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# Case Study of Certification for Telecommunications Terminal Equipment in Japan

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Hiroshi Arakawa

Japan Approvals Institute of Telecommunication Equipment

Equipment Approval Department



## Unified Interpretation on Article 9 of Ordinance Concerning Terminal Facilities, Etc. based on Telecommunications Business Act





#### Interpretation

"The terminal equipment that transmits radio waves in the terminal facility" is equipment for approval in accordance with Article 9 of the "Ordinance Concerning Terminal Facilities, etc."

Type of radio equipment to be used with typical wireless-communications protocol are shown in the Attached Table.

The Specific scopes of the application object are shown in the Attached Tables (Case 1, 2 & 3).

The most interfaces for terminal equipment connecting to the existing approved terminal are 10/100BASE interface; therefore, it shall be basically approved as "D approval" since the interfaces are considered as the demarcation point.

However, if the existing approved terminal is specified as "A" or "C" approval, then the terminal also shall be approved as "A" or "C".

- Case 1: The terminal equipment that transmits radio waves listed in the Attached Table in the terminal facility, shall be treated as "Case 1" and approved as usual.
- Case 2: Under typical wireless communication protocol, the terminal equipment shall be approved as the master equipment which connects to the existing approved slave equipment.
- Case 3: Under typical wireless communication protocol, the terminal equipment shall be approved as the slave equipment which connects to the existing approved master equipment.

In case of a Public Wireless LAN type of connection configuration, it could be considered as an aspect of the mobile radio terminal facility under the Ministry of Posts and Telecommunications, Notification No. 72, Article 2 of 1994; however there is no registered telecommunications

carrier concerned at this point.

Naturally, under this connection configuration, two beneficiaries arise (public wireless LAN operator and its user) and the terminal equipment is considered as a part of network service business. However, under the technical aspect, it is also considered as the connection required by Article 9 of "Ordinance Concerning Terminal Facilities, etc.", therefore this terminal equipment shall be approved by itself.

#### Others

- 1. Since the communication of general wireless mouse, wireless keyboard, etc., are not the telecommunications carrier's services (voice service and data communications service) based on the Telecommunications Business Act, they are not objects of approval.
- 2. A wireless headset (handset) is object of approval for the above-mentioned voice service.

  Also, Chapter 3 (Safety, etc.) Article 7 (Occurrence prevention of an excessive acoustic shock) of "Ordinance Concerning Terminal Facilities, etc." will apply.





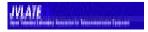
#### Attached Table: Radio equipment in terminal facilities

Type of radio equipment	Typical wireless- communication protocol
·Extremely weak power Radio Equipment (R: Article 4-1)	
·Analog Cordless Telephone Radio Equipment (O: Article 49-8)	
· Digital cordless telephone (Narrow band TDMA) (O: Article 49-8-2)	
· Digital cordless telephone (Wide band TDMA) (O: Article 49-8-2-2)	
· Digital cordless telephone (TDMA/OFDMA) (O: Article 49-8-2-3)	
·Specified Low-Power Radio Equipment (Telemeter, etc.) (O: Article 49-14)	
·Specified Low-Power Radio Equipment (Data transmission implanted medical equipment) (O: Article 49-14)	
·Specified Low-Power Radio Equipment (Millimeter wave data transmission equipment) (O: Article 49-14)	
· Specified Low-Power Radio Equipment (Animal Detection & Reporting System) (O: Article 49-14)	
·Low-Power Security System (O Article 49-17)	
·2.4GHz band Low-Power Data Communication System (O: Article 49-20-2)	(IEEE802.11)
·2.4GHz ISM band Low-Power Data Communication System (O: Article 49-20-1)	(IEEE802.11, Bluetooth, etc)
<sup>-</sup> 5GHz band Low-Power Data Communication System (O: Article 49-20-3)	(IEEE802.11)
·25GHz & 27GHz band Low-Power Data Communication System (O: Article 49-20-4)	
·5GHz band Wireless Access System (O: Article 49-21)	(IEEE802.11)
·Ultra Wide band Wireless System (UWB) ( O: Article 49-27)	

<sup>:</sup> General wireless-communication procedure : The applicable method is only Case 1. (The wireless communications protocol is not common)

