Overview of Certification System for Terminal Equipment in Japan

27 February, 2013
Telecommunication Systems Division
Telecommunications Bureau
Ministry of Internal Affairs and Communications (MIC)
1. Outline of certification system (P.2)
2. Outline of regulations related to certification system (P.6)
3. Technical conditions for terminal equipment (P.15)
4. Market surveillance (P.22)
5. Consideration about terminal equipment for Internet protocol mobile telephones (P.27)
6. Consideration about certification method for “Softphones” (P.33)
1. Outline of certification system
According to the regulations, Conformity Assessment Bodies (CAB) in the private sector certifies the conformity with the technical conditions of terminal equipment. Technical conditions are established in the purpose of preventing any damage in telecommunication circuit facility.

Certification Procedure

Manufacturers submit documents for technical conditions compliance approval → CAB

Examine the conformity to technical conditions → Certification

Label indicating the conformity with technical conditions

Back cover of a mobile phone

"Technical conditions for Connections of Terminal Facility" (general rules)
- The telecommunications circuit facility shall not be damaged, nor shall functions thereof be impaired.
- No disturbance shall be caused to other users.
- The demarcation point of responsibilities with a telecommunications circuit facility shall be clearly stipulated.

Technical conditions compliance inspection of terminal facility by telecommunications carriers.

Technical conditions compliance approval of terminal equipment approval by the registered approval body.

Self-confirmation of technical conditions compliance of terminal equipment by the manufacturers.

Connection of terminal facility to telecommunications circuit facility.

The right of maintenance inspection by the telecommunications carrier.

The inspections of connection by the telecommunications carriers which operate a telecommunication network are waived when technical conditions compliance approval is obtained.
The certification body is designated in each category.

**Category Type A1**

*Terminal equipment for phone calls* (Article 4 Item 1 of Ordinance concerning technical conditions compliance approval etc. for terminal equipment)
e.g.)
- Analog Telephone
- Mobile Telephone (without packet communication function)
- IP Telephone (with 0AB-J numbers, for call only)

**Category Type A2**

*Other types of terminal equipment* (Article 4 Item 2 of Ordinance concerning technical conditions compliance approval etc. for terminal equipment)
e.g.)
- FAX
- Modem
- Data Communication Card Device for PHS, 3G or BWA
- Pager
- IP terminals (including Wi-Fi Products, without phone call function)
- IP Telephone (except 0AB-J numbers)

**Category Type A1&A2**

*Terminal equipment placed in both category types*
e.g.)
- FAX with phone
- Mobile Telephone (with packet communication function)
- ISDN Terminal Adaptor
Mutual Recognition Agreement

- MRA is a system where the results of conformity assessments with the technical conditions of terminal equipment are mutually accepted between Japan and foreign countries.

- As for terminal equipment, Japan has concluded, Japan-EC MRA (Enacted Jan, 2002), Japan-Singapore MRA (Enacted Nov, 2002), and Japan-US MRA (Enacted Jan, 2008).

Before Implementation of MRA

1. Application
2. Conformity Assessment
3. Export

[Japan] 
[Foreign Country]

Apply directly in a foreign country to export equipment designed for the foreign country (time and cost are required).

After Implementation of MRA

1. Application
2. Conformity Assessment
3. Export

[Japan] 
[Foreign Country]

Application for a foreign country can be performed in Japan
Shorter time period and reduced costs
Assess overseas standards in Japan
2. Outline of regulations related to certification system
Outline of Telecommunications Business Act

- Purpose: to ensure sound development of telecommunications and convenience for citizens and to promote the public welfare.
- Enacted 1984, Composed of 193 Articles in Chapters 1-6
- *Certification System is stipulated in the following subsections:
  - Subsection 2, Section 4 of Chapter 2 “Connection of Terminal Equipment” (Articles 52 to 73)
  - Subsections 2 and 3, Section 5 of Chapter 2 “Registered Approval Body” and “Recognized Approval Body” (Articles 86 to 105)

### Chap 1. General Provisions (Articles 1 to 5)

### Chap 2. Telecommunications Business (Articles 6 to 116)
- Section 4. Telecommunications Facilities (Articles 41 to 73)
- Sub-sec 2 Connection, Etc. of Terminal Facilities (Articles 52)
  (Articles 53 to 73)
- Section 5. Designated Examination Body, Etc. (Articles 74 to 105)
- Sub-sec 2. Registered Approval Body (Articles 86 to 103)
- Sub-sec 3. Recognized Approval Body (Articles 104 and 105)

