Smart Grids Plus
ERA-Net

Von der Information zum Wissen: die ERA-Net Knowledge Community

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ERA-Net Smart Grids Plus Support Team

ERA-Net Smart Grids Plus

From Local Trials towards a European Knowledge Community

23 funding partners from 21European countries and regions involved

Austria, Croatia, Denmark, Finland, Flanders, France, Germany, Latvia, Lombardy, Norway, Poland, Portugal, Romania, Scotland, Slovenia, Spain, Sweden, Switzerland, The Netherlands, Turkey, Wallonia

Goal

Organize the learning to enable the right technologies, market designs and customer adoption to achieve the Smart Grids vision & goals of Europe

www.eranet-smartgridsplus.eu

ERA-Net Smart Grids Plus will be supported by funding from the European Union's Horizon2020 research and innovation programme under grant agreement No 64603.

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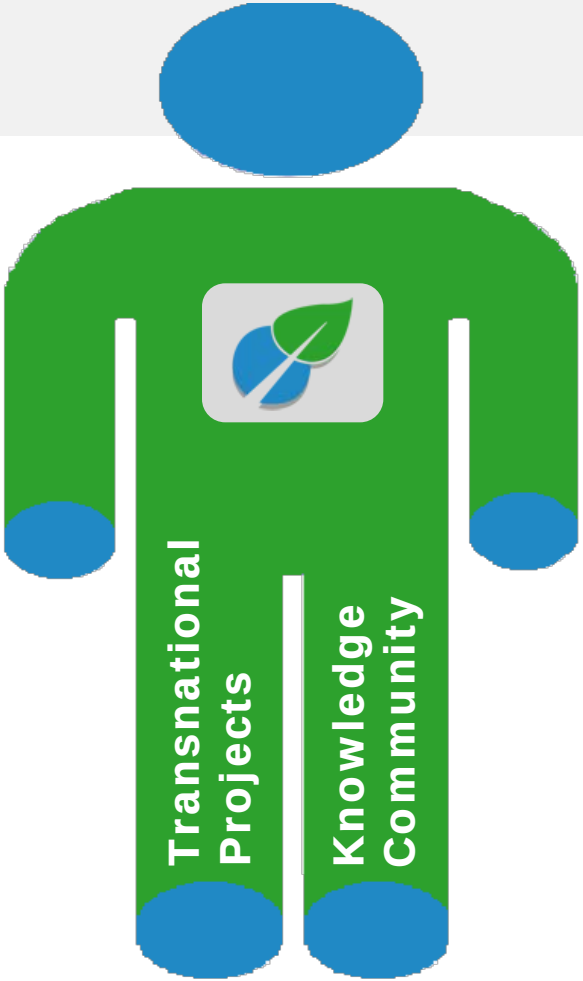

WALKING ON TWO LEGS

- Transnational Projects
  - selected in ERA-Net SG+ Calls
  - national funding with EU top up funds
  - supported by Support Team
- Knowledge Community
  - from and for the ERA-Net SG+ projects
  - national and international experts
  - unique knowledge base for our topic

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THE KNOWLEDGE COMMUNITY

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Members

- ERA-Net SG+ projects
- (Trans-)National key projects
- International RDD projects
- Smart Grids practitioners
- Agenda setters and policy makers

Tools

- Living Documents
- Working Groups
- Project Profiling
- Expert Repository
- Spotlights and Policy Briefs

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THE KNOWLEDGE SHARING PLATFORM

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Ludwig Karg | SHARE | EDIT

LIVING DOCUMENTS | WORKING GROUPS | PROJECTS | EXPERTS | EVENTS | NEWS | MANAGEMENT

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Living Documents

These online documents resemble the joint knowhow of the ERA-Net Smart Grids Plus Knowledge Community. Content for the Living Documents is being created by the Support Team from various sources such as desk research, evaluation of past and ongoing projects or Working Groups. All visitors of a Living Document can leave comments or contribute to discussion fora linked to specific paragraphs. The Support Team will us experts' input to further improve the content of a Living Document.

Living Documents are available for the following topics (*please click to open the document*):

System Architecture and Modelling

Consumer and Citizen Involvement

Regulatory and Market Development

Standards and Interoperability

Scalability and Replicability

Storage and Cross Energy Carrier Synergies

Spotlights

These newsletter-type documents will keep experts updated on the ongoing activities and intermediate results of ERA-Net Smart Grids Plus projects. In addition, they inform in a condensed manner about specific new knowlegde. Spotlights concentrate on specific topics wih high relevance for project participants and practitioners. In that sense Spotlights represent condensed versions or extracts from Living Documents.

