



A major Smart Metering project with Helen Electricity Network

Helen Electricity Network Ltd and Landis+Gyr will cooperatively implement one of the largest and most advanced smart metering projects in Europe. The comprehensive smart metering solution will enable the network company to rationalize its processes and lead the way in developing new services and the smart grid.

Prior to the expansion of the company's smart metering solution, the electricity consumption of Helen Electricity Network's 150,000 customers is already measured with smart meters supplied by different manufacturers. Added to this Helen Electricity Network wanted also its largest smart metering package supplier to be a proficient and environmentally aware actor that could offer a versatile and cost-effective total solution, from high-quality and innovative meters to a sophisticated meter reading service.

Helen Electricity Network required that their partner in this extensive smart metering project has to be able to rise to the challenge throughout the life cycle of the smart metering service. Another requirement Helen Electricity Network had in the selection of its smart metering solution provider was a reliable communication from meters to utility data systems. In total, the solution had to be able to provide up-to-date information on energy consumption, network status and power quality data to support the daily operations of Helen Electricity Network.

Strong ability to provide total solutions

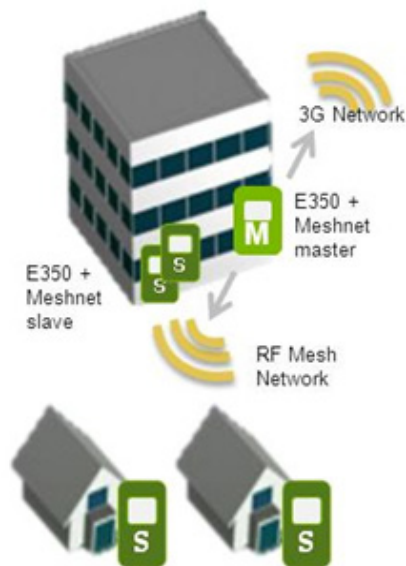
Helen Electricity Network selected Landis+Gyr as its smart metering solution provider, as it met all the criteria set for the smart metering partner. Landis+Gyr's diverse product and service portfolio allowed for a turnkey delivery, which enabled Helen to switch to smart metering with controlled costs and use of human resources. Thanks to Landis+Gyr's long experience in the service business, the implementation of this extensive project will meet the specific needs and expectations of the network company's business. Another decisive factor in choosing Landis+Gyr was the advanced processes for meter reading services. This extensive smart metering project will be completed by 2013, at which point all 350,000 of Helen Electricity Network's customers will be covered by smart metering.

Helen Electricity Network opted for the turnkey delivery of Landis+Gyr's smart metering solution. Landis+Gyr is responsible for the delivery and installation of 200,000 meters, as well as the integration of the smart metering

system with the network company's information systems. Landis+Gyr is also in charge of the project management – in close cooperation with the customer. Together with its installation partners, Landis+Gyr takes care of the equipment installation. An integral part of the delivery is the meter reading service provided by Landis+Gyr, which Helen Electricity Network obtained for a minimum of 10 years. This service provides the energy company with efficient and reliable consumption information and network status data without burdening its own human resources. Metering data is delivered to

Helen Electricity Network

Helen Electricity Network is part of the Helen Group, a subsidiary of Helsingin Energia. Helsingin Energia is one of the largest energy companies in Finland delivering electricity to about 400,000 customers. In 2010, the amount of electricity transferred in the network company's distribution area was more than 4730 GWh. The revenue of the network business in 2010 was EUR 113 million.



The metering room structure for E350 meters utilized in Helen Electricity Network's solution optimizes the communications reliability and costs.

Helen Electricity Network on a daily basis with the exception of selected sites where hourly data delivery is required. The meter reading service also supports remote and relay control, as well as a variety of on-demand readings and controls. During the service contract period, Landis+Gyr is also responsible for the maintenance of the field devices.

Flexible technology meets customer needs

Landis+Gyr was able to provide Helen Electricity Network with advanced smart metering technology that comes with a flexible system architecture open not only to the technologies of other meter manufacturers but also to the implementation of communication solutions: compliance with open standards enables the use of different communication technologies and protocols. The communication solution selected utilizes Meshnet RF-

technology. The flexible solution allows the optimization of installations, equipment and communication costs.

The main incentive behind the development of Landis+Gyr's smart metering technology is the preparation for future innovations. The flexible system architecture developed to meet the individual needs of the customer also facilitates adaptation to future developments. Smart meters can be updated remotely and they support bi-directional energy metering, which allows also small-scale production of energy to be measured.

"Smart metering is a key step in the development of a smart grid. We are prepared for these future developments in our technological solutions, as improving energy efficiency and ensuring the continuity of electricity supply is our goal for the future," says Risto Harjanne, Managing Director, Helen Electricity Network.

Landis+Gyr's Gridstream AIM system supports dynamic load control, which enables the network company to develop market-based load control. The system can be configured to receive market price information and control the meters accordingly - the basic program adapts to the fluctuations in demand.

New innovations and cost benefits through near real time metering

The switch to smart metering allows Helen Electricity Network to develop and diversify its customer services. The quality of customer service is improved through real-time information and up-to-date billing.

By switching to smart metering, Helen Electricity Network receives significant

cost benefits. Near real-time data enables, for example, the optimization of network usage thanks to the effective monitoring of network status and electricity quality. This also helps to focus preventive maintenance efforts and investments.

The end of manual meter reading and the ability to remotely connect and disconnect electricity supply reduce site visits and provide significant savings and environmental benefits. Meter remote controls can be implemented flexibly using a variety of different control methods. Helen Electricity Network, for instance, uses a "current guard" control to connect the electricity supply when the customer is moving in. The measurement device is set to measure the phase currents after the connection of the electricity supply. If the phase current exceeds the specified limit, the electricity supply is automatically disconnected.

"Smart metering is a key step in the development of a smart grid. We are prepared for these future developments in our technological solutions"

Risto Harjanne, CEO, Helen Electricity Network

Contact:
Landis+Gyr AG
 Theilerstrasse 1
 6301 Zug, Switzerland

Tel. +41 41 935 6000
 Fax +41 41 935 6601
 info@landisgyr.com
 www.landisgyr.eu

Gridstream solution for 200 000 electricity metering points



Our technology:

- + 200,000 E350 smart electricity meters
- + 2G/3G communications, combined with Meshnet RF
- + Gridstream AIM software
- + Site Manager installation tool
- + System integrations
- + AIMIA integration interface
- + Internet-based Dashboard tool for easy browsing of the data

Helen Electricity Network's smart metering solution delivers the benefits of smart metering to over 200,000 customers, being one of the largest smart metering projects in Europe.

E350's metering room solution optimizes the communication costs of the solution: intelligent E350 master meters can serve as both metering and communication devices for metering data. E350 devices will transmit the data through the Meshnet RF network to an E350 master meter, which will transmit the data further to the meter reading system via the 2G/3G network.

The smart metering solution supports a variety of remote and relay controls. It enables network monitoring and load controls as one answer to elasticity of electricity demand.