

NATIONAL TECHNOLOGY PLATFORM – SMART GRIDS AUSTRIA

Andreas Lugmaier
Siemens AG - Austria
andreas.lugmaier@siemens.com

Hubert Fechner
arsenal research - Austria
hubert.fechner@arsenal.ac.at

Wolfgang Prügler
Energy Economics Group - Austria
prueggler@eeg.tuwien.ac.at

ABSTRACT

Within this paper the goals and dedicated results for building the “National Technology Platform - Smart Grids Austria” are described and presented in detail.

The “National Technology Platform - Smart Grids Austria” will prepare a network for relevant Austrian players in the area of Smart Grids and serve as competent discussion and implementation partner for the European Technology Platform - Smart Grids.

The main activities can be seen in achieving a common consensus of all partners on the thematic content and strategy of the platform, to create and install a joint management structure, to define thematic focus areas for market aspects and framework conditions, and even more to coordinate R&D as well as demonstration activities of Smart Grids.

BACKGROUND

By implementing the European Smart Grid Technology Platform (ETP) the European Commission brought all relevant stakeholders together to create a flexible, efficient and reliable transmission as well as distribution system for the 21st century. The ETP created a common vision, and further defined the Strategic Research Agenda (SRA, see [1]). At present the Smart Grid Strategic Deployment Document (SDD, see [2]) is finalised, including the timeline and related actions to reach the common goals agreed on. Furthermore, preparatory steps for market implementation are described.

An important recommendation of the SDD is to create, encourage and strengthen facilitation groups in member states to serve as competent discussion and implementation partners.

Within the scope of “Smart Grids” Austria already disposes

- an industry with high-tech know-how, approved products and innovations,
- well established and complementary research and development (R&D) institutions in a broad range, actively participating in the “electricity network” part of the national energy research programme, which was already established in 2007
- innovative grid operators and energy suppliers,

- as well as a proactive policy concerning R&D stimulation in general.

On the other hand in Austria there is a lack in overall cross-linking of relevant stakeholders (e.g. component developers, power industry, energy suppliers, grid operators, research institutions) as well as a focused coordination among several R&D projects related to Smart Grids.

In order to utilise upcoming economic opportunities most efficiently, the strategy process “e2050”, initialised by the Federal Ministry for Transport, Innovation and Technology (BMVIT) and the Federal Ministry of Economics and Labour (BMWA) in 2007, enables the implementation of an adequate Austrian cooperation basis in the sector of Smart Grids. This is why the “National Technology Platform - Smart Grids Austria” was raised on a common strategic basis.

Within this paper the project structure, the objectives and envisaged results of the “National Technology Platform Smart Grids Austria” are described and presented in detail. Above all to build up a common cooperation base for all relevant national players, such as industry, network operators, energy suppliers as well as research and development institutions (R&D).

PROJECT STRUCTURE

The building up of the National Technology Platform Smart Grids Austria is divided into a definition and implementation phase (see Figure 1).

The definition phase is necessary to achieve a common understanding and consensus of all partners for the thematic content and strategy of the platform, as well as to create an appropriate management structure.

In the following implementation phase the thematic focus areas for market aspects, framework conditions and R&D coordination will be installed.

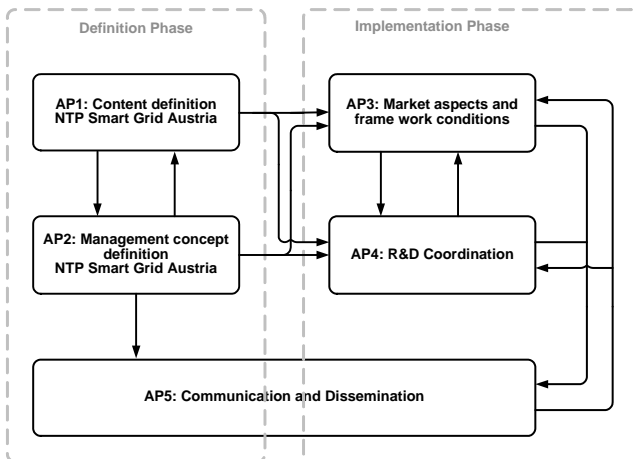


Figure 1: Definition and Implementation phase for building the “National Technology Platform - Smart Grids Austria”

OBJECTIVES

The most relevant objectives of the project are:

- to bring together all relevant national stakeholders (industry, network operators, research, power generators as well as regulation and politics) and build a cooperation basis
- to create a common smart grid definition, vision and picture
- to position the National Technology Platform - Smart Grids Austria as a central communication and information instrument for national and international strategies and projects (e.g. ETP Smart Grids)
- to define, describe and support the necessary framework conditions for the implementation of improved R&D and supporting schemes and for a Smart Grid market
- to coordinate national Smart Grid R&D, demonstration as well as dissemination activities and furthermore
- to identify opportunities for the local industry to find new world wide market options in this new business area.

RESULTS

The two main documents of the National Technology Platform Smart Grids Austria, aligned with ETP - SRA and SDD, will be (see Figure 2):

- A National Smart Grid Strategic Agenda / Roadmap for Research & Development and Demonstration, market strategy / business cases, and for both guidelines for requested legal and regulatory framework conditions
- A National Smart Grid Deployment Document, which will deliver details for the relevant aspects of the National Smart Grid Strategic Agenda. This means to de-

liver answers to the questions of “what, how and when” further steps have to be implemented by “whom”.

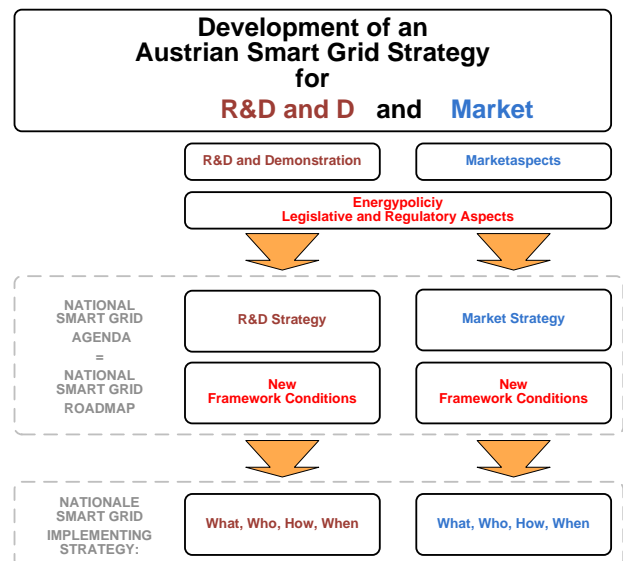


Figure 2: The two main results of the “National Technology Platform - Smart Grids Austria”

CONCLUSIONS AND OUTLOOK

Various research projects show the need for innovative solutions in the area of Smart Grids. Significant contributions to innovative technologies - both on distribution and transmission level - of all stakeholders are needed in order to identify most effective technical, socio-economical and ecological problems in order to come up with sustainable solutions. The Austrian Technology Platform described in this paper therefore facilitates strategic national networking and delivers applicable guidelines for achieving national goals of all markets players within the next 18 months.

REFERENCES

[1] European Commission, Directorate-General for Research, “Strategic Research Agenda for Europe’s Electricity Networks of the future”, 2007
 [2] European Commission, Directorate-General for Research, “Draft - Strategic Deployment Document for Europe’s Electricity Networks of the future”, 2008