### Chap 3. Use of Land, Etc. (Articles 117 to 143)

### Chap 4. Telecommunications Dispute Settlement Commission (Articles 144 to 162)

### Chap 5. Miscellaneous Provisions (Articles 163 to 176)

### Chap 6. Penal Provisions (Articles 177 to 193)

### Sub-ordinances of Telecommunications Business Act

- Ordinance Concerning Terminal Facilities, etc.
  [Main contents]
  1. General provisions
  2. Demarcation of responsibility
  3. Safety, etc.
  4. Regulations related to individual terminal equipments

- Ordinance Concerning Technical Conditions Compliance Approval for Terminal Equipment
  [Main contents]
  1. General provision
  2. Terminal equipment subject to technical conditions compliance approval
  3. Technical conditions compliance approval and design certification conducted by registered approval body (Items to be examined, Form of label, Items to be filled out in the various notifications)
The following provisions are specified in the articles related to the standards certification system in the Telecommunications Business Act.

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Obligation of Complying with Design

[Paragraph 1, Article 57 of the Telecommunications Business Act]

“Certified Vendor” which is certified by an approval body has an obligation to have the terminal equipment compliant with its design when the vendor handles the terminal equipment according to the design specifications concerning the certification.

Obligation of Saving Examination Records

[Paragraph 2, Article 57 of the Telecommunications Business Act]

- Certified Vendor shall inspect the terminal equipment regarding the certification and create and save the examination records according to the certified “examination method” (method concerning quality control) to implement the obligation as described above.

- The following items must be recorded and saved for 10 years from the examination date:[As specified in the Article 21 of the Ordinance concerning Technical Conditions Compliance Approval for Terminal Equipment]
  (1) Certification number of the design concerning the examination
  (2) Date and location of the examination
  (3) Name of the person who is in charge of the examination
  (4) Examination method, and
  (5) Examination result
- **Label** [Article 58 of the Telecommunications Business Act]
  - The certified vendor may affix the label indicating the compliance on the terminal equipment only when the aforementioned obligations of complying with design and of storing examination records are carried out.

- The label format is stipulated in the following form
  [Form No. 7 of Ordinance Concerning Technical Conditions Compliance Approval, etc. of Terminal Equipment]

- The label must be affixed on a recognizable place or clearly viewable on the screen.(See next page) [Article 22 of Ordinance Concerning Technical Conditions Compliance Approval, etc. of Terminal Equipment]

- The terminal equipment with the label affixed according to the procedure shall get the aforementioned legal benefit.(Benefit: connection to the telecommunication networks)

* Handling of a label when any change is made on the terminal equipment *

- In principle, a certified vendor **must obtain a new certification by a certification body when a part of or the whole design specification is changed** on the terminal equipment.

- When a new certification is obtained, **Another Number** shall be provided for the certification.
In accordance with reports from Information and Communications Council “Articles regarding technical conditions as to IP telephone terminals and telecommunications troubles” (July 28, 2009) and “What comprehensive legal system of communications and broadcast should be” (August 26, 2009), revision is conducted which makes it possible to record a Label which means it conforms to the technical conditions (hereinafter called conformity mark), which was attached to an easily recognizable section of terminal equipment, onto terminal equipment with a screen image in an electronic way and to show it on its image screen (Electronic label).

**Actual Status of Conformity Mark**

- As for a mobile phone terminal, label showing it is adapted to related technology standards (conformity mark, Bluetooth logo etc.) is attached in the storage space of a battery pack.
- **The space to attach the conformity mark is running short** as various terminal equipment including a mobile phone terminal is becoming rapidly downsizing multirole and combined.

**Introduction of Electronic label**

- **Short of space to attach conformity mark is solved** by the introduction of electronic label.
- **It is easier to confirm than the place where the conformity mark is now attached.**

**Example of Electronic label**

(1) Operation Example

<< Example of Electronic >>

(2) Display Example
- **On-site Inspection on Certified Vendors**  
  [Paragraphs 2 and 3, Article 166 of the Telecommunications Business Act]  
  - When it is deemed necessary for the enforcement of this Act, MIC may order a certified vendor to report on the terminal equipment concerning the certification or may order MIC staff members to conduct an on-site inspection at its office of the certified vendor to inspect the corresponding terminal equipment or any other objects.  
  - When the vendor refuses a report or falsifies a report, a maximum penalty of 300,000 yen may be applied.

- **Submission of Terminal Equipment**  
  [Article 167 of the Telecommunications Business Act]  
  - MIC may order a certified vendor to submit the corresponding terminal or object within a specified time limit when an on-site inspection of the equipment by the staff members is deemed extremely difficult in its residing site or when an object is particularly required in the examination of the corresponding equipment.  
  - When this order is violated, a maximum penalty of 300,000 yen may be applied.

