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# FINESCE Innovation Event

## Future Internet Smart Utility Services

Terni

17.10.2013



Alexander von Jagwitz, B.A.U.M. Consult München / Berlin



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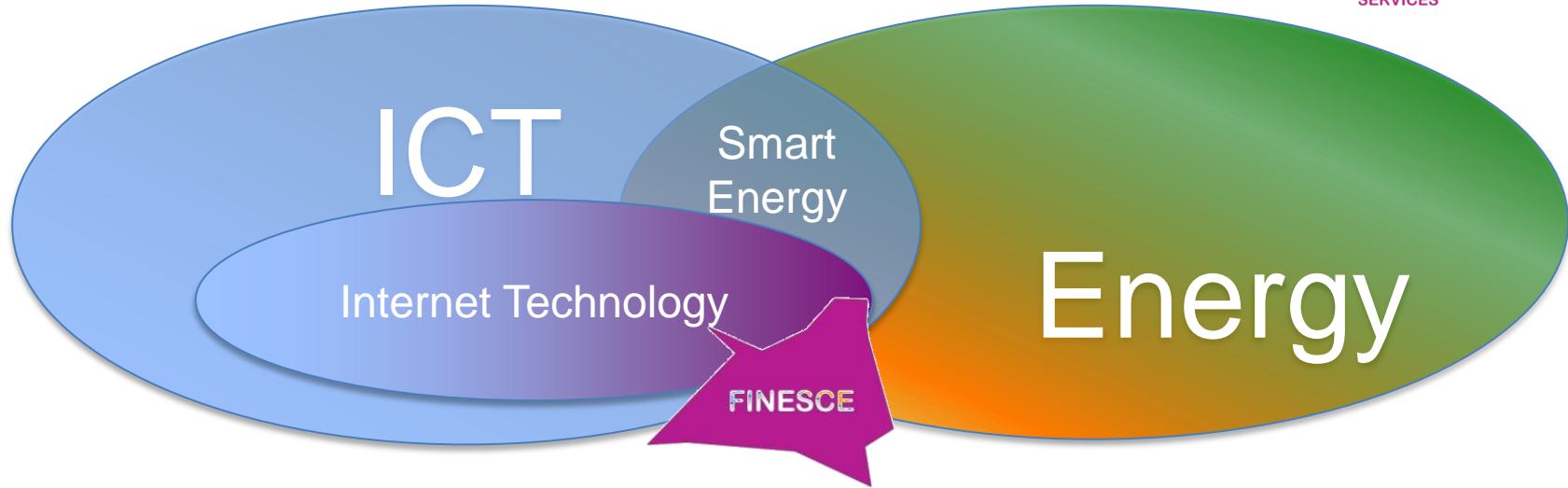
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# **FINESCE and the FI-PPP Programme**

# The Future Internet for Smart Energy

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Future Internet of Energy: organizing many...

- (volatile) distributed energy production
- (flexible) consumers and prosumers
- electric vehicles (as consumers and storage)

