



Overview of the Access Possibilities in the Smart Energy Systems H2020 ERIGrid 2.0 RI Project

Thomas I. Strasser 

*Coordinator H2020 ERIGrid 2.0
AIT Austrian Institute of Technology*

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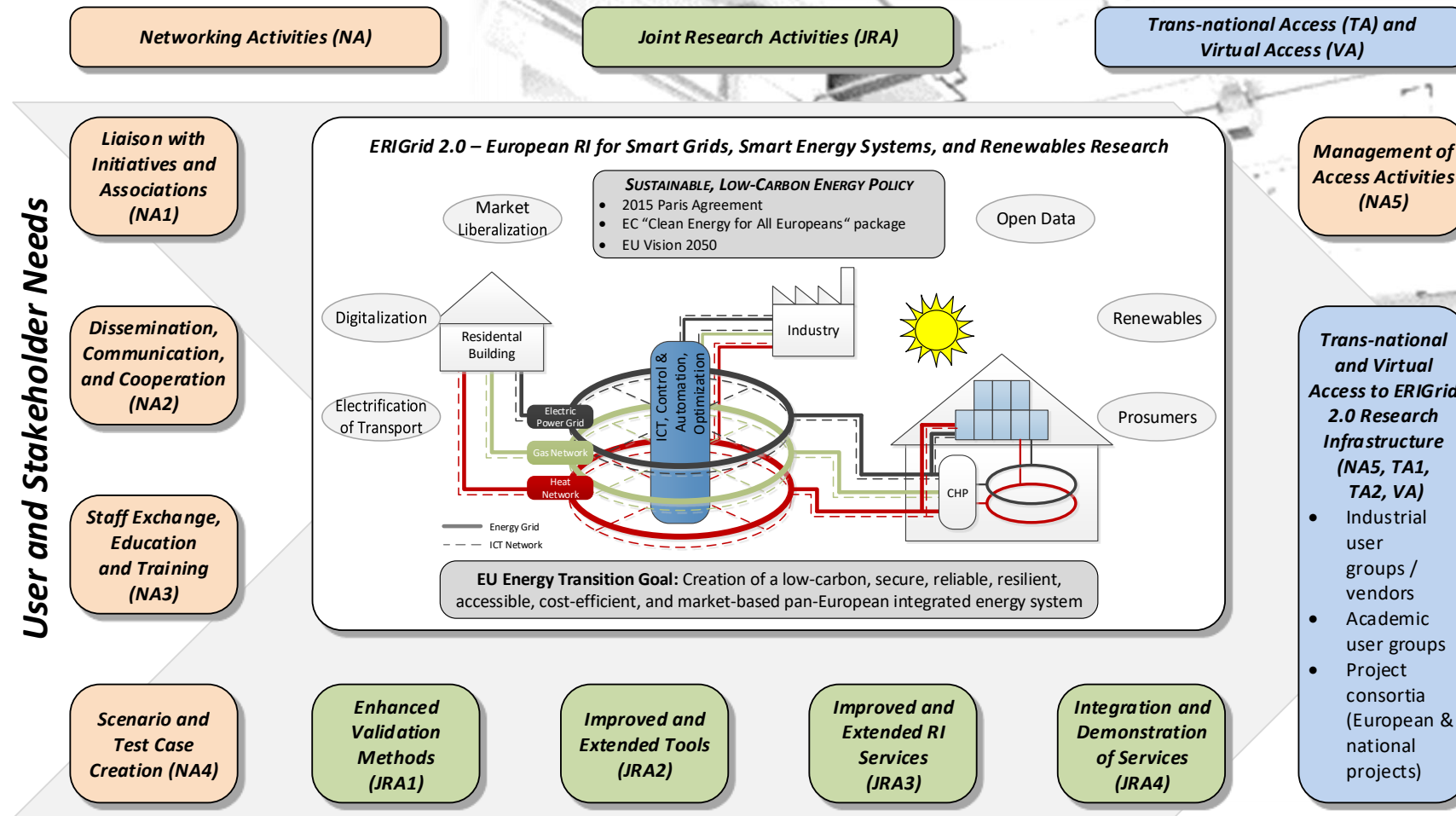
Key Facts

- Extended and applied research based on ERIGrid topics and achievements for
 - Smart grid and smart energy systems
 - Digitalization with lab interfacing and data exchange for physical/virtual access
- Tight collaboration of partners
 - 13 European countries involved
 - 20 Partners from research and industry
 - 21 top-class smart grid, smart energy systems, and DER labs
 - 8 virtual facilities