- **Order to Prevent Disturbance**  
  [Article 54 of the Telecommunications Business Act]  
  - MIC may order a certified vendor to take any necessary measures for preventing any expansion of disturbance caused by the equipment when the Minister particularly deems a necessity to prevent the expansion in the case where the terminal equipment with the label concerning certification is in fact not complying with the technical conditions and that the usage of the equipment may cause disturbance with other users’ communications in the telecommunications circuit equipments.  
  - When the order is violated, a maximum penalty of 1 year in jail or a fine of up to 1 million yen may be applied. Also, a maximum corporate fine of 100 million yen may be applied concurrently.
3. Technical conditions for terminal equipment
The technical regulations in the Telecommunications Business Act target the terminal equipment connecting to the telecommunications circuit facility, aiming to prevent any damage to the facility. The technical conditions must be conformed even if a radio link is used to connect to the telecommunications circuit facility.

In Japan, a mobile telephone using any of the following systems must comply with not only the Radio Act but also with the technical conditions in the Telecommunications Business Act.

- TDMA
- CDMA
- W-CDMA
- CDMA2000
- W-CDMA (HSDPA)
- CDMA2000 (1xEV-DO)
- LTE
- WiFi
- WiMAX
- XGP

Types of Terminal equipments

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<td>Terminal equipment connected to ISDN facility</td>
<td>C</td>
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<tr>
<td>Terminal equipment connected to leased line facility or digital data transmission facility</td>
<td>D</td>
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The following page shows the technical regulations which should be conformed for the terminal equipments connected to other telecommunication circuit facility.
### Amendment of Regulations on Terminal Equipment as to IP Telephone Terminal

Considering the improvement of technical conditions on 0AB ~J IP telephone terminal in accordance with reports.

#### Structure of Ordinance Concerning Terminal Facilities, etc.

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#### Key Points

- **0AB~J IP telephone (hereafter called IP telephone)** has developed into a major telephone terminal equal to analog and mobile phones.
- Meanwhile, at present the IP telephone terminal is defined as "data communication" not as "telephone terminal" and necessary functions as a telephone are not secured in the system.
- From the viewpoint of network-protection etc., required system improvement will be carried out so that the IP telephone will have the minimum necessary functions as a telephone and can deal with the problems particular to it.

#### Enforcement

- **Defining IP telephone terminal as telephone equipment and improving technical conditions**
- **Adding conditions to assure emergency call**

It was found that some telephone terminals cannot make emergency calls in the stream of diversification and internationalization of terminal.

Example: Some mobile phones made in a foreign country was set "911=emergency number" wrongly, sold as it was and couldn’t make emergency call and so on.
Details of Amendment of Regulations Regarding Technical Conditions Compliance Approval of Terminal Equipment (Apr. 1, 2011 Enforcement)

Symbol “E” is newly prescribed as an additional category of Technical Conditions Compliance for IP telephone terminal.

Ordinance Concerning Technical Conditions Compliance Approval for Terminal Equipment, Etc.

Type of Terminal Equipment: Before the revision  Symbol  
| Terminal equipment connected to telephone facility | A |
| Terminal equipment connected to radio paging facility | B |
| Terminal equipment connected to ISDN facility | C |
| Terminal equipment connected to leased line facility or digital data communication facility | D |

Type of Terminal Equipment: After the revision  Symbol  
| Terminal equipment connected to analog telephone facility or mobile telephone facility | A |
| Terminal equipment connected to IP telephone facility  Apr. 1, 2011 Enforcement | E |
| Terminal equipment connected to radio paging facility | B |
| Terminal equipment connected to ISDN facility | C |
| Terminal equipment connected to leased line facility or digital data communication facility | D |

Example: Type of terminal equipment  

Before the amendment

- D Router equipped with VoIP adapter function
- A Certified telephone terminal

After the amendment

- DE Router equipped with a built-in router equipped with VoIP adapter function
- A Certified telephone terminal
Date of Enforcement etc. of Technical Conditions & Certification

Promulgation: Oct. 25, 2010
Enforcement: Apr. 1, 2011

Interim Measure (1): Apr. 1, 2012
Interim Measure (2): Apr. 1, 2013

Mobile telephone, ISDN, Analog telephone

A & C certifications (former technical conditions)

→ Former conditions are applied for technical conditions for terminals that have already been certified.