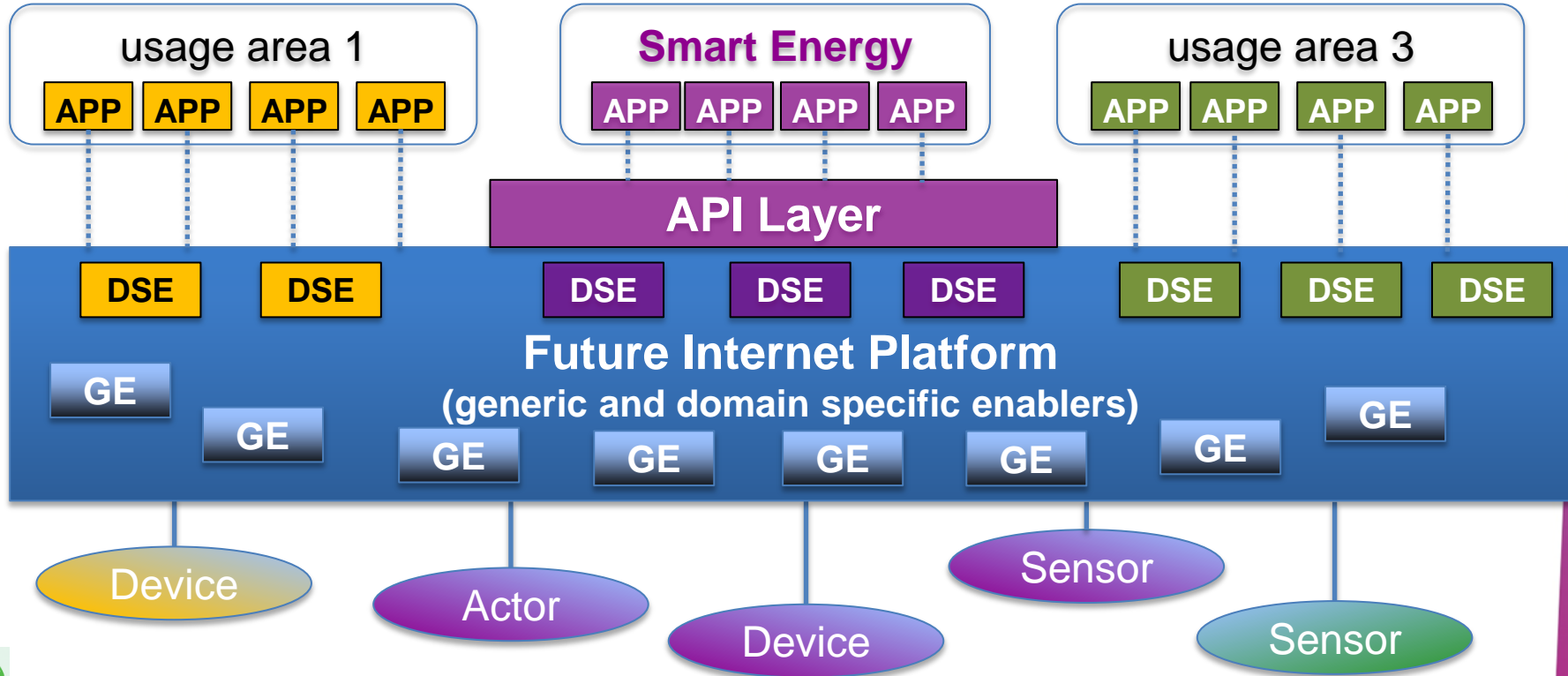
Benefits of using the future internet:

- lower costs for application development
- easy access for new partners
- scalability of applications

# Internet of Things and Services

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# FIWARE Generic Enablers (examples)

Generic Enablers	
Internet of things enablement	<ul style="list-style-type: none"> <li>• Process Automation</li> </ul>
Applications/ Services Ecosystems	<ul style="list-style-type: none"> <li>• Business Models &amp; Elements</li> </ul>
Data/ Context Management	<ul style="list-style-type: none"> <li>• Complex Event Processing</li> <li>• Big Data Analysis</li> <li>• Unstructured data analysis</li> </ul>
Interface to Networks and Devices	<ul style="list-style-type: none"> <li>• Cloud Edge</li> </ul>
Cloud Hosting	<ul style="list-style-type: none"> <li>• IaaS DataCenter Resource Management</li> <li>• Object Storage</li> <li>• Resource Monitoring</li> </ul>
.....	<ul style="list-style-type: none"> <li>• .....</li> </ul>

