



IoTWeek

Dublin
June 20-23, 2022

Interoperability for Flexibility

David Rua (INESC TEC)

The challenges to foster clean energy transition,
resilience and energy security in Europe

20th June 2022

interconnect

Decarbonization: the road to clean energy transition

Decarbonize the electric system

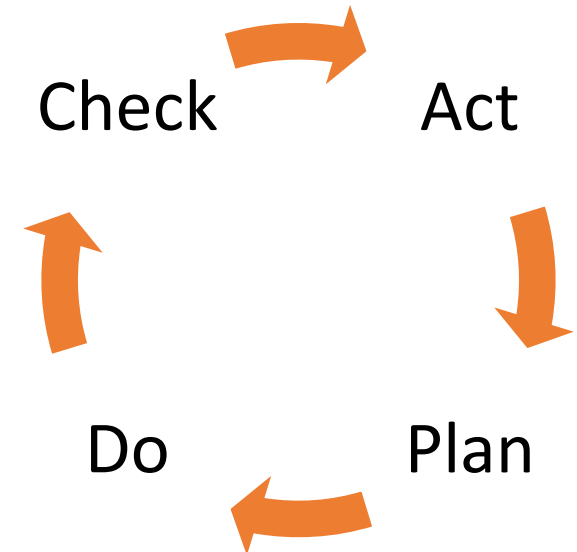
Systematic and long-term commitment

- Sustainable change
- Environmental, economical and political

Ambitious goals set by the EC

- 30% until 2030
- 50%+ until 2050

Increase resiliency and efficiency of connected systems



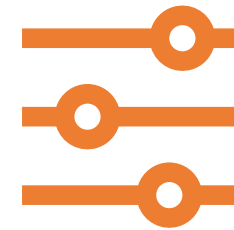


Paradigm change: articulating energy grids and consumers



Increase integration of renewable sources

- Deal with variability
- Tackle geographic distribution
- Ensure energy sufficiency



Demand side flexibility

- Engaging end-users, tech and service providers
- Make technology available to all
- Enablers for effective services

Services: novelty or newer applications?



Combine data and energy

Characterize better
Predictive strategies



Foster competitive offering

New application
Novel market approaches



Cross-sector cooperation

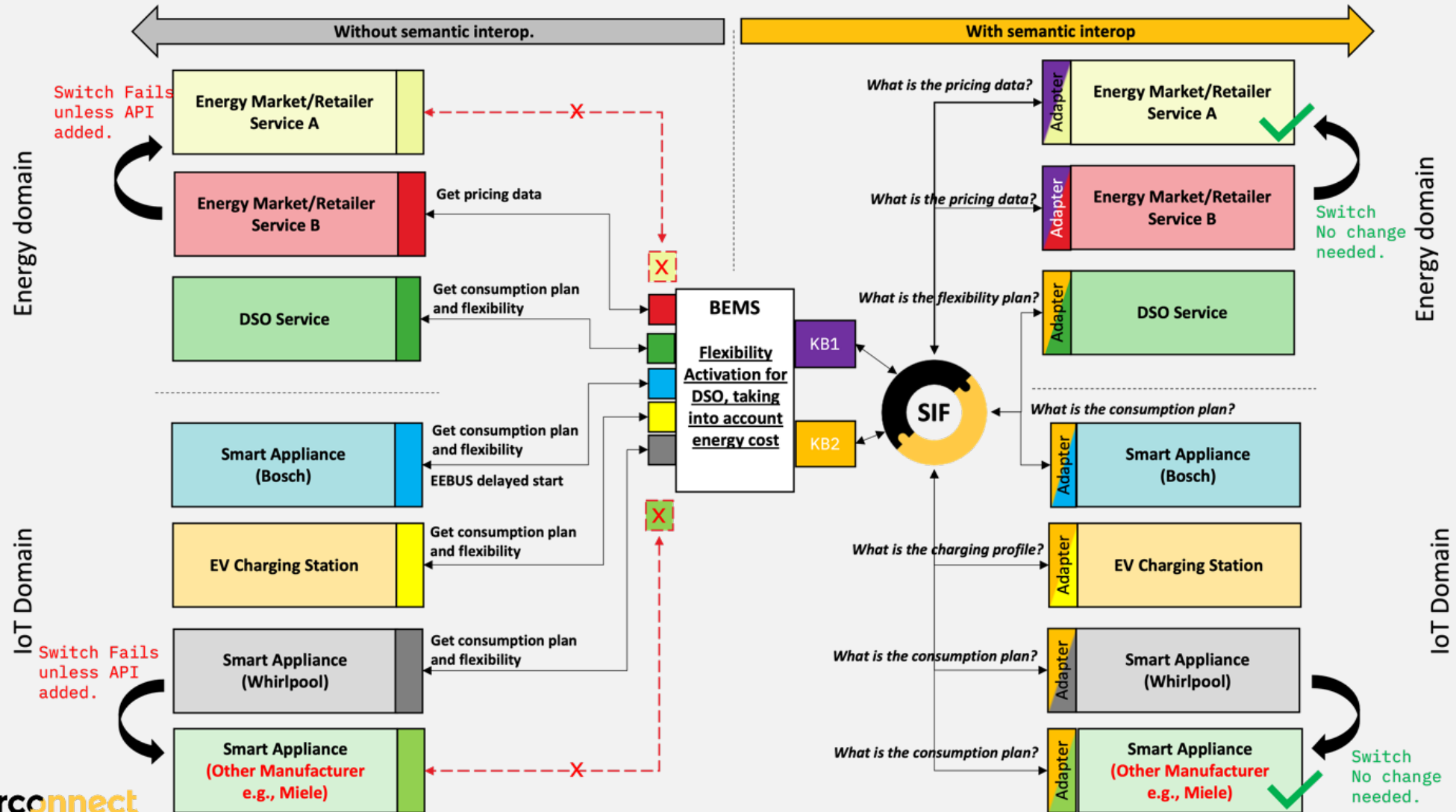
Buildings to grids
Mobility from private to public
Energy management to
convenience



