

NTT DoCoMo Achieves World's First 5Gbps Packet Transmission in 4G Field Experiment

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NTT DoCoMo, Inc. announced today that it achieved a maximum packet transmission rate of approximately 5Gbps in the downlink using 100MHz frequency bandwidth to a mobile station moving at 10km/h. The field experiment of fourth-generation (4G) radio access took place in Yokosuka, Kanagawa Prefecture on December 25, 2006.

After having achieved a maximum speed of 2.5Gbps on December 14, 2005, DoCoMo doubled the speed in the more recent test by increasing the number of MIMO* transmitting and receiving antennas from six to 12 each, and by using proprietary received signal processing technology.

As compared with the December 14, 2005 test, the frequency spectrum efficiency, or the ratio of data transmission rate to channel bandwidth, was also doubled from 25bps/Hz to 50bps/Hz (5Gbps/100MHz).

DoCoMo will present the details of the experiment at the 3GSM World Congress 2007 in Barcelona, Spain being held from February 12 to 15.

DoCoMo looks forward to contributing to the global standardization of 4G through its ongoing research and development.

* Multiple-Input Multiple-Output: Different data streams are spatially multiplexed using multiple antennas for both transmission and reception on the same frequency

Source: NTT DoCoMo

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