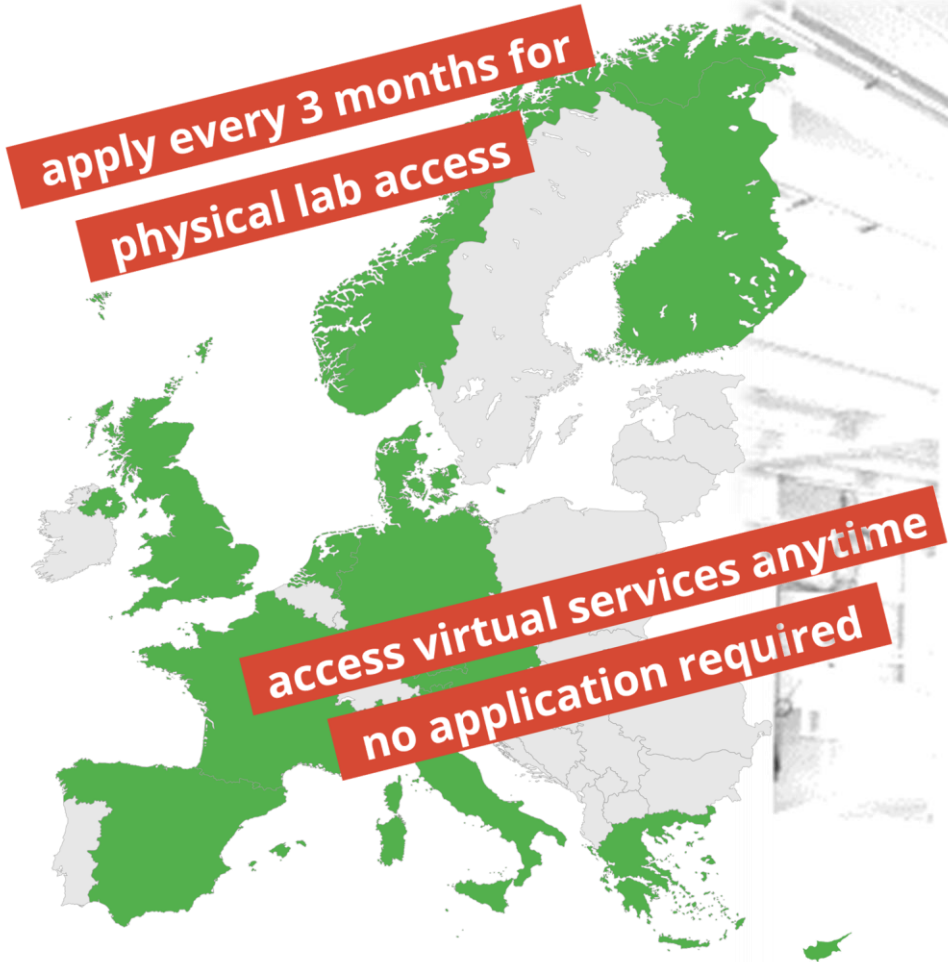
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Overview of the Approach




Lab Access Possibilities



www.erigrd2.eu/lab-access

Virtual Services

- Focus on
 - Simulation-as-a-Service (SaaS)
 - Open data, Data- as-a-Service (DaaS)
 - Virtual labs

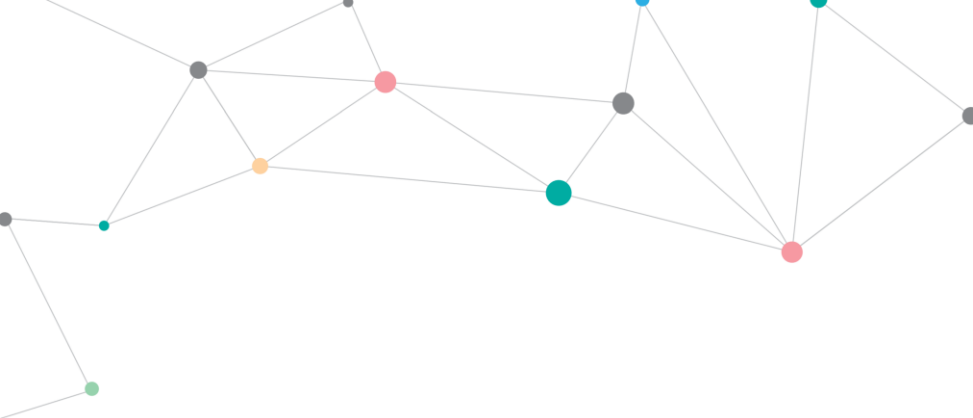


The collage features several key components:

- Smart Grid MVP Dashboard:** Displays 'Frequency Gauge - UK Grid', 'Frequency Gauge - StrathPMU', and 'Voltage Phasor Diagram - StrathPMU'. The phasor diagram shows vectors for 545.159 [V], 128.08°, and -112.02°.
- Linear Regression Notebook:** A Jupyter notebook titled 'In Depth: Linear Regression' with code for fitting a line to data.
`import numpy as np
x = 10
y = 2 * x
plt.scatter`
- Seattle Weather: 2012-2015:** A scatter plot showing 'Maximum Daily Temperature (C)' vs 'Date' from April to November.
- ACTIVE POWER BALANCE:** A line chart showing 'Active Power (W)' over time for WIND, BATT, PV, and GRID active power.
- Frequency:** A chart showing power frequency variations.
- Virtual Labs:** Includes a 'Julia' notebook with data analysis, a 'python notebook' with Lorenz system equations, and an 'R' notebook with a scatter plot.

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Privatdoz. DI Dr. Thomas Strasser

Senior Scientist
Energy Department
Electric Energy Systems

AIT Austrian Institute of Technology GmbH
Giefinggasse 2 | 1210 Vienna | Austria
T +43(0) 50550-6279 | F +43(0) 50550-6390
thomas.strasser@ait.ac.at | <http://www.ait.ac.at>



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