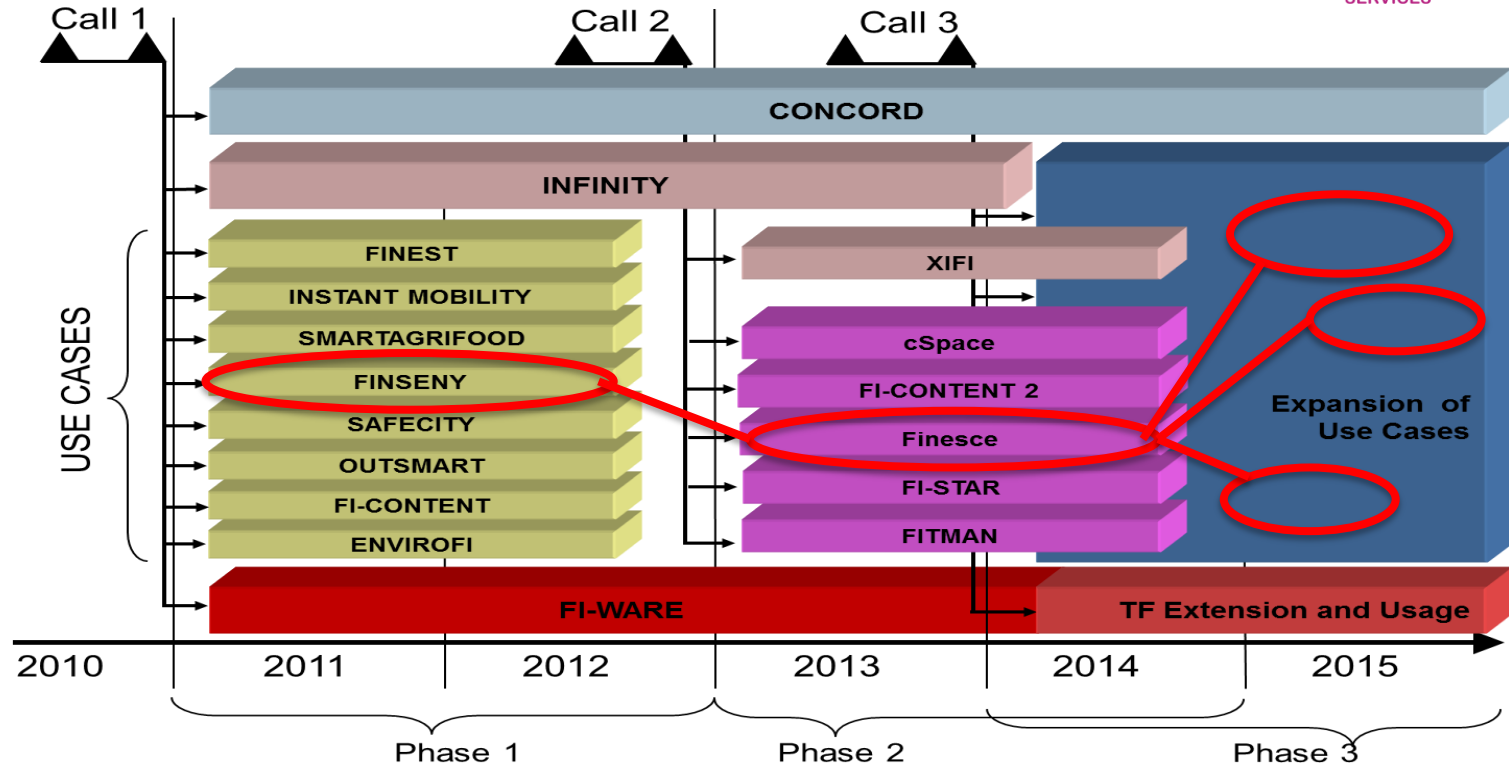


Find all GEs at [www.fi-ware.eu](http://www.fi-ware.eu)

# FI-PPP Family of projects

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# Apps for the Smart Energy World

