



# Workshop: "Smart Grids for Smart Cities" Smart Grids ERA-NET Series of Events towards an ERA-Net Plus Event No2

Tuesday, 14<sup>th</sup>, May, 2013, 10:00 a.m. Salzburg AG, Bayerhamerstraße 16, 5020 Salzburg, Austria

#### **Motivation**

This SmartGrids ERA-Net workshop focuses on the role of smart grids in smart city concepts and deals with the specific requirements regarding joint R & D projects. In particular, the role of smart grids for the implementation of smart cities will be discussed, relevant research areas further defined and necessary research questions identified.

Smart grids and smart cities experts, amongst others from Austria, Denmark, Germany, Netherlands, Italy, Sweden and Switzerland are present and have the unique opportunity for intensive know-how exchange and determining future research topics and funding priorities, together with representatives of national / European funding agencies.

At this workshop, the contents and priorities of future transnational funding calls in the field of smart grids will be defined by selected smart grids/smart cities actors, together with program managers of national funding programs. In particular, an ERA-Net Plus call is being prepared as a proposal to the European Commission for the work programme 2014/2015.

This workshop is targeted to experts in the fields of smart grids and smart cities as well as policy makers and program managers of relevant national R & D funding programs. This workshop is the **2**<sup>nd</sup> **event of the SmartGrids event series towards ERA-NET Plus**.

Info:

- → <a href="http://www.smartgrids.ch/sgeranetplus/docs/20130429\_SmartGrids-ERA-net-Event-Series\_Program.pdf">http://www.smartgrids.ch/sgeranetplus/docs/20130429\_SmartGrids-ERA-net-Event-Series\_Program.pdf</a>
- → http://www.smartgrids.ch/sgeranetplus/

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# Agenda:

Smart Grids ERA-NET Workshop: "Smart Grids for Smart Cities"

Tuesday, 14<sup>th</sup>, May, 2013, 10:00 a.m. Salzburg AG, Bayerhamerstraße 16, 5020 Salzburg, Austria

#### 9:30 Registration

### 10:00 Opening and Welcome

Representative of Salzburg AG
Ruud de Bruijne, Coordinator of SG ERA-Net/ NL Agency, Energy and Climate Change, The
Netherlands

#### 10:10 Introduction "Smart Grids for Smart Cities"

Michael Hübner, Austrian Ministry for Transport, Innovation and Technology, Smart Grids ERA-Net

Host/Facilitator: Robert Hinterberger, Managing Director, NEW ENERGY

10:30 - 11:30

## Session 1: Smart Cities Initiative: challenge for frontrunning cities in Europa

In this first session, selected smart city projects will be presented and the role of smart grids in the overall smart city concept discussed. The **identification of challenges in the set up of local smart cities/smart grids lighthouse projects** will be the fundament for the following three thematic sessions; speakers including

- ❖ Riga: Smart cities activities in one of the front-running cities in Europe Inete lelite, Riga Energy Agency, Latvia
- Amsterdam: Smart grids strategy of Smart City Amsterdam Bert Heerbaart, Alliander N. V, Netherlands
- Smart grids/smart cities approaches outside Europe: a Dubai view Hong-Linh Truong, Distributed Systems group, Technical University Vienna, Austria







#### Session 2: Innovative smart grid planning for new urban development areas

Due to the growing of cities also in Europe, new green- or brownfield urban quarters will be developed within the coming years. **New urban development areas** like Stockholm Royal Seaport, Malmö Hyllie, Copenhagen Nordhaven or Vienna Aspern could be **future smart grids showcases**. Thus, the main challenges in **realizing new innovative smart grids concepts** in such development areas will be addressed in this session; speakers including:

- Malmö: Smart Grid Hyllie Peder Berne, E.ON Sverige AB, Sweden
- Stockholm: The Royal Seaport Project Moustafa Chenine, KTH Royal Institute of Technology

Panel discussion with representatives of cities/grid operators Identification and discussion of key research topics

## 12:30 – 13:15 Information about current funding opportunities by funding agencies

13:15 - 14:00 Lunch break

14:00 - 15:00

# Session 3: Convergence of energy and ICT in urban areas: a roadmap to value added services

Smart grids solutions should not only enable the integration of renewable energy and increase the overall energy efficiency of the power system. The **new ICT infrastructures** should also **facilitate new added value services**. In particular, smart metering as a stand-alone solution is not enough.

- Finnland: Smart meter roll outs are almost completed what's coming next? Jan Segerstam, Development Director, Empower IM Oy, Finnland
- FI-PPP: Future Internet Public Private Partnership possible synergies with smart grids projects

Alexander von Jagwitz, B.A.U.M Consult GmbH, Germany

In this thematic session, **synergies and thematic overlaps** between smart grids lighthouse projects and **similar initiatives** from ICT actors, like the *Future Internet Public Private Partnership (PPP) Programme* and the *European Network of Living Labs (ENoLL)* as well as synergies with the *Smart Cities Member States Initiative* will be identified and discussed.

Panel discussion with representatives of utilities, cities and the named initiatives Identification and discussion of key research topics







# Session 4: Hybrid energy networks – smart electricity grids are not enough

Smart grid concepts are applicable not only to electrical power grids. These concepts could also be applied to district heating or natural gas networks. In particular, **synergies between these infrastructures** could **provide flexibility to the electricity grids**. However, the greatest synergy effects are likely to be achieved by a **systemic approach** integrating the various energy systems and grids together with municipal infrastructures.

- ❖ Power-To-Heat in Denmark: Integration of renewable energy into district heating networks Paul-Fredrik Bach, Denmark
- Austria: Smart City Graz Mitte integration of energy grids and storage facilities Christian Orthofer, Energie Steiermark AG, Austria

Based on the presentation of international flagship demonstration projects, future research issues are identified regarding these aspects. In particular, the interfaces between electricity and district heating networks, but also with municipal infrastructures, are in the focus of this session.

Panel discussion with representatives of cities and utilities Identification and discussion of key research topics

16:00 - 16:30

# Smart grids programming- exchange with other initiatives

- Managing smart grids programmes: experiences from US Ronald B Melton, Pacific Northwest National Laboratory
- The European member states initiative on smart cities Catrin Haider, Austrian Ministry for Transport, Innovation and Technology

#### 16:30 - 16:45 Closing remarks

Michael Hübner, Rainer Bacher, Gunilla Andrée (Smart Grids ERA-Net)







#### 17:00 - 19:00

# ERA-NET+ Call 2014/2015 and other joint activities (program managers only)

- Information about the ERA-NET+ instrument under Horizon 2020 and the status of the initiative towards a Smart Grids ERA-Net Plus
- Q &A, discussion

The following topics will be discussed between program managers:

- What are the thematic areas of common interests of member-states programs?
- What are the relevant next steps in different areas regarding to the innovation chain (technology readiness level)?
- What financing mechanisms are needed for these next steps?
- What are the funding mechanisms that the participating MS-programs can provide?
- What other kind of joint activities are needed to tackle challenges and barriers (e.g. joint activities like knowledge sharing, mapping, etc.)?

Facilitators: Michael Hübner, Rainer Bacher, Gunilla Andrée (Smart Grids ERA-Net)





