

Technological Development to Improve Communications Quality

Activity and Results

Efforts to Increase Communication Speed

■ Providing Carrier Aggregation for 4G LTE and WiMAX 2+

In FY2014, KDDI introduced 4G LTE Carrier Aggregation, which is supported by next-generation high-speed LTE-Advanced technology, and started releasing smartphones and tablets that support two next-generation communication networks, Carrier Aggregation and WiMAX 2+.

Carrier Aggregation technology enables LTE data communications across multiple frequency bands simultaneously. By combining data received in different frequency bands, a faster communication speed is achieved.

In FY2015, KDDI continued to increase the speed of 4G LTE Carrier Aggregation, as well as introducing Carrier Aggregation for WiMAX 2+ and releasing compatible smartphones and tablets.

In FY2016, KDDI plans to start offering 4G LTE & WiMAX 2+ high-speed communication with a maximum receiving speed of 370 Mbps, bundling 4G LTE high-speed communication and WiMAX 2+ high-speed communication with Carrier Application. The network is automatically selected based on the customer's communication environment, ensuring comfortable high-speed data communications^[1].

[1] Devices are connected to the network that KDDI determines to be the least congested, based on factors such as traffic conditions.

* WiMAX 2+ is a high-speed communication service provided by UQ Communications Inc.

Activity and Results

Providing a Convenient Usage Environment

■ Providing Area Quality Information Transmission Function for 4G LTE Smartphones (Android™)

KDDI has expanded the number of mobile phones that include the Area Quality Information Transmission Function in its effort to further increase communications quality. The Area Quality Information Transmission Function is a function that detects and collects information on quality, signal condition and location during voice calls and data transmission and automatically sends it to KDDI. The area quality information sent to KDDI is analyzed statistically and used for improving the signal quality in places where customers experience transmission errors and slow transmission speeds.

■ Improvement of Communications Environment by Home Visits

As part of the efforts to improve the communications environment for au mobile phones, KDDI offers the Signal Support 24 service for customers nationwide. In this service, KDDI staff visit the homes of customers who have inquired about signal quality and examine the reception condition for au mobile phones. KDDI contacts the customer to setup an appointment within 24 hours of their inquiry.



Home visit service – Examining signal reception quality to create better service area



au Femtocell (left) and au repeater (right)

KDDI then implements service area improvements using au repeaters or au Femtocells. We accept inquiries about signal quality not only in homes, but also outdoors and in offices and restaurants. We will continue to strive to improve service area quality as well as deliver a reliable communication environment through committed reactions to the voices of our customers.

■ au Wi-Fi SPOT Public Wireless LAN Service

KDDI offers the "au Wi-Fi SPOT Public Wireless LAN Service," which allows easy Internet access by anyone with an au smartphone.

By simply turning on the Wi-Fi function of their device, anyone can easily connect to an au Wi-Fi SPOT. Also, depending on the strength of the signal, devices can switch from 4G to Wi-Fi automatically for easy Internet communications. KDDI is enhancing au Wi-Fi SPOT network construction and increasing the number of hotspots so as to provide easy telecommunications access to all au smartphone users.



Sticker to inform of available location