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## FINESCE trials

APP APP APP APP APP

## FINESCE open call

APP APP APP APP APP

## FI-PPP phase III

APP APP APP

## API Layer

Virtual Power  
Plant

DSE

GE

GE

Smart Factory

DSE

DSE

GE

Smart Home  
and Prosumers

DSE

GE

GE

Electric  
Vehicles

DSE

GE

GE

eMarket Place

DSE

DSE

GE

Device



Sensor



Actor



Device



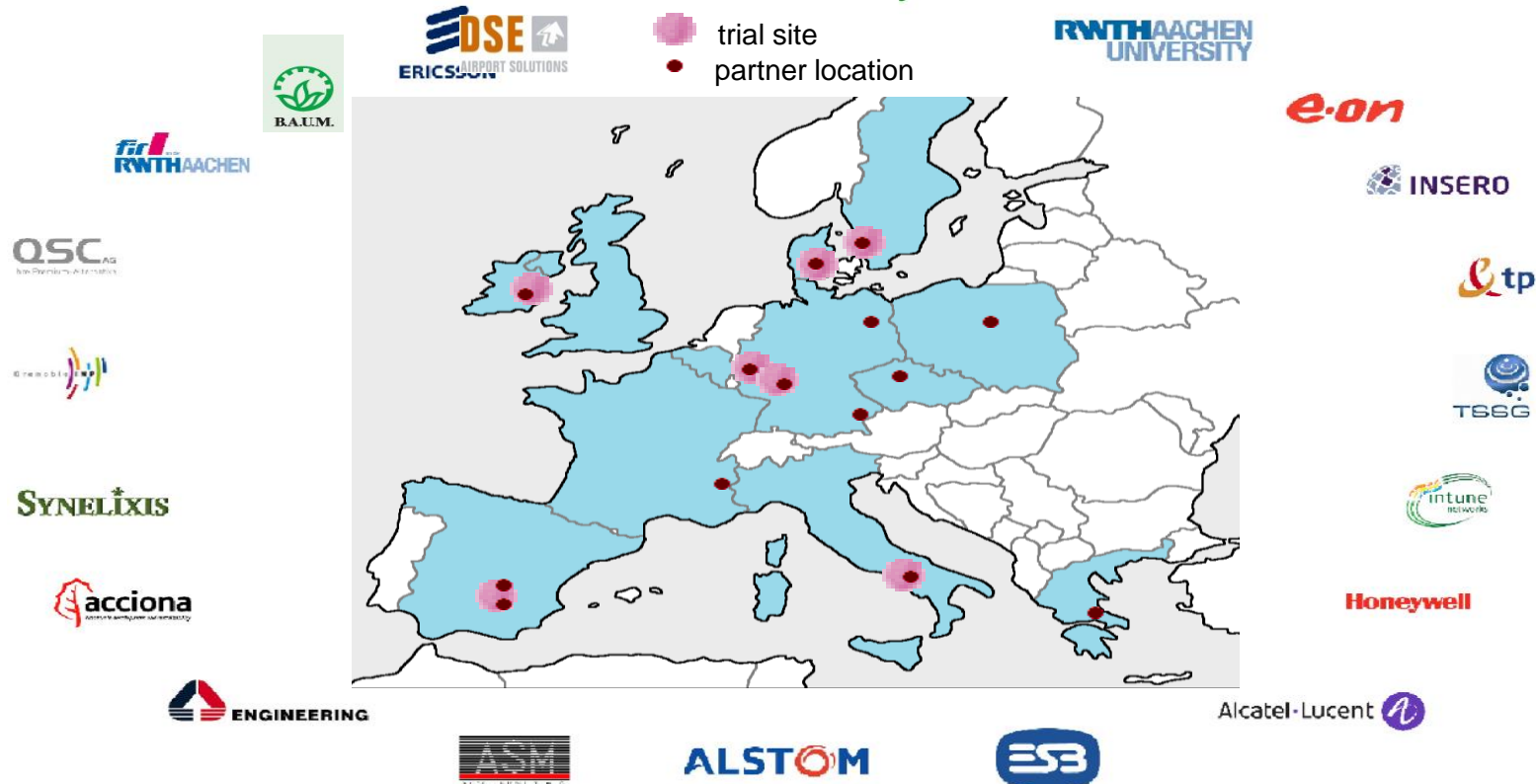
Actor



# FINESCE Partners and Trial Sites

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# FINESCE Strategic Goals

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- Foster Europe's leadership in ICT solutions for **Smart Cities and Smart Energy**
- Team-up the **ICT and Energy sectors** to demonstrate outstanding European Future Internet technologies enabling sustainable energy management