Following Spotlights are available (*please click to open the spotlight*):

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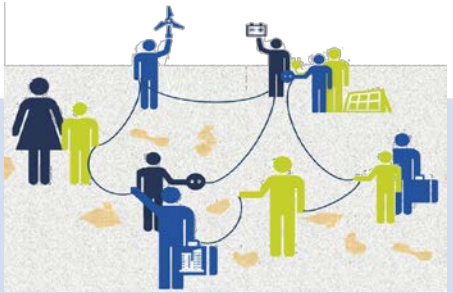
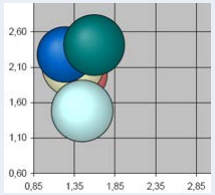
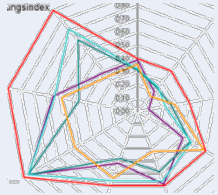
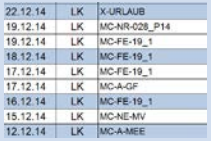
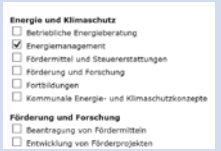
MORE THAN JUST DATA

Knowledge	ask questions, discuss in a network, link to other info, learn from others, …	
Information	put into context, aggregate, anonymize, interpret, hide as needed, implement privacy, …	 
Data	collect, store, backup, implement data security, …	 

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DERIVING AND CONVEYING STRATEGIC KNOWLEDGE

- providing benchmarking material
- maintaining Living Documents
- providing spotlights for experts
- exploiting profiling results for strategic steering of ERA-Net SG+
- informing stakeholders with resolutions from the Steering Board
- representing ERA-Net SG+ project family in ETIP context

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ERA-NET SG+ KNOWLEDGE PLATFORM

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Expert Repository

Working Groups

Living documents

Spotlights

Policy Briefs

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SG+ project repository

project profiles

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EXPERA USER TYPES

1. administrators
2. support team and call management representatives
3. core team representatives
4. members of board
5. users with specific access rights
   - ERA-Net project representatives
   - representatives of other projects
   - active participants of working groups
   - members of NSCG
6. registered *expera* experts
7. other registered users: *expera* followers

Note: user types higher in the list always own rights of all user types lower in the list

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WORKING GROUPS

- System Architecture and Modelling
- Storage and Cross Energy Carrier Synergies
- Consumer and Citizen Involvement
- Interoperability and Standardisation
- Regulatory and Market Development

- 1-2 physical meetings per year
- virtual meetings as needed
- input to living documents

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MEETING IN SPLIT – THE KICK-OFF

Establishing the „ERA-Net SG+ family“ → stengthen links between projects, agencies, ERA-Net SG+ bodies

LIVING DOCUMENTS

- System Architecture and Modelling
- Storage and Cross Energy Carrier Synergies
- Consumer and Citizen Involvement
- Regulatory and Market Development
- Standards and Interoperability
- Scalability and Replicability

- 10 chapters („questions“) each
- consolidated knowledge
- process to discuss with experts

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STRUCTURE OF LIVING DOCUMENTS

topic (title, definition, scope) [1)]

consolidated state of knowledge
(consolidated by SG+ Support Team)

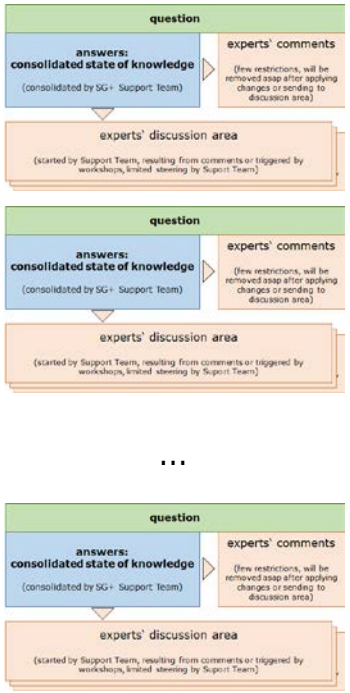
available tools and prototypes [3)]
(selected by SG+ Support)

experts' comments

(few restrictions, will be removed asap after applying changes or sending to discussion area)

experts' discussion area [2)]

