

Hitachi and ELES Agree on Common Smart Grids and Smart Communities Action

Mizuho Bank participates as an entrusted company

Ljubljana, Slovenia, 25 November, 2016 – Hitachi, Ltd. (TSE: 6501, Hitachi) and ELES, d.o.o. (ELES) today announced that they have agreed to undertake a joint project on smart grids and smart community business in Slovenia. The project will run for three years from November 2016 to October 2019. A number of advanced solutions will be demonstrated by Hitachi to establish or expand its existing service-based business. These solutions will be further extended to other European regions in the future. ELES will use the solutions for optimization of their network operation; for the future development of their systems to enable a coordinated approach for all network operators in Slovenia; and for the creation of new services at lower voltage levels that enable secure operation of transmission systems.

This agreement is based on an existing partnership between Japan's New Energy and Industrial Technology Development Organization ("NEDO") and ELES. Within this partnership, Hitachi, as the entrusted company of NEDO, provides advanced equipment and solutions while ELES invests in development of smart functionalities, with the joint aim of creating a smart network infrastructure.

Mizuho Bank, Ltd. ("Mizuho Bank") will also conduct the demonstration project to study business models as an entrusted company by NEDO and we will all collaborate to proceed with the project.

Slovenia became independent from the former Federal Republic of Yugoslavia in June 1991 and joined the European Union (EU) in 2004. Currently, Slovenia has set targets for covering 20% of its final energy consumption with renewable energy by 2020, based on EU directives that include reductions in the emission of greenhouse gases. In addition, Slovenia has ratified the new international framework for measures against global warming - the "Paris Agreement" - that came into effect on November 4, 2016. The achievement of these targets will require both the installation of large amounts of renewable energy generation, and the technology that can provide sophisticated and coordinated network management.

Since joining the EU, Slovenia has enjoyed improving standards of living and a high

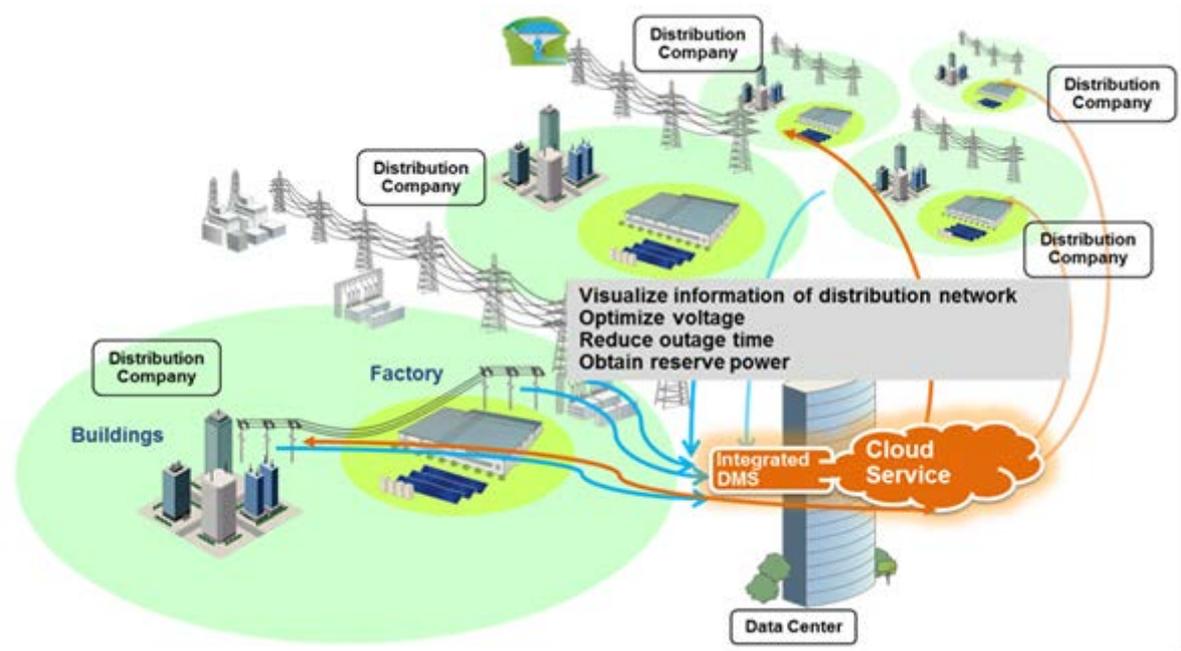
rate of growth in the manufacturing industry. As a result, electricity demand is increasing and the cost of replacing the existing, aging network infrastructure is expected to increase.

