

May 24, 2019 Marubeni Corporation

Marubeni Begins Global IoT Communications Service

Marubeni Corporation (hereinafter, "Marubeni") has started to provide a global IoT communications service (hereinafter, "the Service") using the Nokia Worldwide IoT Network Grid (hereinafter, "NOKIA WING"), a global communications management platform of NOKIA Corporation (hereinafter, "NOKIA"), through a fully-owned subsidiary of Marubeni, Marubeni Wireless Communications Inc. (hereinafter, "MWC").

NOKIA WING can improve the management and control of IoT devices, regardless of country and communication type, by connecting with local carriers while following the regulations and laws of each country where WING is used. WING enables MWC to provide global IoT communications services at almost local prices (as opposed to more expensive roaming prices) and, through connection with overseas carriers provided with WING, MWC and Nokia work together to develop global communications services that allow MWC to develop and sell IoT services to its customers. MWC has already begun to provide these global communications services based on NOKIA WING.

Furthermore, MWC will address the Japanese manufacturing industry's need to remotely monitor products shipped overseas by supplying global communications services at a lower price that is comparable to local prices.

In addition to telecommunications services providing wide coverage to 190 countries and regions around the world, MWC also aims to be able to provide e-SIM services by the end of this year. The primary details of this service are listed below:

- Remote control of industrial equipment such as air conditioners and machine tools.
- Monitoring (and remote monitoring) of the operation status of construction equipment and medical equipment such as artificial dialysis devices.
- Real time information collection for preventive maintenance such as FA equipment.
- Collection of vehicle position information and travel data.

MWC also provides lower-cost global telecommunication services to overseas business travelers and visitors.

MWC has signed Johnson Controls-Hitachi Air Conditioning, a global manufacturer of



air conditioning equipment, as a customer of this service.

[Company Profiles]

< NOKIA Corporation >

Headquarters	Espoo, Finland
Founded	1865
Business:	Telecommunication Equipment, Networking Equipment, Software

<Marubeni Wireless Communications Inc.>

Headquarters	Hakushika Kayabacho Bldg. 7th Floor, 1-17-18, Shinkawa, Chuo City,
	Tokyo
Founded	2012
Business:	MVNO, IoT Service

*Reference:

May 15th, 2019

Subsidiaries of Marubeni Corporation to Merge to Strengthen Network Solution Sector

https://www.marubeni.com/en/news/2019/release/20190515E.pdf

< Johnson Controls-Hitachi Air Conditioning >

Headquarters	1-16-1, Kaigan, Minato City, Tokyo
Founded	2015
Business:	Design, manufacture and sales of air conditioning equipment