Emergency call function not required

D certification

→ Former conditions are applied for technical conditions for terminals that have already been certified.

Standard Applied to Terminal Equipment Connected to IP Telephone Facility

Revised Ordinance Concerning Terminal facilities, etc. New Article 32-4&5
(Registration of identification information, congestion notification)

Notice of testing method etc.

E certification

→ No technical conditions necessarily need to be applied during the moratorium period.

(Required)

Feb. 27, 2013
Recently Added or Revised Types of Terminal Equipment

- **Leased Line Terminal Equipment: LTE (From July 2010)**
  
  **Required Functions and conditions**
  - Calling & answering functions, Transmission timing, Random access control, Time alignment control, Location registration control, Function for receiving level reports etc.

- **DECT, sPHS [Digital codeless telephone standard] (From October 2010)**
  
  **Required Functions and conditions**
  - Identification code, Carrier sense etc.

- **Leased Line Terminal Equipment: 1000BASE-T (From April 2011)**
  
  **Required Functions and conditions**
  - Transmission voltage etc.

- **Leased Line Terminal Equipment: XGP (From July 2011)**
  
  **Revised Functions and conditions**
  - Transmission timing, Random access control, Function for receiving level reports

- **920MHz-Band Electronic Tag System (From December 2011)**
  
  **Required Functions and conditions**
  - Identification code, Carrier sense etc.
4. Market surveillance
MIC purchases the terminal facilities in the market to check the conformity to the technical standard provided in Telecommunications Business Law.

MIC carries out market surveillance every year. Examination of the technical standard conformity of a terminal facilities are carrying out by registered organization to the MIC, so that MIC check whether CAB and manufacturers observe laws.

Contents of Surveillance

- Labels (indicating the compliance of technical standard)
- Common standards required for the terminal equipment (Banning of identified communication leakages, insulation resistance, wiring facilities, etc.)
- Terminal equipment connected to telephone facility (Analog telephone, mobile telephone, VoIP phone, Data transmission facilities, etc.) etc.

Relationship to Certification

Manufacturers submit documents for technical conditions compliance approval

CAB(*1)

Examine the conformity to technical conditions

Certification

Back cover of a mobile phone

Label indicating the conformity with technical conditions (*2)

In case that CAB miss reviewing or approving

Manufacturers can Self-confirmation (In any case, examine the method written in MIC public notice)

In case that manufacturers miss ensuring that the terminal equipment is in accordance with the certified type.

In case that Manufacturers affix false labels.

*2 The inspections of connection by the telecommunications carriers are waived.

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Implementation of after-the-fact regulations and inspection in the market

- MIC judges whether the certification is implemented properly by conducting an on-the-spot inspection of the registered approval body, etc.
- There are after-the-fact regulations including orders for improvement, orders to prohibit affixing labels and orders to recall the products.
- MIC monitors the certification status via inspections in the market and other measures.

Inspection in the Market

**Device Inspection**
(From 2003)

- MIC purchases the product without advance notice.
- MIC test whether it conforms the technical conditions or not.
- If it was found that the equipment does not comply with the technical conditions, MIC direct the supplier (vendor or dealer) to take corrective measures.

**Document Inspection**
(From 2011)

- MIC requests to submit documents.
- Confirm that documents are prepared and kept in compliance with the regulation.
- Render administrative guidance etc. when breach is found.
Measures against violation of technical regulations and rules of label

**Order to Take a Measure**
- MIC may order a certified vendor to take the necessary measures for improving an examination method regarding certification when the Minister deems that the certified vendor has violated the obligation of complying with design.【Article 59 of the Telecommunications Business Act】

**Measures to prohibit affixing labels**
MIC may prohibit the certified vendors from affixing their certification label on the equipments which are based on the specifications for up to two years if any of the following cases apply.
(1) When the equipment which is based on the specifications do not conform to the technical conditions provided in the Telecommunications Business Act and a ban needs to be implemented to prevent disturbance with communications by other users of the telecommunications circuit facility (except cases applying to 6).
(2) When the certified vendors violate their duty to inspect and record.
(3) When the certified vendors breach administrative orders.
(4) When the certified vendors are authorized by illegal measures.
(5) When the registered approval bodies certify in violation of their duties.
(6) When the technical conditions are changed and the specifications certified before the change no longer conform to the new technical conditions.【Article 60, Paragraph 1 of the Telecommunications Business Act】

**Measures that terminal equipment is deemed to have no label affixed**
If the equipment with the certification mark does not conform to the technical conditions and MIC determines that a ban is required to prevent the disturbance on the communications by other users of the telecommunications circuit facility, the equipment is regarded as having no certification label.【Article 55, Paragraph 1 of the Telecommunications Business Act】

- MIC will publish a notice declaring it as being without label.
- MIC will publish a notice of any prohibition of affixing labels.【Article 55, Paragraph 2 / Article 60, Paragraph 2 of the Telecommunications Business Act】
Cases of Violation

- The case where it was checked a Conformity Assessment Bodies has granted a certification of type of terminal equipment in violation of the provisions of Article 56, Paragraph 2 of the Telecommunications Business Act.

