

FINSENY in Standardization

The availability of standards is a prerequisite for a cost efficient large scale deployment of Smart Grids. On one hand interoperability standards are needed to ensure seamless interconnection and information exchange between the various actors and roles in a Smart Grid, to allow the development of new innovative applications and to ensure economy of scale.. On the other hand classical product standards which for example cover safety and security have to be evolved in order to take the new requirements, functions and threats of a future Smart Grid into account. As in other domains global standardization enables interoperability and sustainability of the new systems and products as well as it provides confidence in its safety and security.

FINSENY is aiming to actively contribute the results of its work, the use cases, requirements, architecture and Future Internet based generic and domain specific enablers to Smart Grid standardization activities based on the Future Internet . It is important for us to do that via open standardization processes which provide a neutral platform for all relevant stakeholders and to work for the collective advantage of the society. As a European research project we will especially support the European Smart Grid standardization activities and therefore participate and contribute to the Smart Grid Co-ordination Group (SG-CG) of CEN, CENELEC and ETSI which was established following the acceptance of the standardization mandate for Smart Grids M/490 of the European Commission.

One of the expected deliverables of the SGCG is the collection and analysis of Smart Grid use cases and the installation of a use case management system in short term. As the definition of use cases is a main objective of FINSENY as well, an early interlink of work was established and created a high synergy potential. The Smart Grid use cases selected and described by FINSENY are now taken into account for the generic use cases defined by Working Group Sustainable Processes within the SG-CG. FINSENY not only contributes to the SG-CG, but also takes the results of SG-CG into account for its architecture development. The Smart Grid Architecture Model (SGAM) framework currently developed by the SC-GC reference architecture group will also be the base for the FINSENY architecture definitions. Furthermore existing standards which are worldwide considered and recognized like the IEC TC57 standards for Communication networks and systems for power utility automation (IEC 61850) and System interfaces for distribution management (IEC 61968) will be taken into account when defining the architecture, data models and communication relationships as well as existing telecommunication standards supporting the Future Internet (e.g. wireline and wireless communication, network and application layer). The impact of the FINSENY approach on these standards will be evaluated and new ideas, modifications and extensions contributed to the relevant standardization activities.

FINSENY will closely follow the Smart Grid standardization activities at European and international level and contribute to additional standardization activities as needed. Furthermore we will analyse the standardization relevance of the Future Internet Smart Grid solutions defined in the project. If standardization gaps are identified we will drive to fill these gaps and trigger new standardization activities as needed.

Our aim is to develop standardization continuously in parallel to the research activities in order to provide necessary new standards as early as possible - especially in this dynamic market.