(started by Support Team, resulting from comments or triggered by workshops, limited steering by Support Team)



1) formulated as guiding questions („What you always wanted to know …")
2) not commented by SP, but can influence state of knowledge
3) refrain from advertising, only mention tools available for R&D

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What you always wanted to know about …
SYSTEM ARCHITECTURE AND MODELLING

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1. Which is a commonly accepted terminology? Which ontologies can be used?
2. Are there existing reference architectures and how can they be used for system design purposes?
3. Which are most promising modelling techniques for Smart Grid solutions? What is the meaning and benefit of the SGAM model?
4. In what sense are distributed data and control functions superior to centralized solutions?
5. Which new electrical and ICT architecture models exist for non-hierarchical systems (e. g. cellular or holonic approaches to microgrids)?
6. How can improved resilience be implemented?
7. How can privacy and security be improved by intelligent architectural designs?
8. Are there horizontal hardware and software platforms for Smart City, Smart Grid and Smart Home solutions and how can they be used to implement energy related applications?
9. What are characteristics of attractive user interfaces?
10. How can intelligent architectures help to reduce costs for a future smart grid?

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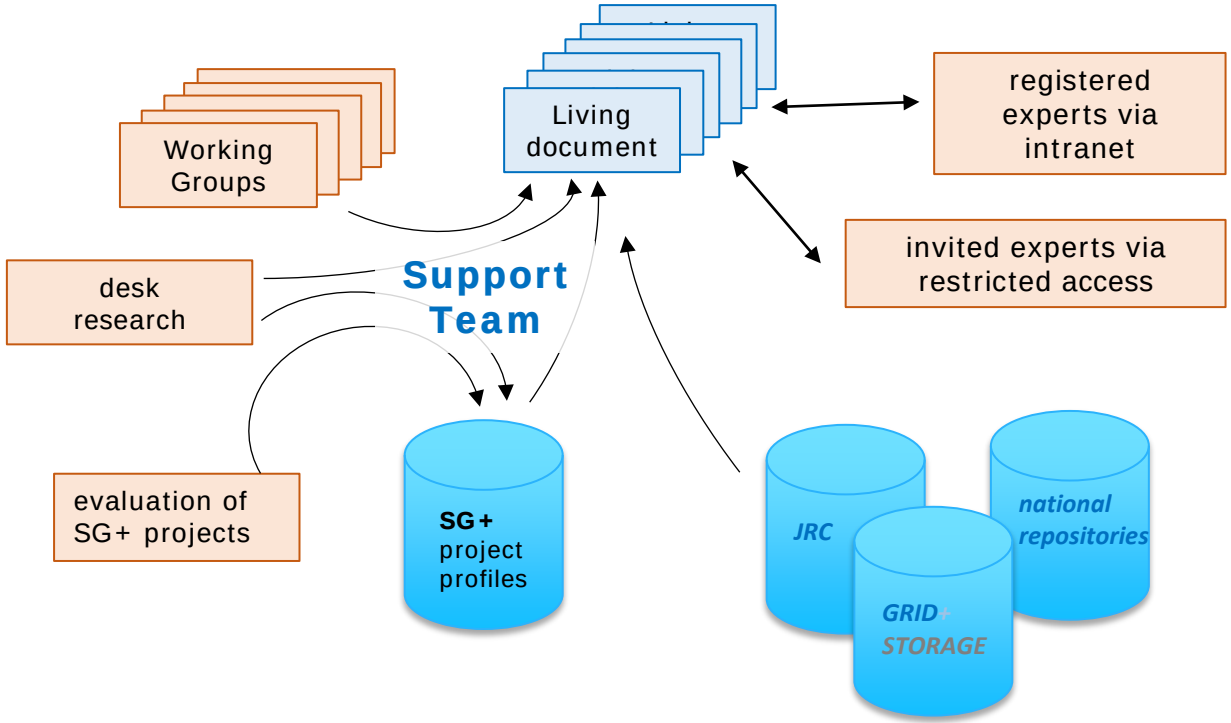
GENERATING LIVING DOCUMENTS