  → MIC prohibited a certified dealer from affixing the label of Article 58 to terminal equipment based on a certified type for two years. (placed a public notice)

  【Article 60, Paragraph 1, item (v) of the Telecommunications Business Act】

- The case where it was checked the contents of the label affix on the terminal equipment are mistaken.

  → Vendor or dealer take the necessary measures for improving.
5. Consideration about terminal equipment for Internet protocol mobile telephones
Migration for Internet protocol mobile telephone

- Consideration about functions (technical regulations) which IP mobile telephone (Especially, “VoLTE”) shall have.
- Offer both voice call and data communications by a LTE network, a network facility will be slim and inexpensive, and frequency usage efficiency will improve.
- Since the VoLTE system has been already standardized internationally in 3GPP※1 and GSMA※2 technical standards should be developed quickly. Then, VoLTE terminals based on international standards will be promoted, contributing also to improvement of global competitiveness.
- Additionally, by using all IP systems between terminals, communication networks become to be strong against a disaster. ※1: Third Generation Partnership Project ※2: GSM Association

Existing 3G system

- 3G core
- Circuit switch
- Packet switch
- 3G terminals
- 3G (voice)
- 3G (data)

Existing 3G+LTE system (CS Fall Back)

- 3G core
- Circuit switch
- Packet switch
- 3G+LTE terminals
- 3G (voice)
- LTE (data)

Voice over LTE (VoLTE) system

- LTE core
- Packet switch
- LTE终端
- LTE (VoIP)
- LTE (データ)
Definition of IP mobile telephone terminals
(Add in Para 2, Art 2 of Ordinance Concerning Terminal Facilities, etc.)

Terminal facilities connected to Voice over Internet Protocol mobile phone circuit facilities (mobile telephone circuit facilities※1 (limited to those for the use of voice transmission services provided by using telecommunications numbers prescribed in Article 9, paragraph (1), item (iii), ※2 of the Regulations for Telecommunications Numbers) which use Internet Protocol to connect to terminal facilities or customer-owned and maintained telecommunications facilities.)

※1 Telephone circuit facilities (telecommunications circuit facilities for the use of telecommunications business and telecommunications service mainly for the purpose of transmitting and switching voice) that use radio waves to connect with terminal facilities or customer-owned and maintained telecommunications facilities.
※2 Telecommunications numbers used for mobile telephones (080/090).

Technical regulation for VoLTE terminals (IP mobile telephone terminals which use LTE system) refers to “Electrical conditions, etc. for LTE (data transmission)”.

