

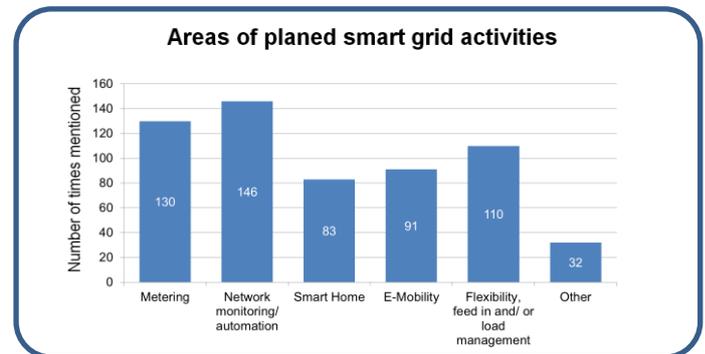
# ENERGISE: ICT-based ENERgy Grid Implementation – Smart and Efficient: Management Summary: Survey Results on Communication Infrastructure for Smart Grid Applications

February 2016

ENERGISE is a research project of the EU Commission established to perform an analysis for smart grid communication infrastructure together with the different parties on governmental, industrial, DSO and TSO side. The main focus is on identifying the different factors which determine if a dedicated or shared communication infrastructure should be used and aid the decision-making for solution deployment.

The survey mainly addressed European DSOs and communications providers, but was open to all interested members of the community. Indeed, the analysis of the 294 fully answered questionnaires shows that the survey gathered viewpoints from various stakeholders beyond the two main target groups, including researchers, TSOs, equipment manufacturers and organisations engaged in energy generation/trading/resale. Albeit not being statistically representative for all European DSOs and communications providers (or the wider European community), the results from the survey mark an important milestone in completing the picture across the ecosystem regarding smart grids in Europe. The survey achieved a wide geographical coverage across Europe with responses by at least one DSO or communications provider from each European member state, whereas responses from both of the main targeted groups cover most of the European member states. Overall, the survey provides a **comprehensive impression** of the European organisations interested and active in smart grid topics and activities.

The analysis of responses received revealed a number of key insights as documented in full detail in the “Survey Summary Report” document. Smart grids were found to determine a main driver of major future developments in the market, both for DSOs and communications providers. The vast majority of responding market players (89%) devotes themselves to smart grid in one way or another. The ability to operate smart grids and/or offer the respective services and solutions appears to turn into an **inevitable competitive asset**.



With a rising amount of smart grid activities reported and planned by respondents, the structure of the energy market is likely to change substantially, for instance with respect to the involvement and role of actors. The significant share of responding communications providers entering the energy market is a clear indication for a substantial **market shift**. While DSOs appear to be developing smart grid applications mainly from a “grid-driven” point of view, communications providers are adopting a more “customer-driven” focus. When considering smart grids, DSOs and communications providers tend to focus on those activities they are most familiar with according to their core competences.

Overall, the analysis of the survey suggests that the energy market as a whole is about to change and speed up quite significantly. However, there are substantial strategic hurdles to overcome in order to enforce cooperation between communications providers and DSOs as there are **various asymmetries** among them.