The joint Japan and Slovenia project began with a feasibility study from December 2014 to September 2016, which was commissioned by NEDO and the Slovenian government to Hitachi and Mizuho Bank. Following positive results of the study, the Slovenian state-owned electricity transmission system operator (ELES), electricity distribution network companies and local companies have joined the project. Specifically, a cloud-based integrated distribution management system for small and medium-scale electricity distribution companies will be provided as a service-based business. The system will use advanced Japanese electricity management technologies and ICT such as voltage optimization and fault restoration. And ELES will invest in development of advanced functionalities including the functions of voltage optimization and the restoration of the faulty sections. As a result, the system will enable coordinated operation of the many small and medium network operators across Slovenia, leading to reduced capital investment costs and allowing further expansion of renewable energy in the country. As renewable energy advances in Europe, improved fault restoration, voltage optimization and the visualization of distribution network information will reduce outages and contribute to the supply high-quality electricity and safe operation of the electric power system.

■ **Benefits for Slovenia:**

- advanced and environmentally-friendly solutions for developing sustainable electric power systems on a national level
- advanced systems, ICT technologies and cloud-based services to better utilize existing infrastructure and reduce investment costs
- a coordinated approach between distribution and transmission operators to achieve safer system operation
- exchange of knowledge and experience through cooperation of Slovenian and with Japanese industry

■ System Overview



* DMS: Distribution Management System

About Hitachi, Ltd.

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, delivers innovations that answer society's challenges. The company's consolidated revenues for fiscal 2015 (ended March 31, 2016) totaled 10,034.3 billion yen (\$88.8 billion). The Hitachi Group is a global leader in the Social Innovation Business, and it has approximately 335,000 employees worldwide. Through collaborative creation, Hitachi is providing solutions to customers in a broad range of sectors, including Power / Energy, Industry / Distribution / Water, Urban Development, and Finance / Government & Public / Healthcare. For more information on Hitachi, please visit the company's website at <http://www.hitachi.com>.

About ELES, d.o.o

As the transmission system operator, ELES, d.o.o., sistemski operater prenosnega elektroenergetskega omrežja (ELES, d.o.o.), ensures the safe, reliable and uninterrupted transmission of electricity. ELES is the guardian of Slovenia's electric power transmission system, which is closely connected with the transmission networks of the neighbouring countries and integrated into the European energy system. As experts in the field of energy, and through the application of knowledge and advanced technology, ELES provides both suppliers and consumers with the quality transmission of energy – a quality of life. The founder and the sole owner of the company is the Republic of Slovenia. For more information on ELES, please visit the company's website at <http://www.eles.si>.

About Mizuho Bank

Mizuho Bank provides financial and strategic solutions for the increasingly diverse and sophisticated needs of clients, focusing its efforts on serving major corporations, financial institutions, individuals, public sector entities and small and medium-sized enterprises. A relationship management approach to serving clients enables Mizuho Bank, together with group companies including Mizuho Trust & Banking and Mizuho Securities, to develop customized solutions in areas such as corporate, structured and project finance, investment banking, transaction banking and risk management. With offices in 38 countries, Mizuho Bank offers clients both localized service and the extensive reach of a global business network. Mizuho Bank is a subsidiary of the Japan-based Mizuho Financial Group, Inc. (NYSE: MFG), one of the largest financial services companies in the world, with total assets of approximately \$1.6 trillion.

<https://www.mizuhobank.com/index.html>

Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.