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<table>
<thead>
<tr>
<th>Function</th>
<th>Mobile Telephone Terminals①</th>
<th>VoIP Phone Terminals①</th>
<th>IP mobile telephone Terminals【amendment①】</th>
<th>Announcement for VoLTE(new)</th>
<th>LTE (data transmission)②</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic functions</td>
<td>Art. 17</td>
<td>Art. 32-2</td>
<td>Art. 32-10</td>
<td>-</td>
<td>4-1</td>
</tr>
<tr>
<td>Call origination functions</td>
<td>Art. 18</td>
<td>Art. 32-3</td>
<td>Art. 32-11</td>
<td>-</td>
<td>4-2</td>
</tr>
<tr>
<td>Timing of transmission</td>
<td>Art. 19</td>
<td>-</td>
<td>Art. 32-12</td>
<td>※3</td>
<td>4-3</td>
</tr>
<tr>
<td>Random access control</td>
<td>Art. 20</td>
<td>-</td>
<td>Art. 32-13</td>
<td>※3</td>
<td>4-4</td>
</tr>
<tr>
<td>Time alignment control</td>
<td>Art. 21</td>
<td>-</td>
<td>Art. 32-14</td>
<td>※3</td>
<td>4-5</td>
</tr>
<tr>
<td>Location registration control</td>
<td>Art. 22</td>
<td>-</td>
<td>Art. 32-15</td>
<td>※3</td>
<td>4-6,4-10(=Art. 22)</td>
</tr>
<tr>
<td>Function to comply with instruction to switch channel</td>
<td>Art. 23</td>
<td>-</td>
<td>Art. 32-16</td>
<td>-</td>
<td>4-10(=Art. 23)</td>
</tr>
<tr>
<td>Reception level notification functions</td>
<td>Art. 24</td>
<td>-</td>
<td>Art. 32-17</td>
<td>※3</td>
<td>4-8</td>
</tr>
<tr>
<td>Function to comply with instruction to suspend transmission</td>
<td>Art. 25</td>
<td>-</td>
<td>Art. 32-18</td>
<td>※4</td>
<td>4-7</td>
</tr>
<tr>
<td>Function to automatically suspend transmission in the event of deterioration of reception level, etc.</td>
<td>Art. 26</td>
<td>-</td>
<td>Art. 32-19</td>
<td>-</td>
<td>4-10(=Art. 26)</td>
</tr>
<tr>
<td>Function to automatically suspend transmission in the event of failure</td>
<td>Art. 27</td>
<td>-</td>
<td>Art. 32-20</td>
<td>-</td>
<td>4-10(=Art. 27)</td>
</tr>
<tr>
<td>Registration of identification information</td>
<td>-</td>
<td>Art. 32-4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Congestion notification function</td>
<td>-</td>
<td>Art. 32-5</td>
<td>Art. 32-22</td>
<td>(except) ※4</td>
<td>-</td>
</tr>
<tr>
<td>Function to secure essential communications</td>
<td>Art. 28</td>
<td>-</td>
<td>Art. 32-21</td>
<td>-</td>
<td>4-10(=Art. 28)</td>
</tr>
<tr>
<td>Emergency call function</td>
<td>Art. 28-2</td>
<td>-</td>
<td>Art. 32-23</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Function to prevent information specific to the mobile telephone terminal from being changed</td>
<td>Art. 29</td>
<td>-</td>
<td>Art. 32-24</td>
<td>※4</td>
<td>4-9</td>
</tr>
<tr>
<td>Electrical conditions, etc.</td>
<td>-</td>
<td>Art. 32-7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Signal output power in the case of communications with an analog telephone terminal, etc.</td>
<td>Art. 30</td>
<td>Art. 32-8</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Crosstalk attenuation</td>
<td>Art. 31</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Special telephone terminals</td>
<td>Art. 32</td>
<td>-</td>
<td>Art. 32-25</td>
<td>※4</td>
<td>-</td>
</tr>
</tbody>
</table>

※1 Ordinance Concerning Terminal Facilities, etc. (Ordinance of Ministry of Posts and Telecommunications No.31 of 1985)
※2 Electrical conditions, etc. for VoIP Phone Terminals and Terminals for private circuit facilities, etc. (Public notice of MIC No.87 of 2011) Appended Table 5
※3 ※4 Newly establish (schedule)
Addition of new technical regulations and definitions
【Ordinance Concerning Terminal Facilities, etc.】

【Telecommunications circuit facilities】
- Telephone circuit facilities [item (i)]
  * mainly transmitting and switching voice
- Analog telephone circuit facilities [item (ii)]
- Mobile telephone circuit facilities [item (iv)]
  Voice over Internet Protocol (VoIP) mobile phone circuit facilities [new]
- Voice over Internet Protocol (VoIP) phone circuit facilities [item (vi)]
- Radio paging circuit facilities [item (viii)]
- Integrated Services Digital Network circuit facilities [item (x)]
- Private circuit facilities [item (xii)]
- Digital data transmission facilities [item (xiii)]

【Terminal facilities】
- Analog telephone terminals [item (iii)]
- Mobile telephone terminals [item (v)]
- Internet Protocol mobile telephone terminals [new]
  <IP Telephone (with 0AB-J numbers)>
- VoIP phone terminals [item (vii)]
- Radio paging terminals [item (ix)]
- ISDN terminals [item (xi)]
  <Private circuit, Digital data transmission>
- Terminals for private circuit facilities, etc. [item (xiii)]

Symbol "F" is newly prescribed as an additional category of Technical Conditions Compliance for Internet Protocol mobile telephone terminal.
【Ordinance Concerning Technical Conditions Compliance Approval, etc. of Terminal Equipment】

ADF 13 0001 000
Type of terminal equipment
3G and VoLTE terminals
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep. 27, 2012</td>
<td>Reports from Information and Communications Council</td>
</tr>
<tr>
<td>Nov. 27, 2012</td>
<td>Consult with Information and Communications and Posts Administrative</td>
</tr>
<tr>
<td></td>
<td>Council (public comment start)</td>
</tr>
<tr>
<td>Dec. 27, 2012</td>
<td>Deadline of public comment</td>
</tr>
<tr>
<td>Jan. 29, 2013</td>
<td>Reports from Information and Communications and Posts Administrative</td>
</tr>
<tr>
<td></td>
<td>Council</td>
</tr>
<tr>
<td>End of Mar. 2013</td>
<td>Amendment of ordinances and public notices (schedule)</td>
</tr>
</tbody>
</table>
6. Consideration about certification method for “Softphones”
Implementation of a “Softphone” as an IP telephone (using 0AB-J number).

