

ERIGrid – A European Research Infrastructure for Integrating and Validating Smart Grid Systems

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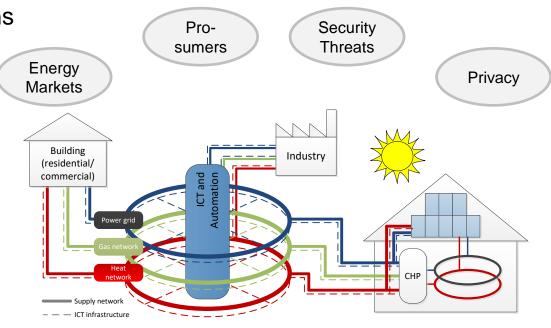




Higher Complexity in Cyber-Physical Energy Systems



- Planning and operation of the energy infrastructure becomes more complex
 - Large-scale integration of renewable sources (PV, wind, etc.)
 - Controllable loads (batteries, electric vehicles, heat pumps, etc.)
- Trends and future directions
 - Digitalisation of power grids
 - Deeper involvement of consumers and market interaction
 - Linking electricity, gas, and heat grids for higher flexibility and resilience

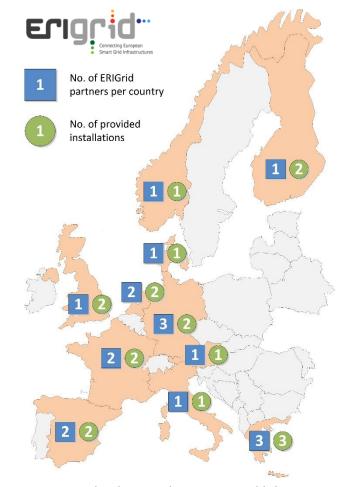


Integrated Cyber-Physical Energy System (CPES)

The integrated Pan-European ERIGrid Research Infrastructure Approach



- Research Infrastructure for validating CPES
- H2020 Call "INFRAIA-1-2014/2015"
 - Integrating and opening existing national and regional research infrastructures of European interest
- Funding instrument
 - Research and Innovation Actions (RIA)
 - Integrating Activity (IA)
- 18 Partners from 11 European Countries
- Involvement of 19 first class Smart Grid labs
- 10 Mio Euro Funding from the EC (~1000 Person Month)

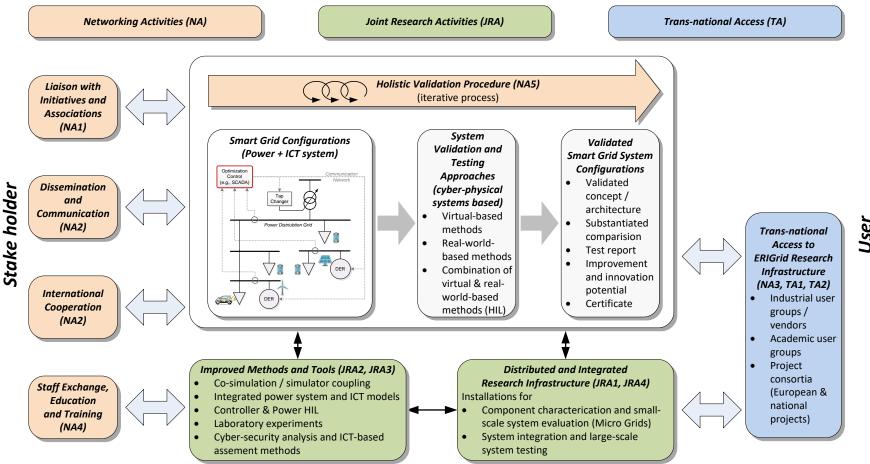


Involved ERIGrid partners and labs



The integrated Pan-European ERIGrid Research Infrastructure Approach







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