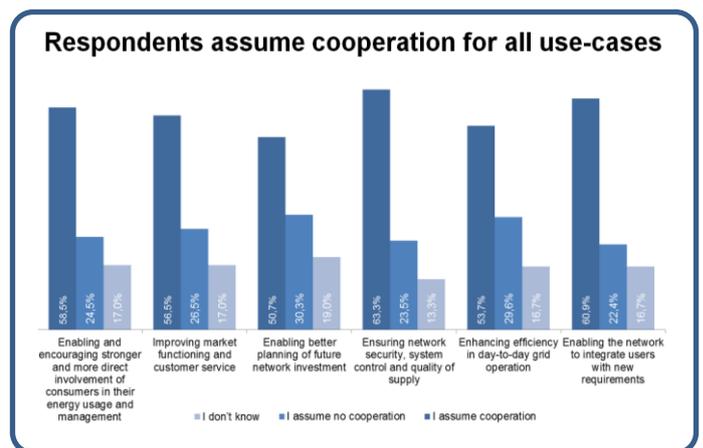
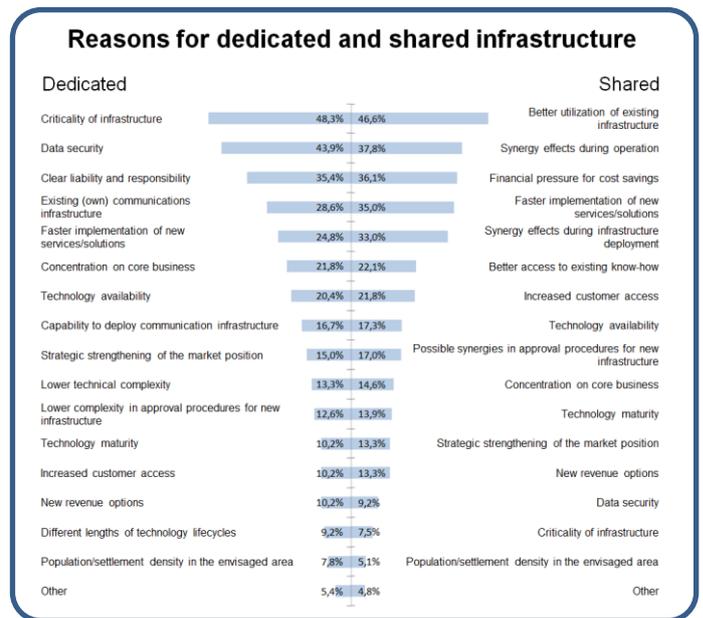
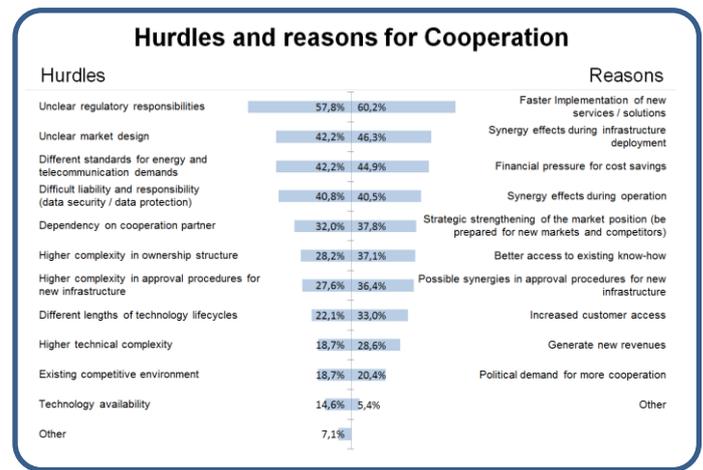
In this context it is important to note that the survey revealed substantially differing strategic backgrounds of the involved industries. The main hurdle for cooperation has been identified by respondents as the regulatory framework, which is perceived to be in need of **further clarification**. Nonetheless, the main reason for cooperation among the energy and communications sectors emerged to consist in **assumed advantages**. Cost savings, synergies during deployment and faster implementation were stated as the most important reasons for a combined effort. Accordingly, a vast **majority of companies assume co-operations** for all use-cases, although there are some noteworthy deviations throughout the different respondent groups.

DSOs and communications providers showed substantially different opinions when it comes to their respective assessment of the cooperation potential among the two sectors as well as with respect to their assumptions on the use of shared infrastructure. However, this depends on the smart grid use case in question: While there appears to be broad consensus for the customer-centric use cases, opinions about the network-centric use cases tend to vary widely. The detailed results for each respondent group can be found in the **full summary report on the project webpage**.

This full report summarises, categorises and aggregates the findings of the use case survey that has been conducted at the end of the first project year in ENERGISE. The survey focused on smart grids in Europe, in particular the following two key aspects.

First, the **role of cooperation** among the energy and communications sectors in building and operating smart grids was assessed. Second, **smart grid use cases** with regard to the assumed priority for various stakeholders and the assumed likelihood for the use cases' realization in cooperation were evaluated.

In general, these results are not only a key outcome of the first project year, they are an essential input to support the future tasks of ENERGISE. Most of all, the use case analysis and the deduction of a theoretical rationale rely on the findings of this survey. Its results will drive in addition the thematic positioning of the community-oriented events planned for the second project year, most importantly the **upcoming workshops** and expert interviews. Furthermore, the project plans to promote the insights obtained from the survey in the community by means of articles published on the project **website** and presentations at industry events.



**ENERGISE: ICT-based ENERGY Grid Implementation – Smart and Efficient**  
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 For more information on the project, please visit <http://project-energise.eu/>

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