# The workflow of connectivity verification with the KDDI network

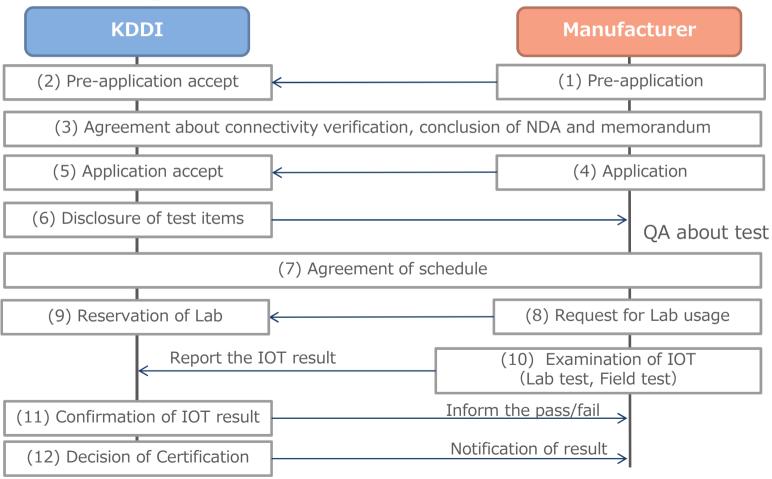
KDDI CORPORATION December 2015



#### Workflow from application to connectivity verification

 This document describes the workflow of connectivity verification with our network for manufacturers which develop their own mobile terminals.

#### [Standard flow]





## **Documents provided from manufacturers**

- At the time of "(1) Pre-application", please fill in the required items on the "Application form" from our web site and send it.\*1
  - ⇒ After confirming the application of IOT, we will provide the following documents.

<Documents>

NDA, Memorandum about the examination of IOT (after the conclusion of the NDA)

- \*1 In our network, if a problem such as interference has occurred by a mobile terminal developed by a manufacturer, we may reject that mobile terminal. To prevent such a situation, we request to confirm the connectivity with our network.
- After "(5) Application accepted", we will provide the technical information\*2 related to the examination of IOT.
  - \*2 We will provide test items for examination with our network at this time.
- At the time of "(10) Examination of IOT", please submit the following documents to confirm that the mobile terminal complies with the Technical Regulations defined by Japanese law.

<Submitted documents>

Technical Regulations Conformity Certification or,

Attestation of the construction design of specified radio equipment



# Laws and regulations

 In case that manufacturers will sell mobile terminals connected to our network in Japan, the manufacturers shall comply with the following laws and regulations at your own risk.

#### < Related laws and regulations >

- Telecommunications Business Law and related decrees, orders, and notices
- Radio Law and related decrees, orders, and notices

#### <Technical Regulations Conformity Certification >

- KDDI has obtained Blanket Licenses for the mobile terminals.
- An operator can obtain the blanket license if the type of radio waves, frequencies and the upper limit of the maximum transmission power of the mobile terminal which are the same.
- Manufacturers need to obtain the Technical Regulations Conformity Certification based on the Radio Law to connect our network.



### **About Band1 Certification of KDDI devices**

 Since the PHS band is close to Band1, the upper limit of unnecessary radiation (-41dBm/300kHz) is restricted by 3GPP specifications and the Japanese Radio Law.



 Devices connected to KDDI network shall comply with the following frequency and transmission power in Band1.

```
<Channel Bandwidth : 5MHz>
                                                                  *Blue: Frequency:
1922.5MHz~1927.1MHz(100kHz interval 47 waves)
                                                        X X dBm
                                                                       3GPP TS36.101 Table 6.6.3.3.1-2
 1927.2MHz~1977.5MHz(100kHz interval 504 waves)
                                                     23dBm
                                                                  *Red: Power reduction: Japanese radio law
<Channel Bandwidth : 10MHz>
                                                                  * The information enclosed with < > may not
 1925.0MHz~1934.6MHz(100kHz interval 97 waves)
                                                       \triangle \triangle dBm
                                                                   be listed depending on the certification
                                                                   organization.
 1934.7MHz~1975.0MHz(100kHz interval 404 waves)
                                                     23dBm
<Channel Bandwidth: 15MHz>
                                                                  * Manufacturers determine
                                                                    "XX","△△","○○","●●".
 1927.5MHz~1942.1MHz(100kHz interval 147 waves)
                                                        \bigcirc\bigcircdBm
 1932.5MHz (Only when a device transmits up to 5.4MHz width consecutively between 1927.19MHz and
 1937.81MHz)
                   23dBm
 1942.2MHz~1972.5MHz(100kHz interval 304 waves)
                                                     23dBm
<Channel Bandwidth : 20MHz>
 <u>1930.0MHz~1949.6</u>MHz (100kHz interval 197 waves)
 1930MHz (Only when a device transmits up to 4.32MHz width consecutively between 19225.32MHz and
 1934.68MHz)
                  23dBm
 1949.7MHz~1970.0MHz(100kHz interval 204 waves)
                                                     23dBm
```



# <Inquiries> Product & Device Technology Dept.

\*To contact us, please fill in the required items and your inquiry on the "Application form" from our web site and send it.

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