First successful electromobility roaming service tested across Europe

With the successful implementation and testing of a Business-to-Business (B2B) IT marketplace for electromobility services, the EU-funded project Green eMotion reached an important milestone to demonstrate a European-wide interoperable electromobility system. The marketplace allows energy companies, car manufacturers and charging point providers to share and integrate services on one common IT platform. The implementation and testing is a crucial step in order to create a network of charging points and electromobility services that are compatible across Europe so that drivers of electric vehicles can travel and charge their cars wherever they like. The Green eMotion marketplace is provided by IBM with electromobility services provided by SAP and Siemens. Already today, companies like Enel, Endesa, ESB and RWE are using the marketplace to test first client services.

One goal of the Green eMotion project was to develop an open IT platform which provides the necessary requirements such as standard IT interfaces for various electromobility services to demonstrate its usability and flexibility across Europe. For this purpose, three demo regions – Berlin, Italy and Spain – connected their IT systems to the newly implemented marketplace. The first release of the software system focusses on so-called clearing house services. Those are necessary to authorize the driver of an electric vehicle when he is plugging his car into charging points from various charging point operators (roaming scenario).

Companies like German energy provider RWE, Irish energy company ESB, Spanish Endesa and Italy’s largest power company Enel have already successfully tested the clearing house services. Enel and Endesa presented an end-to-end working demonstration of roaming service in Barcelona at EVS 27 conference. An Endesa RFID card was successfully authorized at Enel charging station by using the Green eMotion marketplace ICT platform provided by IBM with the clearing house services provided by SAP.

“With this successful test of the roaming functionality, we have achieved a major milestone towards an interoperable European electromobility system, which allows electric vehicle drivers an easy access to charge points throughout the continent” says the project coordinator of Green eMotion, Dr. Heike Barlag (Siemens AG). This demonstration validates the Green eMotion interfaces for their future replication, improvement and commercial scalability.

Additionally to the clearing house services, a search service is implemented, which helps drivers to find appropriate charge points. Further functionalities for reserving charging points and energy load management will follow shortly. Over the next weeks, more demo regions in Copenhagen, Bornholm, Malmö, Karlsruhe/Stuttgart, Strasbourg and Madrid will join the marketplace.

Green eMotion is a large-scale European electromobility demonstration project, launched within the European Union’s Green Cars Initiative. It brings together 43 partners from industry, energy sector, electric vehicle manufacturers, municipalities as well as universities and research institutions. The aim is to develop and to demonstrate a commonly accepted and user-friendly framework consisting of interoperable and scalable technical solutions in connection with a sustainable business platform. Smart grid developments, innovative ICT solutions, different types of electric vehicles and urban mobility concepts will all be taken into account. The four-year project started in March 2011. It has a total budget of €42m, €24m of which are funded by the European Commission.