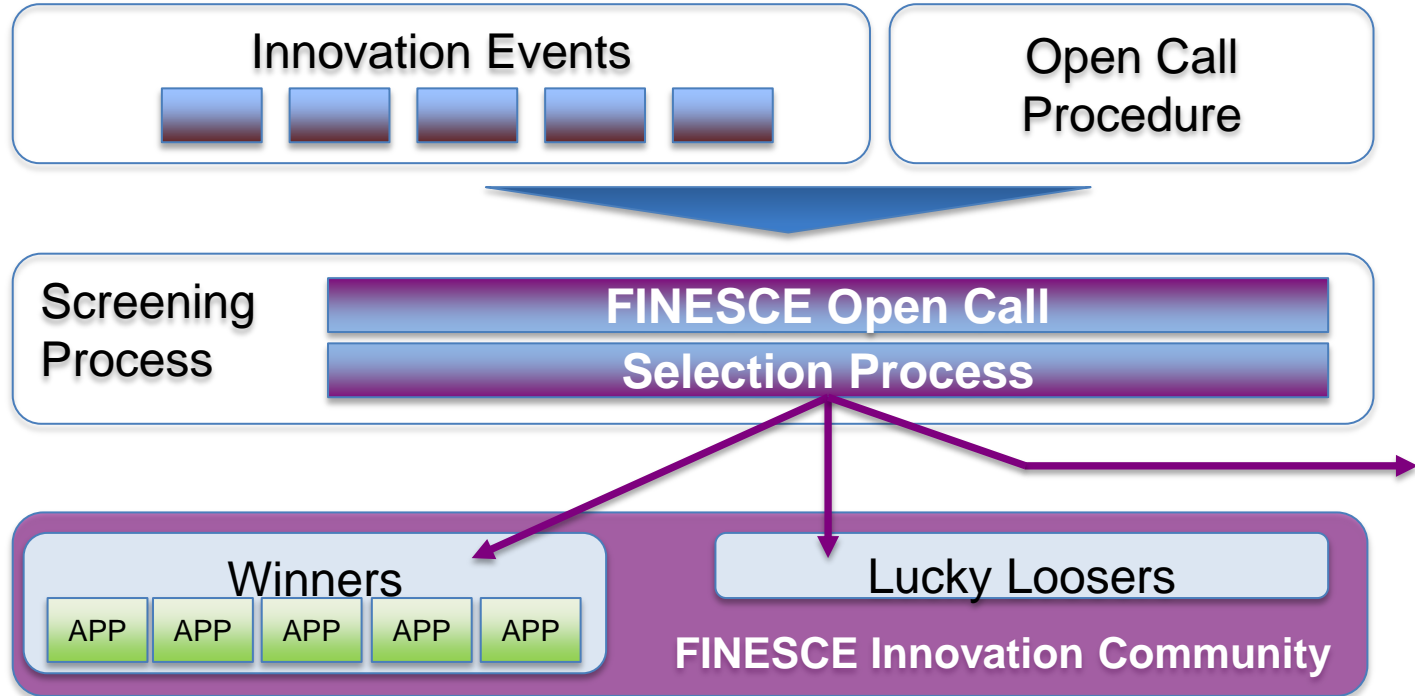
# FINESCE means of involvement

- **FINESCE open call (15.9.2013-13.11.2013)**
  - Area 1: **SME innovation contest (250.000 €):** concepts, mock-ups, apps
  - Area 2: **involvement of new partners for specific tasks (1 mio. €)**
- **FINESCE academia programme (April 2014-October 2014)**
  - student contest (internships for winners)
  - hackathon
- **FINESCE Innovation Community**
  - base for Phase III open call (Summer 2014-Winter 2014)
  - Phase III: 7-8 Mio EUR funding

