Nexans demonstrates the 3rd generation of Power Line Communications (PLC) technology for smart grid at European Utility Week

Paris, November 4, 2014 – Nexans demonstrates its smart grid power line communications (PLC) solutions at European Utility Week this week. Attendees will be able to see how PLC is currently being employed as part of the SoGrid project, which is seeking to develop solutions for a smarter grid.

As power grids become more intelligent and integrated, there is a growing need for grid applications and components to be able to communicate with each other. However, the existing power grid cannot be ripped out. SoGrid, a collaborative project supported by the French government which brings together industry and academia, aims to develop and test an end-to-end solution for an easy retrofit of any distribution network into a smart grid.

Nexans contribution to the SoGrid project includes solutions such as medium voltage smart accessories like devices to facilitate G3-PLC transmission from low voltage to medium voltage networks as well as electronic devices for local data management and transfer along medium voltage networks. Nexans will also provide the G3-PLC couplers and high precision voltage and current sensors, which are already available on the market.

The SoGrid test project in the Toulouse region of France was started in 2013 and will run until 2015. A comprehensive chain of devices will be deployed on ERDF’s (Electricité Réseau Distribution France) Midi-Pyrénées network in Toulouse in order to demonstrate the performance of G3 PLC during real-time control of the grid.

G3-PLC for smarter grids

The key component of the SoGrid project is G3-PLC, a new protocol for power lines communications (PLC) technology. G3-PLC uses existing power cables to transmit data, allowing all the components within the smart grid to communicate with each other. G3-PLC uses transformers supporting IPv6 protocol to provide two-way links between different applications in the grid via power cables. SoGrid is using G3-PLC to develop a chain of sensors and communication devices for the retrofit of existing distribution
networks. These devices will allow for advanced metering, dynamic state estimation and control, fault detection, and remote operation of breakers.

G3-PLC represents an easy solution to make the existing grid smarter without the need to dig new communications paths through obstacles such as large building and local landmarks. It is also very secure as it uses infrastructure owned and managed by utility companies.

Alain Robic, President of Nexans Power Accessories said “PLC is a technology whose time has come. The G3-PLC protocol provides an efficient, cost-effective and elegant mechanism for data communications in a smarter grid and we’re excited to be able to showcase this technology at European Utility Week.”

Nexans will be at booth 4.F10. It will also be possible to find out more about G3-PLC at booth 1.A60 where the G3-PLC Alliance will be exhibiting.

Notes to Editors

About G3-PLC protocol
Nexans is a founder member of the G3-PLC™ Alliance organization, sponsored by Electricité Réseau Distribution France (ERDF), which was formed in order to support, promote and implement G3-PLC in smart grid applications. G3-PLC is a global open power line communication protocol specifically designed for smart grid communications. It enables smart meter management, control and monitoring of the electrical distribution network, energy management, EV charging, lighting control as well as other smart grid applications. Just as with other ubiquitous communications standards, WiFi and Bluetooth for example, this Alliance has been created in order to drive widespread adoption of G3-PLC by enabling rapid development up and down the entire electric power ecosystem.

About SoGrid
SoGrid is consortium established to develop a G3 (third generation) PLC chain of sensors and communication devices for end-to-end power distribution networks. From smart meters installed at customers’ premises, to connection equipment distributed across the medium voltage network to the source substation, a comprehensive chain of devices will be deployed on ERDF’s (Electricité Réseau Distribution France) Midi-Pyrénées network in Toulouse in order to demonstrate the performance of G3 PLC during real-time control of the grid.

About Nexans
Nexans brings energy to life through an extensive range of cables and cabling solutions that deliver increased performance for our customers worldwide. Nexans’ teams are committed to a partnership approach that supports customers in four main business areas: Power transmission and distribution (submarine and land), Energy resources (Oil & Gas, Mining and Renewables), Transportation (Road, Rail, Air, Sea) and Building (Commercial, Residential and Data Centers). Nexans’ strategy is founded on continuous innovation in products, solutions and services, employee development, customer training and the introduction of safe, low-environmental-impact industrial processes. In 2013, Nexans became the first cable player to create a Foundation to introduce sustained initiatives for access to energy for disadvantaged communities worldwide.

We have an industrial presence in 40 countries and commercial activities worldwide, employing close to 26,000 people and generating sales in 2013 of nearly 6.7 billion euros. Nexans is listed on NYSE Euronext Paris, compartment A. For more information, please consult: www.nexans.com

Contacts:
Press
Angéline Afanoukoe Tel.: +33 (0)1 73 23 84 12 Angeline.afanoukoe@nexans.com

Investor relations
Michel Gédéon Tel.: +33 (0)1 73 23 85 31 Michel.gedeon@nexans.com