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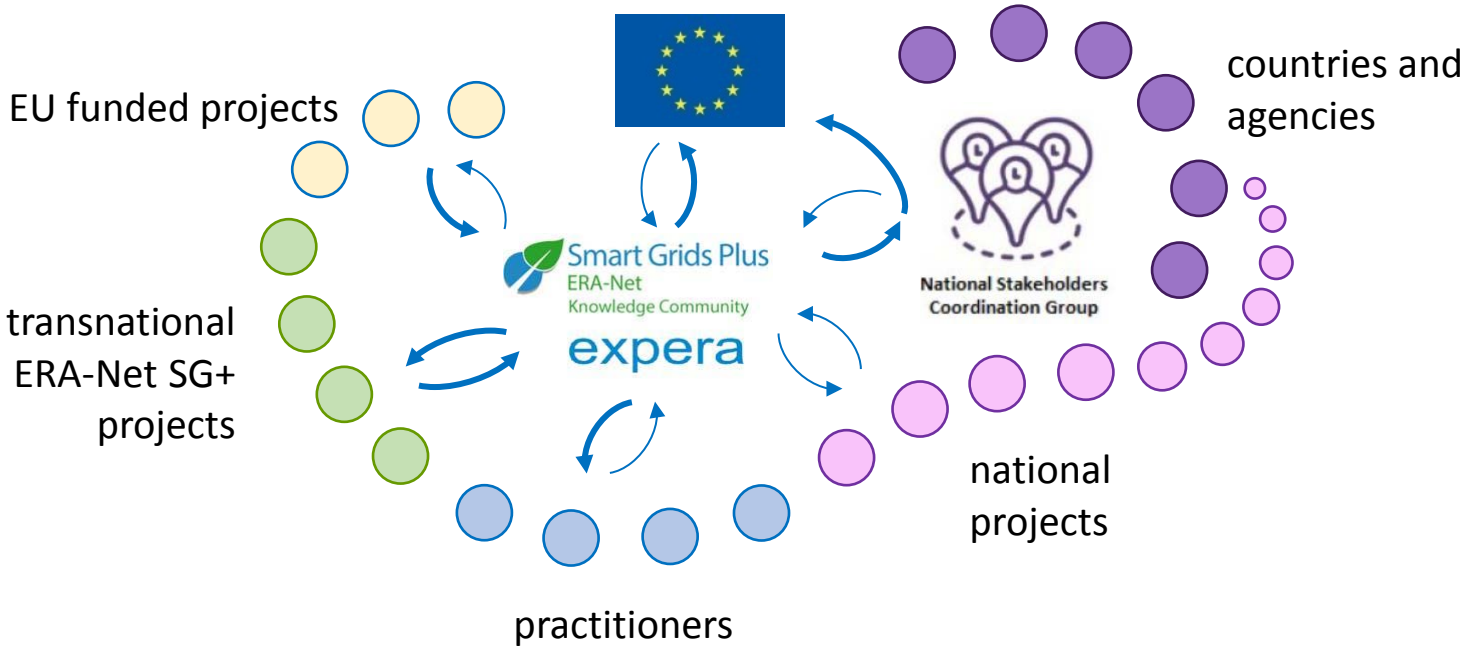
KNOWLEDGE COMMUNITY LINKING THE WORLDS



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PROJECT EVENT 2017

DATE: June 7-9

PLACE: Bucharest, Romania

participants:

- Projects of 1st and 2nd call
- Coordination Team
- National agency representatives
- Working Group members and invited guests
- Potential 3rd call applicants

for program and registration:

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FUNDING PARTNERS

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REPUBLIC OF SLOVENIA
MINISTRY OF INFRASTRUCTURE

MINISTERUL EDUCAȚIEI ȘI CERCETĂRII ȘTIINȚIFICE

FCT
Fundação para a Ciência e a Tecnologia

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Regione Lombardia

MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE ET DE L'ÉNERGIE
Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

The National Centre for Research and Development

iwt
Institute for the Promotion of Innovation by Science and Technology in Flanders

FFG

FOND ZA ZAŠTITU OKOLIŠA I ENERGETSKU UČINKOVITOST

bmvit
Austrian Ministry for Transport, Innovation and Technology

Wallonie

SPW
Service public de Wallonie

ADEME
Agence de l'Environnement et de la Maîtrise de l'Energie

Scottish Enterprise

ue fiscdi

The Research Council of Norway

Federal Ministry for Economic Affairs and Energy

CDTI

TÜBİTAK

ENERGINET.DK

Tekes

NWO
Netherlands Organisation for Scientific Research

Swedish Energy Agency

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