# Innovation Process for SMEs

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# FINESCE Networking



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# 99 sec. presentation

- ALL participants of the workshop give a 99 seconds introduction (1-2 slides) of their organisation and their intentions regarding the event
- 99 seconds seem to be an ideal time format to present yourself.
- It is very alive and is a very good start for participants to communicate with each other

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Thomas Standhartinger, Atos



Atos  
• € 8,844 Mio€ Revenue  
• 76,417 Employees  
• 43 Countries  
• 7 in Bezoen/Paris

Energy Trading & Risk Management  
Smart Grids  
Smart Utilities  
Smart Cities

What we do?

- Thematic focus: smart grids, smart cities
- Integration of different energy grids & systems
- Load shifting in industry, commerce and municipal infrastructures
- First R&D project in Europe on Smart Gas Grids in 2009

OCG

Die OCG  
Die Plattform für Informatik und IKT in Österreich  
Die OCG ist ein gemeinnütziger Verein mit mehr als 1.500 Mitglieder aus den Bereichen Wissenschaft, IT-Anwendung, Lehre und Ausbildung.

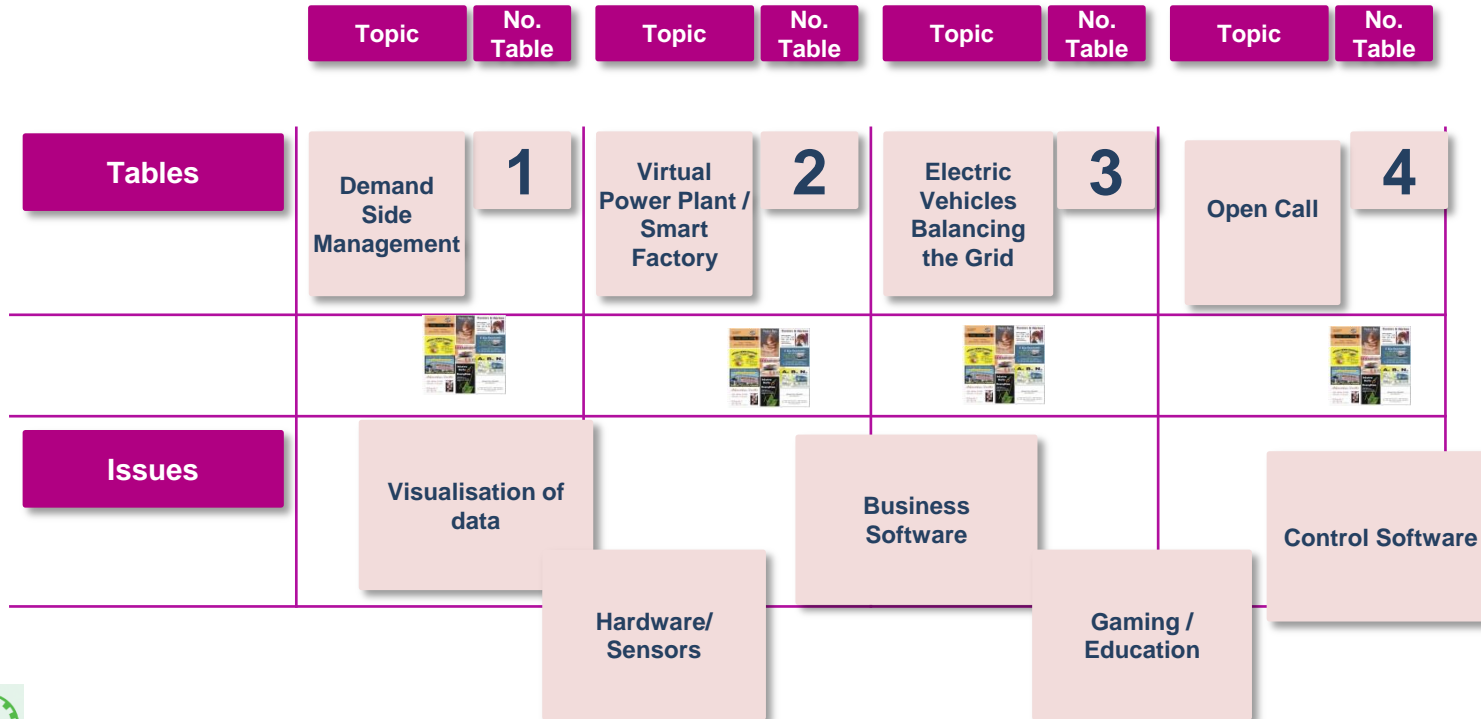
Ziel der OCG ist die Förderung der Informationstechnologie und Informatik unter Berücksichtigung ihrer Wechselwirkung auf Mensch und Gesellschaft.

