4.0/SME

Mobility

Public Sector

Smart Living

Common
cross-domain
requirements



Gaia-X as enabler

Federated Identity Management

Algorithms for data monetisation

Trusted Relationship Management

Data Custodianship as a business principle

Open to adapt of all market participants - and systems

Authorisation and data usage control by the data owner

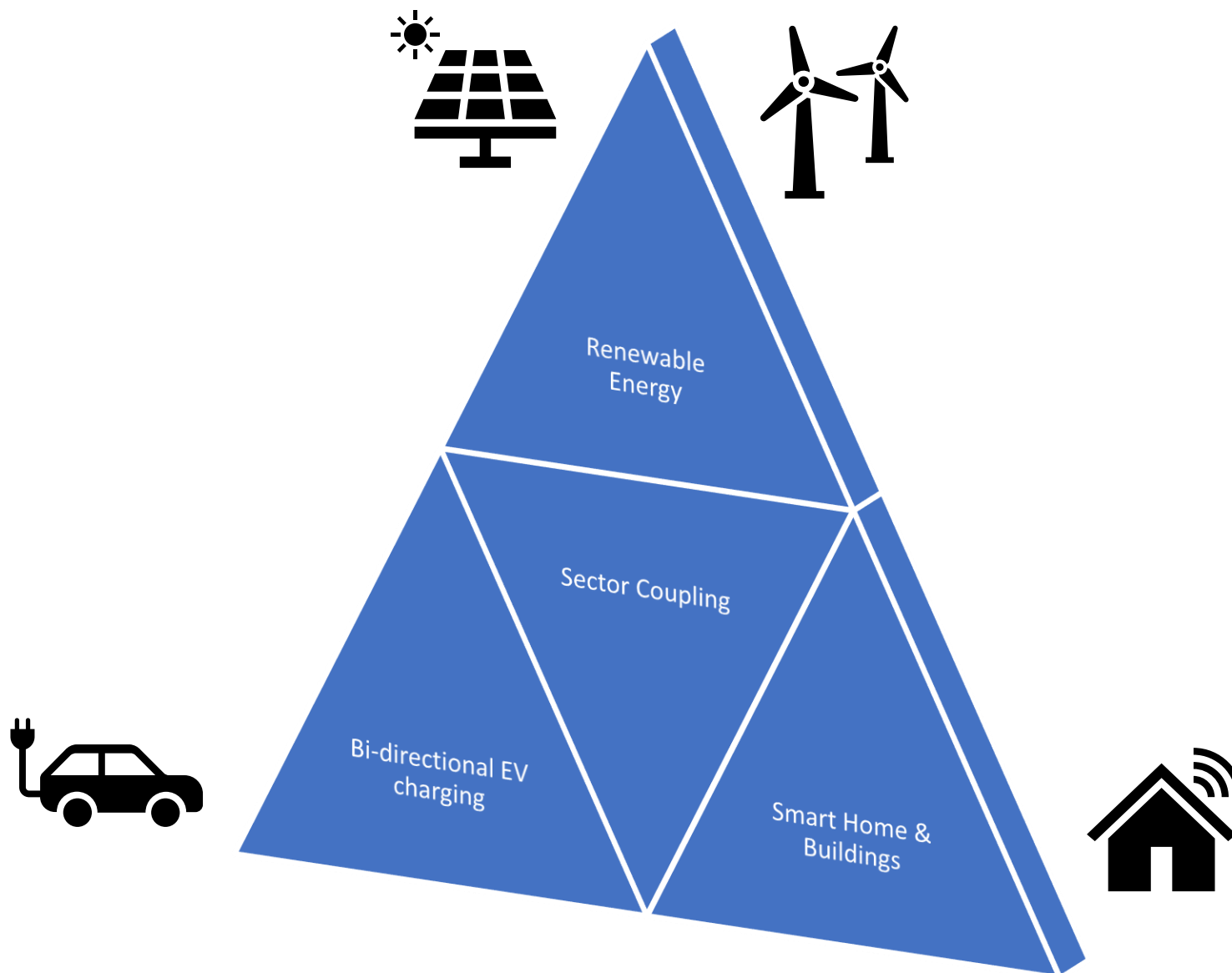
Uniform definition of protection classes for data and services for all participants

Selectable Geography and Legislation for data storage and service offering (locally/centrally)

Hybrid Cloud Scenario through distributed implementation (vertically and horizontally) across many vendors

