European Research Infrastructure supporting Smart Grid Systems Technology Development, Validation and Roll Out
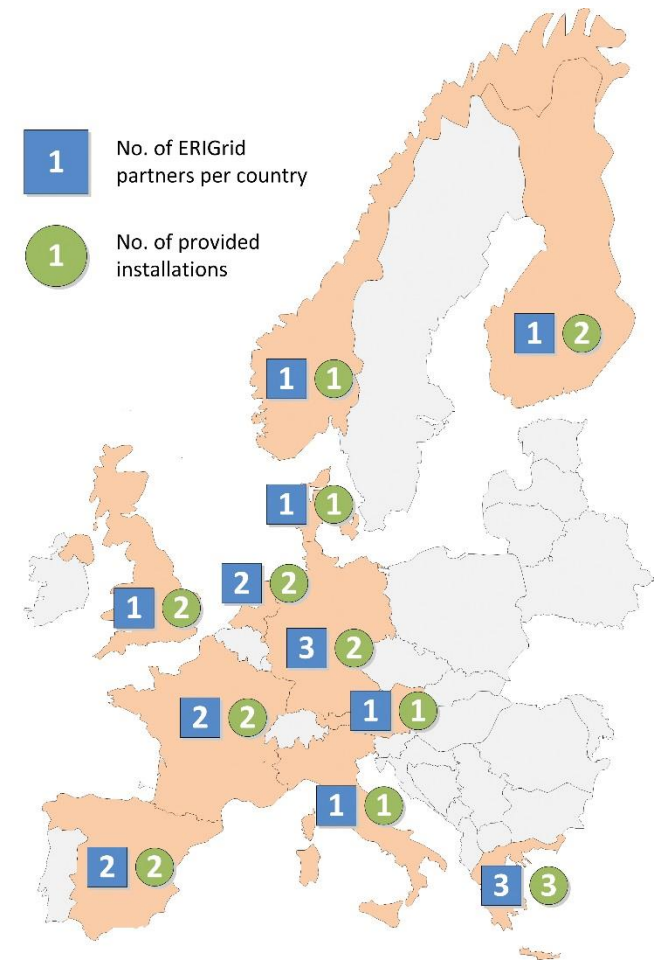
Project Overview and
Trans-national Access Opportunities

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OFFIS – Institute for Information Technology

Project Fact Sheet

- 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
  + 3 Third Parties involved

- Involvement of 21 first class Smart Grid labs

- 10 Mio Euro Funding from the EC

- ~1000 Person Month

1 — No. of ERIGrid partners per country
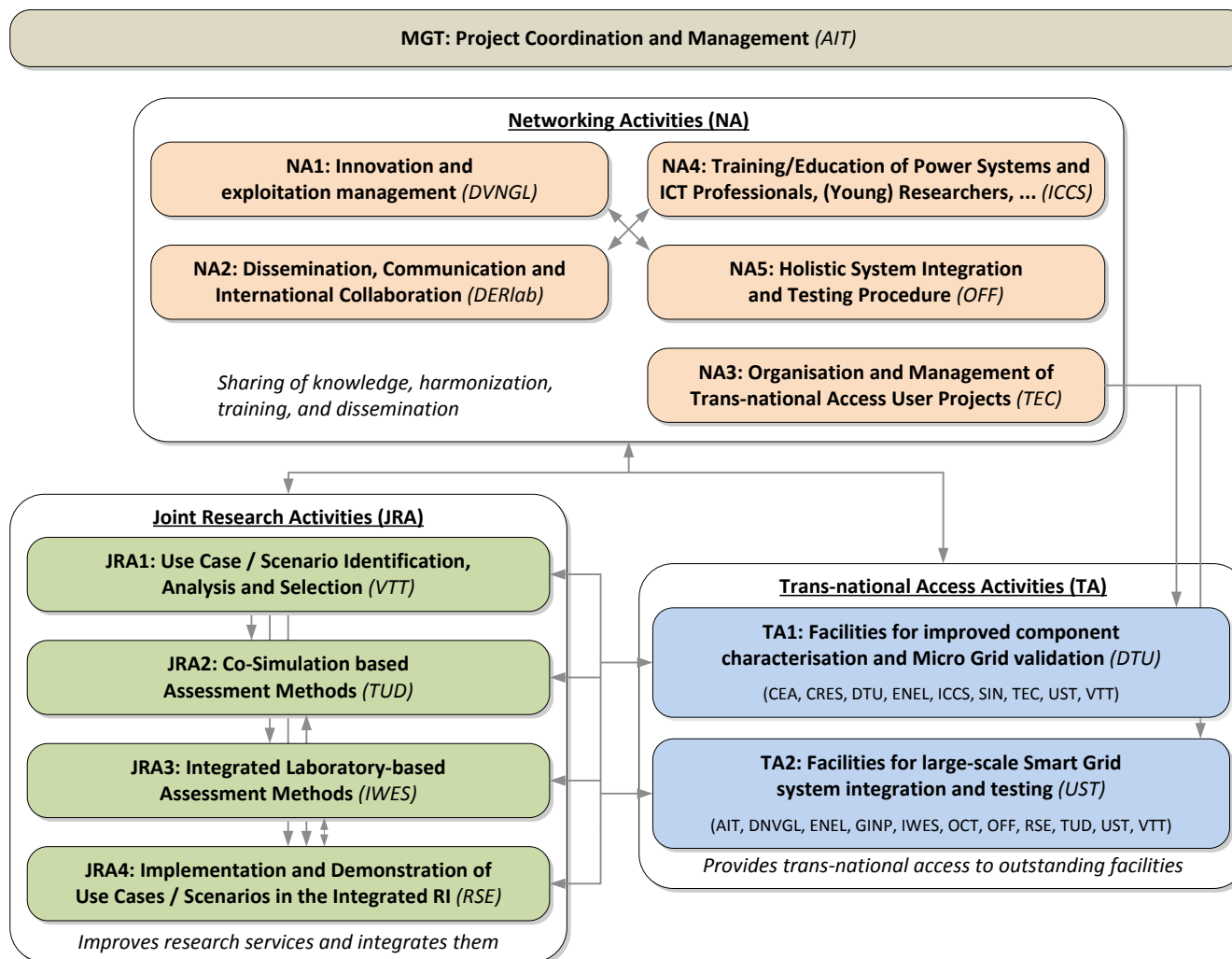
1 — No. of provided installations