new energy  
ENERGY RESEARCH LAB

# Networking Matrix

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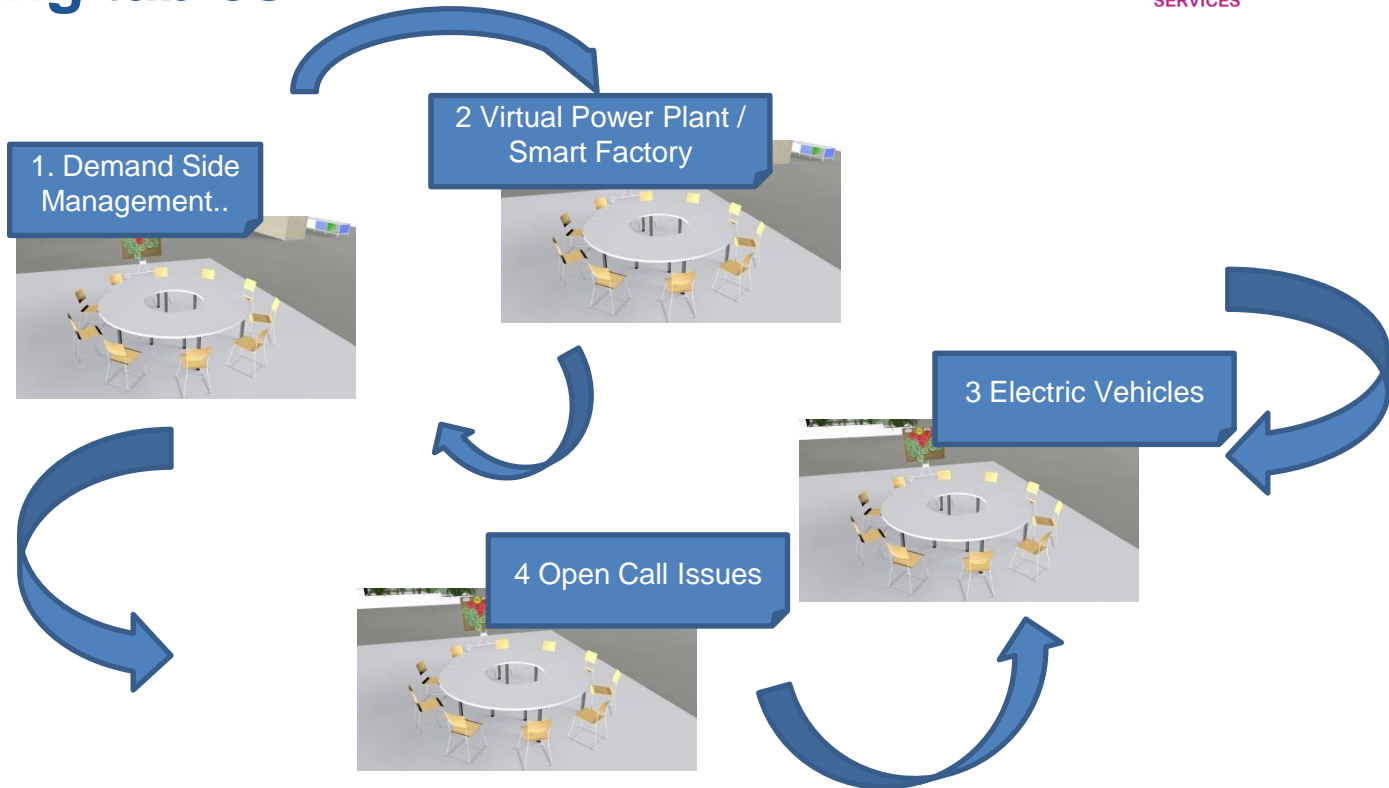
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# Networking tables