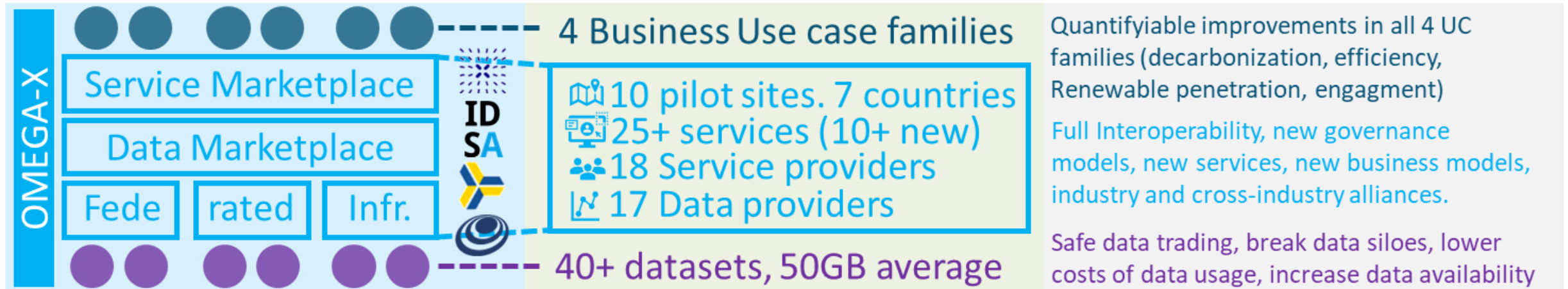
Additional domain-specific requirements

Common shared requirements [Source: Gaia-X]

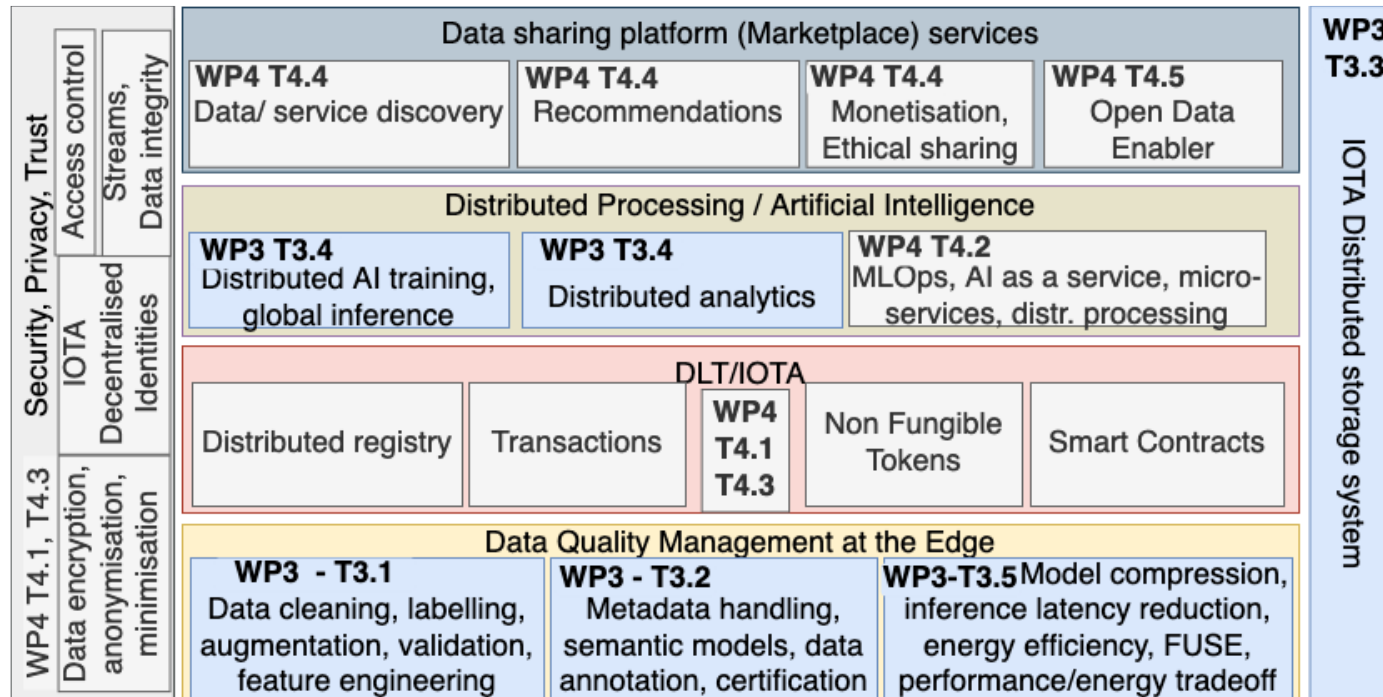




ID card	
Start	05/2022
End	04/2025
Coordinator	Atos
Funding	8M€ (1M€ Atos)
Partners	30



The main goal of SEDIMARK is to design and prototype a secure **decentralised** and **intelligent data and services marketplace** that bridges remote data platforms and allows the **efficient** and **privacy-preserving sharing** of vast amounts of heterogeneous, high quality, certified data and services supporting the common **EU data spaces**.



ID card	OMEGA-X
Start	10/2022
End	09/2025
Coordinator	Atos
Budget	5M€
Partners	13



2ND BUILDING DIGITAL TWIN International Congress

ORGANIZED BY:



**BUILDING DIGITAL TWIN
ASSOCIATION**



SPHERE
BIM DIGITAL TWIN ENVIRONMENT



THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S H2020 PROGRAMME UNDER GRANT AGREEMENT NO. 820805.