



omega-x

tecnal:a

MEMBER OF BASQUE RESEARCH
& TECHNOLOGY ALLIANCE

OMEGA-X Energy Data Space

GAIA-X Lighthouse Project

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



omega-x

Establish the grounds for a common European Energy Data Space
(HEU-CL5-2021-D3-01-01)

START
05/2022



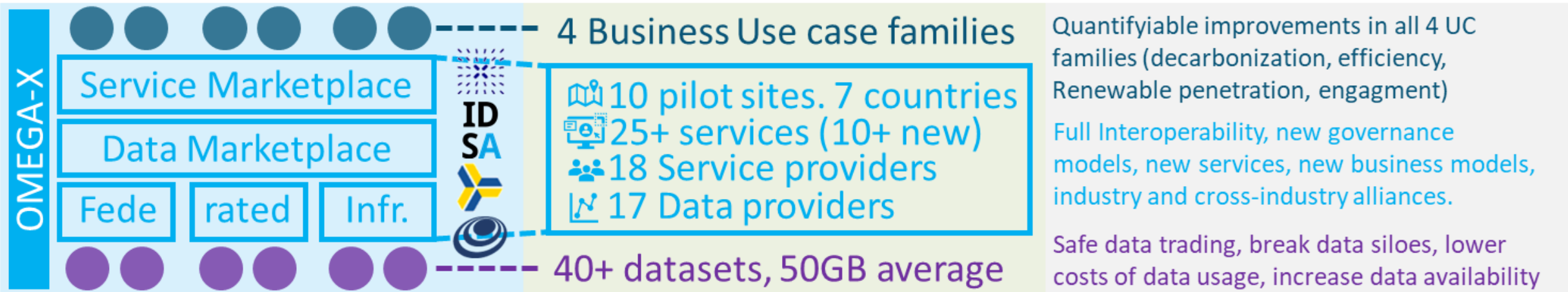
FUNDING
8M€

END
04/2025



LEADPARTNER
Atos

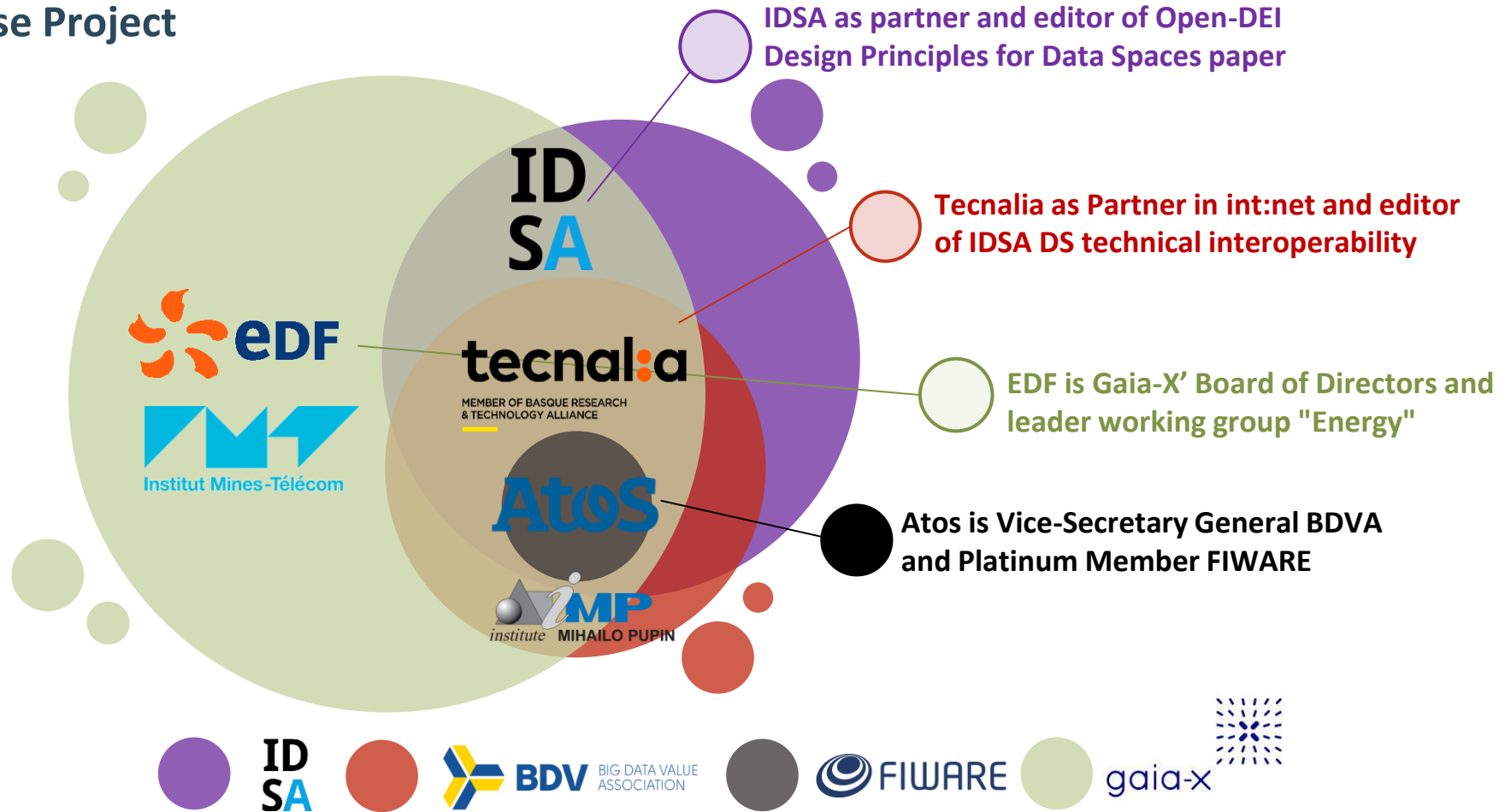
PARTNERS
30



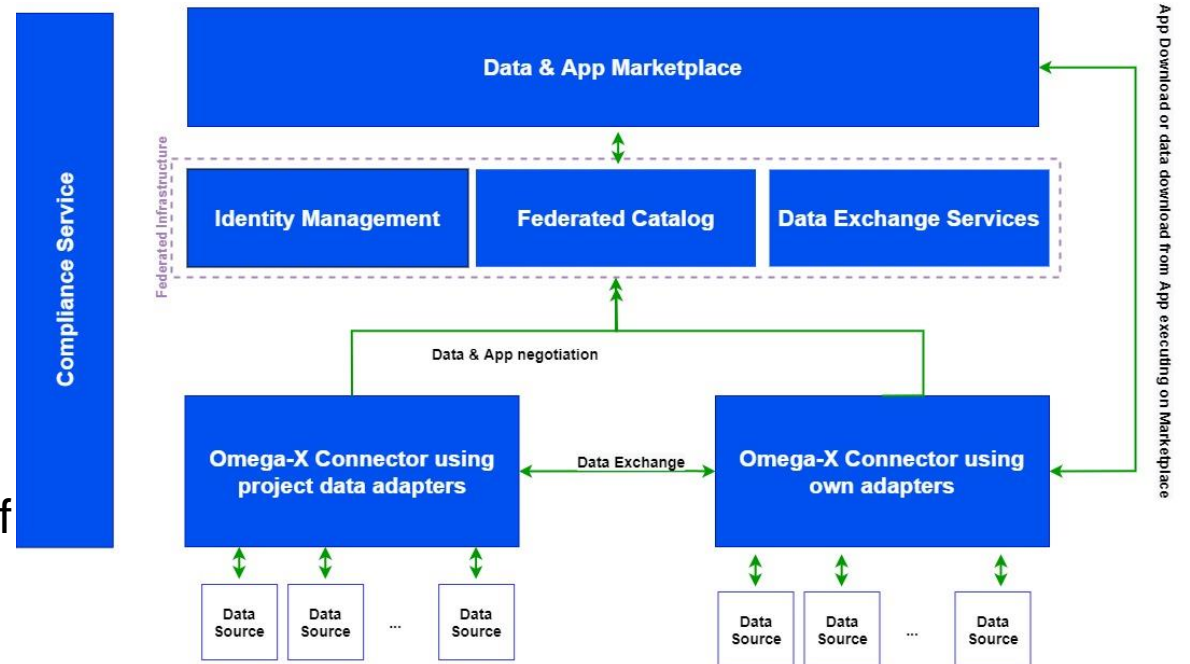
31 Partners - 11 EU Countries



GAIA-X Lighthouse Project



- **Verifiable Credential Issuer** based on OID4VC (TECNALIA)
- **EDC Connector with Verifiable Presentation** (SOVITY)
- **GAIA-X Federated Catalogue & Clearing House** (ATOS)
- **Data & Services Marketplace** integrated with the rest of components (INTRACOM)



Renewables

3 pilot sites. 2 countries (Spain, France)
7 partners involved (3 data owners, 4 service providers)
Intra-pilot: O&M and smart grid data-driven services
Inter-pilot: Benchmarking and synthetic data generation

Local Energy Communities

4 pilot sites. 4 countries (Spain, Italy, Serbia, Portugal)
