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Mitsubishi Electric Develops Prototype Active Phased Array Antenna for 5G

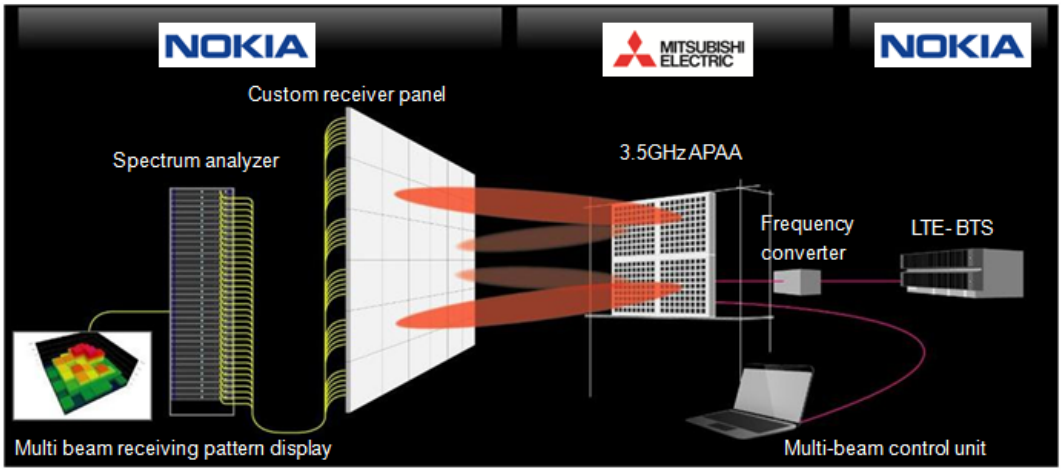
Will demonstrate prototype with Nokia Networks at Brooklyn 5G Summit

TOKYO, April 8, 2015 – Mitsubishi Electric Corporation (TOKYO: 6503) announced today that it has developed a prototype Active Phased Array Antenna (APAA) to verify new multi-beamforming technology for envisioned fifth-generation (5G) mobile networks. Mitsubishi Electric will exhibit the prototype in a 5G multi-beamforming demonstration that it will conduct jointly with Nokia Networks at the Brooklyn 5G Summit in New York City starting April 8.

Key features of the APAA prototype are as follows:

- Four-beam spatial multiplexing achieved with a multi-element antenna.
- Beamforming control of the direction of radio signal transmission and reception for two-dimensional vertical and horizontal scanning.
- Use of 3.5GHz, the highest frequency available in current cellular mobile communication.

In the demonstration of beam-steering control using four beams, Mitsubishi Electric will connect its APAA prototype to Nokia Networks' base station equipment to confirm the four beams' characteristics simultaneously. Mitsubishi Electric and Nokia Networks will continue to jointly evaluate APAA technology for 5G mobile networks.



Scheme of joint demonstration

Multi-beamforming is expected to achieve efficient frequency utilization by forming and multiplexing a plurality of beams using multi-element antenna arrays. Mobile systems based on 5G, the mobile standard that will succeed LTE and LTE-Advanced, will use multi-beamforming to cope with fast-increasing radio traffic volume.

Mitsubishi Electric's APAA technology is already used commercially in satellites and other systems, and now the company aims to adapt it for use in 5G base stations.

The Brooklyn 5G Summit, which will be jointly held by Nokia Networks and the NYU WIRELESS research center at the Polytechnic School of Engineering at New York University, will focus on important trends in 5G wireless technologies.

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About Mitsubishi Electric Corporation

With over 90 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,054.3 billion yen (US$ 39.3 billion*) in the fiscal year ended March 31, 2014. For more information visit:
http://www.MitsubishiElectric.com

*At an exchange rate of 103 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2014