Main Goals

- Supporting the technology development as well as the roll out of Smart Grid approaches, solutions and concepts in Europe with a holistic, cyber-physical systems approach

- Integrating the major European research centres with a considerable, outstanding Smart Grid research infrastructure to jointly develop common methods, concepts, and procedures.

- Integrating and enhancing the necessary research services for analysing, validating and testing Smart Grid configuration.

- System level support and education for industrial and academic researchers in Smart Grid research and technology development is provided to foster future innovation

- Strengthening the technical leadership of the European Research Area in the energy domain

Strong Stakeholder Group Support

- **35 support letters received**

  - National, European and international networks

  - Technology platforms

  - Industry (manufacturers, vendors – power & ICT system)

  - Utilities / grid operators

  - Standardization bodies

  - Research institutes

  - Public bodies / national authorities

Project Plan

MGT: Project Coordination and Management *(AIT)*

Networking Activities (NA)

NA1: Innovation and exploitation management *(DVNGL)*

NA4: Training/Education of Power Systems and ICT Professionals, (Young) Researchers, ... *(ICCS)*

NA2: Dissemination, Communication and International Collaboration *(DERlab)*

NA5: Holistic System Integration and Testing Procedure *(OFF)*

Sharing of knowledge, harmonization, training, and dissemination

NA3: Organisation and Management of Trans-national Access User Projects *(TEC)*

Joint Research Activities (JRA)

JRA1: Use Case / Scenario Identification, Analysis and Selection *(VTT)*

JRA2: Co-Simulation based Assessment Methods *(TUD)*

JRA3: Integrated Laboratory-based Assessment Methods *(IWES)*

JRA4: Implementation and Demonstration of Use Cases / Scenarios in the Integrated RI *(RSE)*

Improves research services and integrates them

Trans-national Access Activities (TA)

TA1: Facilities for improved component characterisation and Micro Grid validation *(DTU)*

(CEA, CRES, DTU, ENEL, ICCS, SIN, TEC, UST, VTT)

TA2: Facilities for large-scale Smart Grid system integration and testing *(UST)*

(AIT, DNVGL, ENEL, GINP, IWES, OCT, OFF, RSE, TUD, UST, VTT)

Provides trans-national access to outstanding facilities

The ERIGrid TA opportunity:
Free of Charge Access to Best European Smart Grid Research Infrastructures

- The ERIGrid project **invites scientists** from research, academia and industry to apply for the transnational access to the research infrastructure of top European organisations active in different fields of Smart Grids.

- Successful applicants will be provided with **free of charge** access to the requested ERIGrid research facilities, including all laboratory installations.

SmartEST Laboratory at AIT

SESA-Lab at OFFIS

- The expenses, including travel and accommodation will be reimbursed under ERIGrid conditions.

- Calls for transnational access will open **every 6 months** till December 2019.

- The current/upcoming call is/will open from 15/03/2017 till 15/06/2017.

Provided Smart Grids Research Infrastructures

Research Infrastructures provide various testing and research possibilities such as:

- DER/Power system components characterization and evaluation

- Smart Grid ICT / Automation validation

- Co-simulation

- Real-time simulation and Power/Controller HIL

Austrian Institute of Technology (AIT)

Commissariat à l'énergie atomique et aux énergies alternatives (CEA)

Centre for Renewable Energy Sources and Saving (CRES)

DNV GL

Technical University of Denmark (DTU)

Grenoble Institute of Technology (GINP)

Institute of Communication and Computer Systems - National Technical University of Athens (ICCS)

Fraunhofer IWES (IWES)

Ormazabal Corporate Technology, A.I.E. (OCT)

Institute for Information Technology (OFFIS)

Ricerca sul Sistema Energetico (RSE)

SINTEF Energy Research (SINTEF)

TECNALIA Research & Innovation (TECNALIA)

Delft University of Technology (TU Delft)

University of Strathclyde

VTT Technical Research Centre of Finland (VTT)

How to Apply?

- User Group (UG) has to fill out the application template available on ERIGrid website → https://erigrid.eu/transnational-access/
  and send it to the specified email address → erigrid-ta@list.ait.ac.at

- User group should provide:

  - *Summary of the proposed research*

  - *State-of-the-art*

  - *Detailed description of the proposed project (objectives, expected outcomes, impact, etc.)*

  - *Synergy with ongoing research*

  - *Proposed host research infrastructures/installations*

  - *Measures of dissemination and exploitation of the results*

  - *Time schedule*

  - *Description of the research team*

Support for filling out an application can be asked to the targeted RIs.

TA calls are launched every 6 months. The current call is open until 15/06/2017.

Evaluation criteria can be found on the project website.

The current call is open from 15/03/2017 till 15/06/2017

Further information is available on the project website:

WWW.ERIGrid.EU

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