Software which realizes the function as a telephone appears. Using usual telephone numbers.

【Ex.1】To implement a “Softphone” on a “Smart TV” and connect to the Internet using monitors and camera functions. → TV telephone for all over the world.

【Ex.2】To implement a “Softphone” on various interior goods so that it can be also used as a home telephone in the house.

Using “Softphones”

Functional advancement of home information appliance
- Internet-ready
- Modify and update software

Response outside “Smart TV”

Call from office to home (tablet)

Response of a child in the living room (table telephone)

Ministry of Internal Affairs and Communications
Features of “Softphones”
• Using software for call control
• Independent from hardware and OS on contact with interface.

※A single piece of software is not a terminal facility (Scope of Technical Standards Conformity Approval) in Telecommunications Business Act.

<table>
<thead>
<tr>
<th>VoIP phone terminals (using 0AB~J number)</th>
<th>“Softphone” facilities (Terminal facilities=PC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conformity Approval (before shipping)</td>
<td>Category “D” (technical standards for digital data transmission terminals (electrical conditions, etc. only))</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>CAB</td>
</tr>
<tr>
<td>Delivery inspection</td>
<td>Certification</td>
</tr>
<tr>
<td>Category “E”</td>
<td>Category “D”</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>Delivery inspection</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>Shipping as “VoIP phone terminals”</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>User’s house</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>Shipping as “VoIP phone terminals”</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>User’s house</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>Completion as “VoIP phone terminals”</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>Before shipping</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>After installing VoIP phone terminals</td>
<td>CAB Certification</td>
</tr>
<tr>
<td>After installing a “Softphone”</td>
<td>CAB Certification</td>
</tr>
</tbody>
</table>

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35
How to check whether the software conforms with technical standards for telephone calls.

An inaccurate “Softphone” may cause unrestricted automatic redialing, etc., and there is a risk of a large-scale communication failure and congestion of Telecommunications facilities.

Scope of Technical Standards Conformity Approval (○: Apply ×: Not apply)

<table>
<thead>
<tr>
<th>Function of controlling telephone call</th>
<th>VoIP Phone Terminal (Category “E”)</th>
<th>Personal computer (Category “D”)</th>
<th>Functions which the “Softphone” has</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>×</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Electrical conditions</td>
<td>○</td>
<td>○</td>
<td>× (Requirement for hardware)</td>
</tr>
<tr>
<td>Basic issues (demarcation of responsibilities, insulation resistance, etc.)</td>
<td>○</td>
<td>○</td>
<td>× (Requirement for hardware)</td>
</tr>
</tbody>
</table>

Facilities which implement a “Softphone” should confirm with technical standards for Category “E”.

