

Position paper for Endesa Servicios
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Presentation:

Endesa Servicios is a company of the Endesa group, managing ICT projects within the Endesa Group. Endesa is one of the major electricity companies in Spain. Their major businesses are Energy Generation and Electricity distribution.

- (1) What use case and scenario in your area would you consider the most appropriate and representative one for large-scale experimentation with the Future Internet platform to be built starting from 2013 (please refer to the documents referred to on the above websites for inspiration)?

*Endesa has been recently very active in Smart Grids research, and currently is leadering a smartcity project in the nice city of Malaga. (<http://www.smartcitymalaga.es>). So, the main interesting scenario for us is the **Smart Energy Grids**. In the Malaga project we are trying to integrate a smart public lighting system and a small fleet of Vehicles (V2G). For this we find highly interesting the second and third scenarios too. **Utilities and Environment, and Transport, mobility and Logistics**.*

- (2) What innovative Internet functionality and technologies would you consider important for your suggested use case and scenario (e.g. context awareness, sensor networks, advanced real time processing capabilities handling huge volume of data, ad hoc service composition and mash-up, managed broadband connectivity and services, embedded media support for interfaces easing the interpretation of processed contextual data, etc.)?

All of them. The distribution grid is probably one of more hug infrastructure ever built by human beings. In fact the deployment of a wide are smart grid involves the integration of several technologies across millions of customers, so probably the development of all those new technologies will be necessary in order to fit the required performance of the system (interoperability, automation, context-awareness, distributed computing, ontologies...)

- (3) Which of the identified functionalities would you expect the Future Internet core technology platform to deliver to support your and other usage area scenarios?

Probably, due to the massive nature of smart grids, the key functionality are "Availability, ubiquity, and simplicity", and "Adaptability and evolvability".

- (4) What kind of experimentation environment would you consider necessary for broad large scale testing of the platform to be developed in your use area? What would be needed to experiment new services and applications cutting across use areas (services and application mash-up) and building a new services and application ecosystem around the prototype implementations of the platform?

Our main interest is centred in Smart Grids technologies and how to integrate them in a real scenario such as several cities or better, a mix of urban and rural areas.

- (5) How do you see the potential role of your organisation in the FI-PPP, in the context of Usage areas taking a prominent role in the Initiative, to ensure an appropriate application driven approach?

Probably we could contribute with our experiences within our current projects or new ones regarding Smart Grids and Electric Vehicles, from the point of view of a utility.