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# FINESCE Open Call





# FINESCE Open Call Timeline

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Start: 16.9.2013

final submission date: Wednesday, 13.11.2013, 17:00

Start of contract: 1.4.2014

End of contract: after 3-12 MM (depending on the open call area)

# FINESCE Open Call: Area 1

- To support the consortium by undertaking investigations of the proposers own creative ideas for energy related services and applications, related to FI-WARE functionality and the FINESCE trial topics, with the work being undertaken in close collaboration with one of our trial sites and partners.
- This area of the open call is particularly targeting start-up companies. Funding of 250.000 Euro will be provided.
- Proposals may address the dissemination and promotion of new services, applications, apps, concepts, prototype or demonstrations based on FI-WARE functionality and related to FINESCE trial topics.

## FINESCE Open Call: Area 2

- To support the consortium by expanding the scope of our trials with work on specific topics.
- This area of the open call is open to large and small organisations including research institutes and universities. Proposals from SME's will be particularly welcome.
- Funding of 1.038.600 Euro will be provided for Area 2
- A maximum of 350.000 Euro will be provided to each organisation invited to join for partly-funded contracts as full project beneficiaries
- Each new partner (beneficiary) is expected to provide a minimum of 9 person months effort to the project

## Area 2 topics for Open Call

1. To expand the scope of the field trial locations in FINESCE by adding new topics and trial sites, developing synergies with the FINESCE and FI-PPP goals,
2. To develop a visualisation of the energy consumption within the trial factory in Aachen and the energy production of the distributed energy resource (DER) in the FINESCE trial in Belgium or Germany, with a user-friendly GUI,
3. To create an Automatic Meter Reading (AMR) system that will exploit the capabilities of Advanced Metering Infrastructure (AMI) utilising the DLMS/COSEM protocol suite. An innovative, reliable, scalable and secure solution, based on open standards to facilitate the exchange of near-real-time electricity metering data. The system will be setup on the FI-WARE cloud computing infrastructure and will be integrated with the Terni trial site.
4. To develop a management system for the energy distribution network used in the FINESCE field trial in Ireland, which will interact with an Electric Vehicle (EV) charge-point management system.
5. To develop a serious game to contribute to the dissemination of the FINESCE results presenting scenarios based on the data collected FINESCE trials

# FINESCE Open Call: Contract details

- New partners become full consortium members
- 2-3 deliverables to be described
- Participation in all project meetings during the contract time mandatory
- New partners will sign the existing collaboration agreement and have full access to FIWARE GEs
- (The possibility of offering a simpler procedure for area 1 is still under investigation by the European Commission )

# FINESCE Open Call: Contract details

## **Funding (including overhead) depending on activity performed:**

- Research and Development: 50% or 75% (only applicable for SMEs and universities)
- Dissemination: 100%

## **Planned payment schedule**

- 45% advance payment at the start of the contract (1.4.2014)
- 55% after the end of FINESCE with the final project cost claim (Claim expected be submitted in June 2015)

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**www.finesce.eu**