Faced with the popularization of “Softphones”, there is a pressing need to establish a certification method for them.
<table>
<thead>
<tr>
<th>Legal basis</th>
<th>Plan A: Technical conditions compliance inspection about “Softphones” [in operation]</th>
<th>Plan B: Certification of Type or Self-Confirmation about “Softphones”</th>
<th>Plan C: Notification of Self-Confirmation about “Softphones”</th>
<th>Plan D: Certification of Type or Self-Confirmation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art.32, Para 1, Item (IV), of The Ordinance for Enforcement of the Telecommunications Business Act</td>
<td>Nothing</td>
<td>Nothing</td>
<td>Art.56 or Art.63 of The Telecommunications Business Act</td>
<td></td>
</tr>
<tr>
<td>The person who certifies terminal facilities.</td>
<td>Telecommunications carrier</td>
<td>CAB or Software vender (Report to MIC)</td>
<td>Software vender (Report to MIC or Telecommunications carrier)</td>
<td>CAB or Software vender (Report to MIC)</td>
</tr>
<tr>
<td>Target of certification</td>
<td>“Softphones”</td>
<td>“Softphones”</td>
<td>“Softphones”</td>
<td>“Softphones” + universal Terminal facilities</td>
</tr>
<tr>
<td>Obligation to be in accordance with the type, etc.</td>
<td>Based on the method defined by the Telecommunications carrier. Ex.) Software must have functions which meet the obligation to be in accordance with the type of softphone. Ex.) ①Regulation of hardware conditions (OS etc.) ②Preventive measure for installation to the terminals which do not fulfill conditions. ③Preventive measure for defacing installation executable files. ④Management of a distributed “softphone.”.</td>
<td>Software must have functions which meet the obligation to be in accordance with the type of softphone. Ex.) ①Regulation of hardware conditions (OS etc.) ②Preventive measure for installation to the terminals which do not fulfill conditions. ③Preventive measure for defacing installation executable files. ④Management of a distributed “softphone.”.</td>
<td>Base on the method defined by the software vender.</td>
<td>-Based on law -MIC publicizes notices Softphones and universal terminal facilities which can be combined.</td>
</tr>
<tr>
<td>Label, etc.</td>
<td>Telecommunications carrier notice in HP etc. (base on law)</td>
<td>-Write in manuals -Can’t affix a label (Need law amendment)</td>
<td>-Write in manuals -Can’t affix a label (Need law amendment)</td>
<td>-Affix a label indicating the compliance of technical Standard</td>
</tr>
<tr>
<td>Market Surveillance</td>
<td>Telecommunications carrier</td>
<td>MIC etc.</td>
<td>MIC etc.</td>
<td>MIC etc.</td>
</tr>
<tr>
<td>Others</td>
<td>Need new system</td>
<td>Need new system</td>
<td>Need new system</td>
<td>Nearly identical to existing system</td>
</tr>
</tbody>
</table>
Certification method for “Softphones”

Reports from Information and Communications Council (Sep. 27, 2012) —

- In the short term: implementation of a “plan A”
- In the medium term: consideration of a certification method based on “plan B” or “plan C”

Third-party certification, self-confirmation, etc. → Consideration about label, market surveillance and correction measures. After that, development of institutions.

“Technical conditions for Connections of Terminal Facility” (general rules)
- The telecommunications circuit facility shall not be damaged, nor shall functions thereof be impaired.
- No disturbance shall be caused to other users.
- The demarcation point of responsibilities with a telecommunications circuit facility shall be clearly stipulated.

Technical conditions compliance inspection of terminal facility by telecommunications carriers.

Connection of terminal facility to telecommunications circuit facility.

The right of maintenance inspection by the telecommunications carrier.

Technical conditions compliance approval of terminal equipment by the registered approval body.

Self-confirmation of technical conditions compliance of terminal equipment by the manufacturers.

Telecommunications carriers’ announcement (exemption of Inspection of Connection)

(Plan A)

- Implementation of the method using telecommunications carriers’ announcement (in operation: some telecommunications carriers).
- Reach consensus among those concerned for one-stop service.
Thank you very much for your kind attention

● MIC Website
http://www.soumu.go.jp/

● Telecommunications Bureau of MIC Website
http://www.tele.soumu.go.jp/index.htm

* MIC: Ministry of Internal Affairs and Communications
or Minister of Internal Affairs and Communications
Certification System for terminal equipment

http://www.soumu.go.jp/main_sosiki/joho_tsusin/tanmatu/

- Certification System, Applicable Acts and ordinances.
- List of registered approval bodies, list of terminal equipments concerning the certification.
- Cases of Violation etc.

Public Information (MIC website)

【Certification System for terminal equipment】

<table>
<thead>
<tr>
<th>1. 概要</th>
</tr>
</thead>
</table>
| 電話機、FAX、モデム等の端末機器を電気通信事業者のネットワーク（電気通信回線設備）に接続し使用する場合、原則として利用者は、電気通信事業者の機器の検査を受け、当該端末機器が電気通信事業法に基づく技術基準に適合していることを確認する必要があります。

ただし、登録認定機関から技術基準に適合していることを認定を受けるなどして総務省令で定める表示（技術マーク）が付された機器を接続する場合には、当該端末機器の利用者は、電気通信事業者による接続の検査を受けることなく接続し使用することができます（下記参照）。

※ 技術基準は、電気通信事業第61条第2項の規定に基づき以下の事項が確保されるものとして、「端末設備等規則」において定められています。
- 1. 電気通信回線設備を操作し、又はその機能に障害を与えないようにすること。
- 2. 電気通信回線設備を利用する他の利用者に迷惑を及ぼさないようにすること。
- 3. 電気通信事業者の設置する電気通信回線設備と利用者の接続する端末設備との責任の分界が明確であるようにすること。