9 partners involved (5 data owners, 5 service providers)
Intra-pilot: multi-vector optimization/planning. Engagement
Inter-pilot: Benchmarking

Electromobility

1 pilot site. 2 countries (Belgium, France)
5 partners involved (3 data owners, 2 service providers)
Intra-pilot: Roaming of EV charge booking services
Inter-pilot: TSO-DSO collaboration

Flexibility

1 pilot site. 1 country (Portugal)
5 partners involved (3 data owners, 2 service providers)
Intra-pilot: Advanced data-driven flexibility



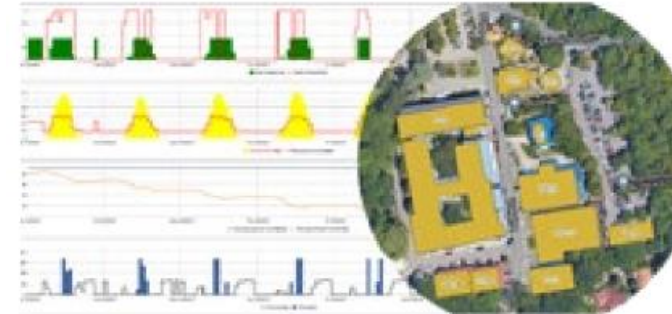
Renewables

- Pilot in **Cordoba** (Spain)
- Partners: **MAGTEL, SENER & TECNALIA**
- PV Operation and Maintenance and Benchmarking



Local Energy Communities

- Pilot in **Granollers** (Spain)
- Partners: **ESTABANELL, UPC & TECNALIA**
- Battery management optimisation for self-consumption



Flexibility

- Pilot in **Maia** (Portugal)
- Partners: **MAIA Municipality, EDP & TECNALIA**
- AI services and digital twins for optimising aggregated offers for local flexibility markets



Thank you!

Keep up with omega-x.eu

 Omega X

 @Omega_X_EU