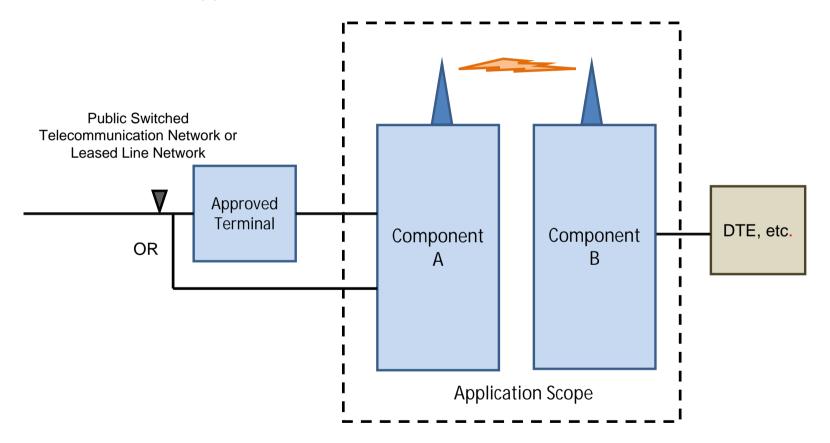
R: Radio Law O: Ordinance Regulating Radio Equipment





#### Scope of the application object on Article 9 (1/3)

Case 1: General application

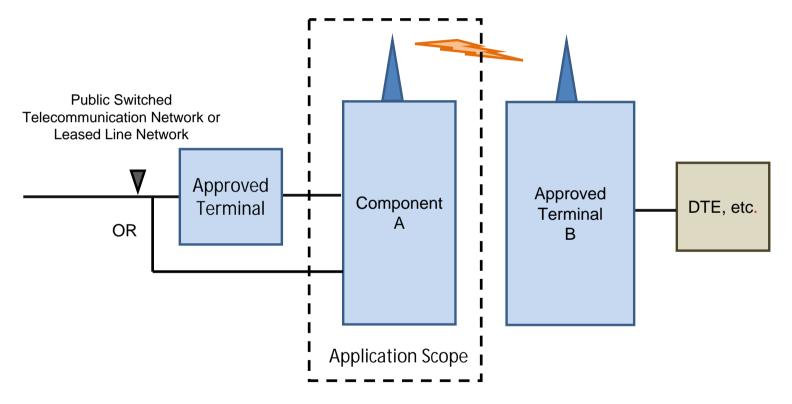






#### Scope of the application object on Article 9 (2/3)

Case 2: In case of Master Terminal (Component A) which connects to the existing approved Client Terminal (Under typical wireless communication protocol)

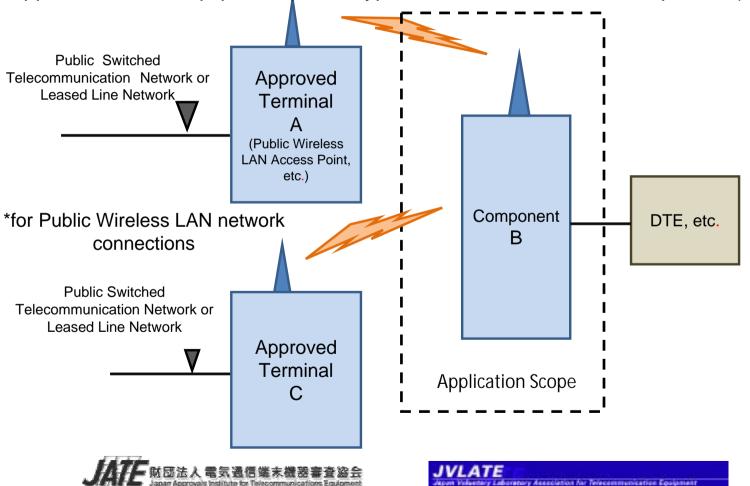






### Scope of the application object on Article 9

Case 3: In case of Client Terminal (component B) which connects to the existing approved Master equipment (Under typical wireless communication protocol)



#### Reference: Ordinance Concerning Terminal Facilities, etc. (Article 9)

- Article 9 Terminal equipment that uses radio waves between sections included in the terminal facility must comply with the requirements indicated below.
- An Identification Code (code to identify radio facilities used as terminal facilities and referenced during setting of the communication channel) that conforms to the requirements published separately by the Minister of MIC must be provided.
- 2 This equipment must determine whether the frequency for utilizing electric waves is open or not in accordance with the separately published notice from the Minister of MIC, and must establish a communication channel only when that frequency is open. This stipulation, does not apply to those cases specifically noted by the Minister of MIC.
- 3 The radio facility must be stored in a single cabinet that can not be easily opened. This stipulation, however, does not apply to cases specifically noted otherwise by the Minister of MIC.

<sup>\*</sup>Related Notification: Identification codes and other conditions based on rules of Ordinance Concerning Terminal Facilities, etc. (Article 9 of Ordinance Concerning Terminal Facilities, etc.) :Ministry of Posts and Telecommunications, Notification No. 424 of 1994 (As amended last by Notification No. 537 of December 14, 2011)