Democratize access to data

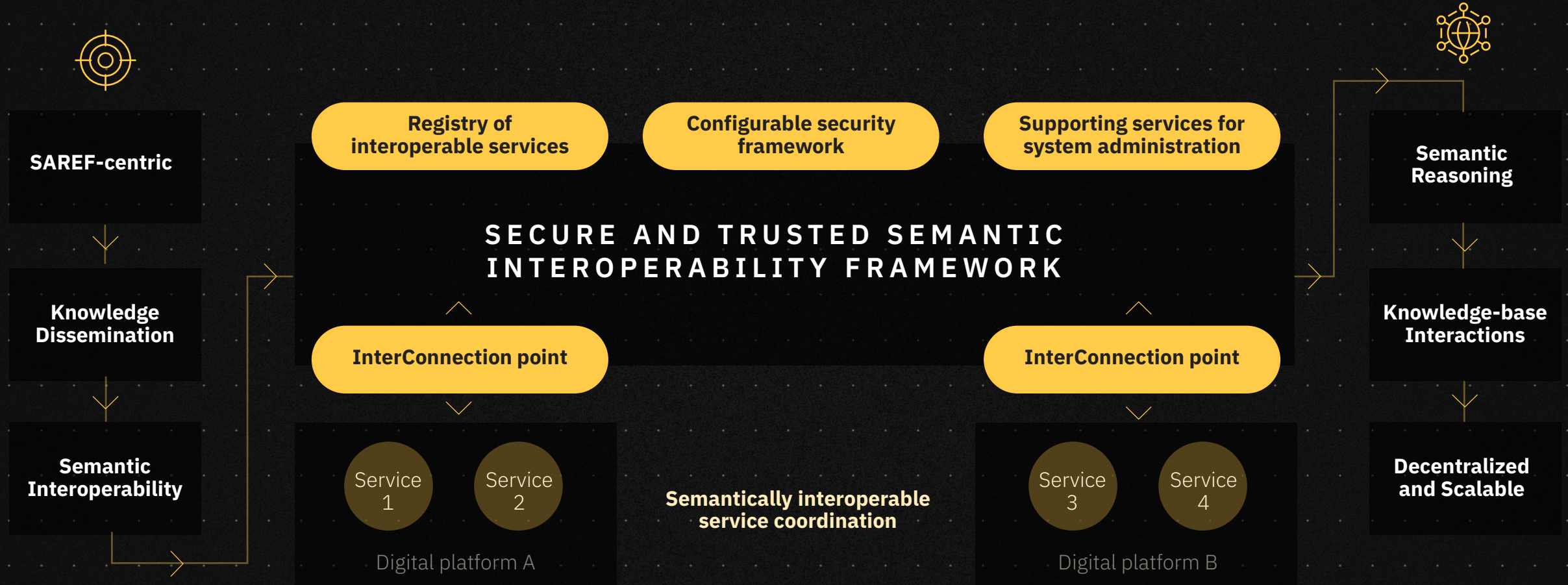
Interoperability – Several layers
Protection and cybersecurity

Added-value of Semantic Interoperability



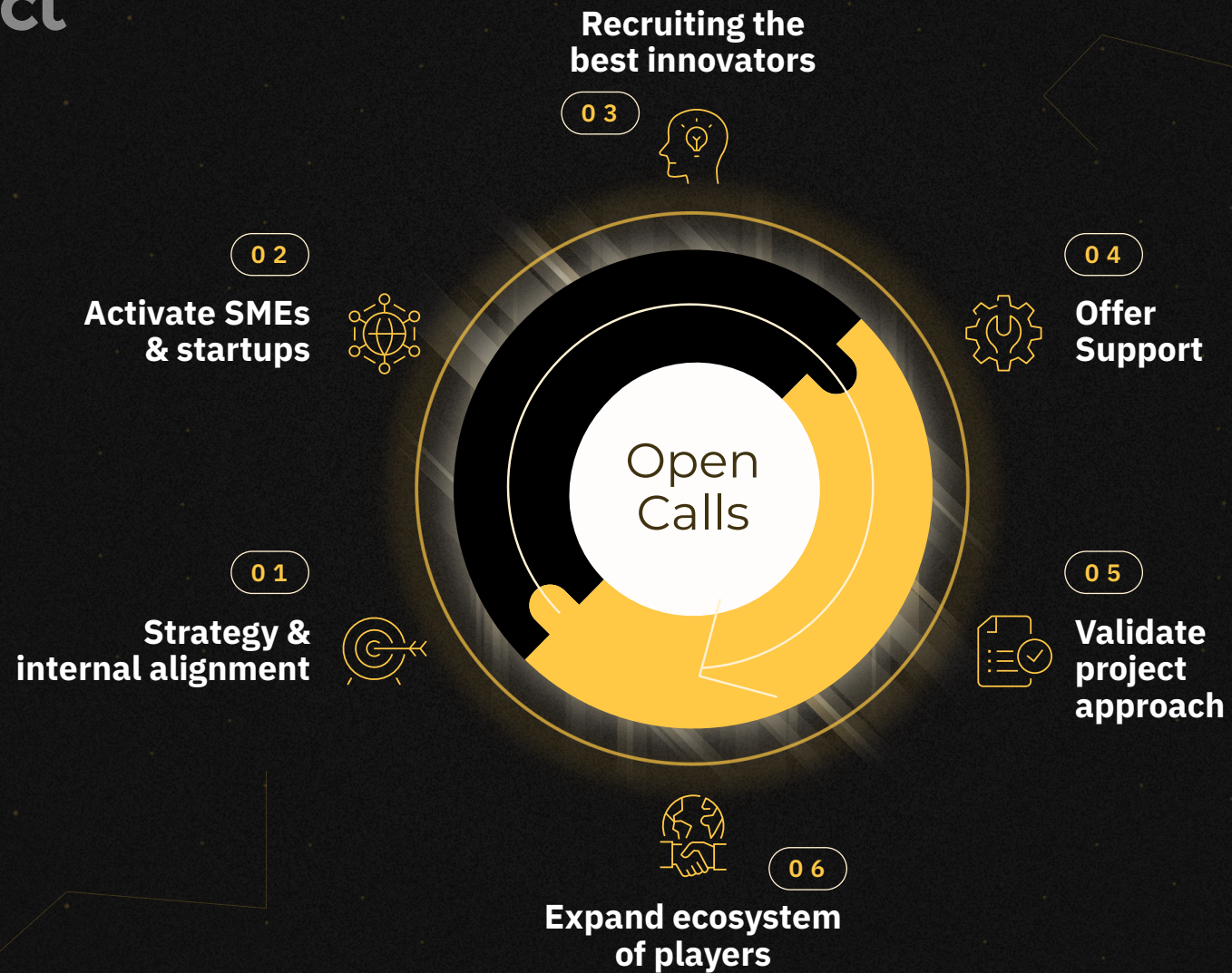
interconnect

Semantic Interoperability Framework



DIGITAL PLATFORMS AND SERVICES BECOME SEMANTICALLY INTEROPERABLE

Services use the interoperable tools to publish & discover capabilities and are joint together to enable use case demonstration



Know more at:

- interconnectproject.eu
- *Project Booth*