

Partial Amendment to Regulations for Terminal Facilities and Other Related Regulations Based on the Report from the IP Network Facilities Committee under the Information and Communications Council

- Consultation with Information and Communications and Posts Administrative Council -

July 29, 2024

Telecommunication Systems Division,
Telecommunications Business Department, Telecommunications Bureau

The partial report (July 2023) from the IP Network Equipment Committee under the Information and Communications Council on the "technical requirements for accident reporting system and telecommunications facilities adapted to the progress of digitization" includes institutionalization of technical requirements for terminal equipment (amendment of the Regulations for Terminal Facilities and other related regulations). MIC will institutionalize these technical requirements for terminal equipment.

[1] Technical requirements for telecommunications equipment to ensure the interconnectivity of emergency calls

**Issues and
the direction of
the response**

➤ With the increasing diversification of terminal facilities, including mobile phone terminals supporting multiple SIMs, there are cases where emergency calls cannot be connected depending on the combination of terminal facilities and SIMs.

- Consider mechanisms to ensure interconnectivity and interoperability between terminal facilities and network facilities.

[2] Technical requirements for terminal facilities conforming with international standards, etc.

**Issues and
the direction of
the response**

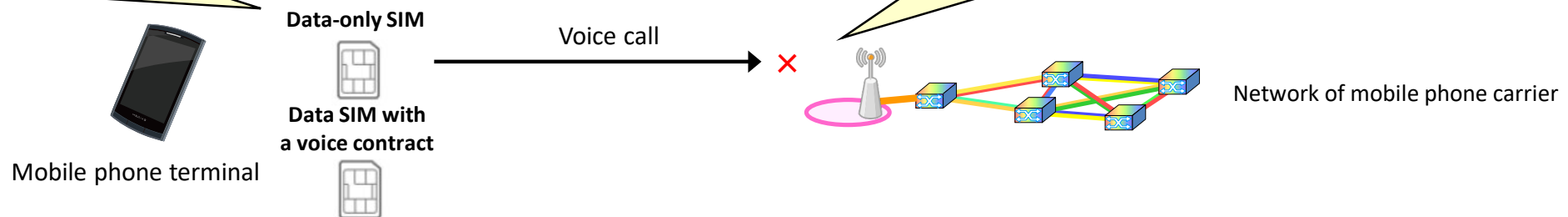
➤ Technical standards for connecting terminal facilities are not consistent with international standards, etc.

- Consider reviewing provisions to ensure that they are consistent with international standards and that terminal equipment categories align with the changing times.

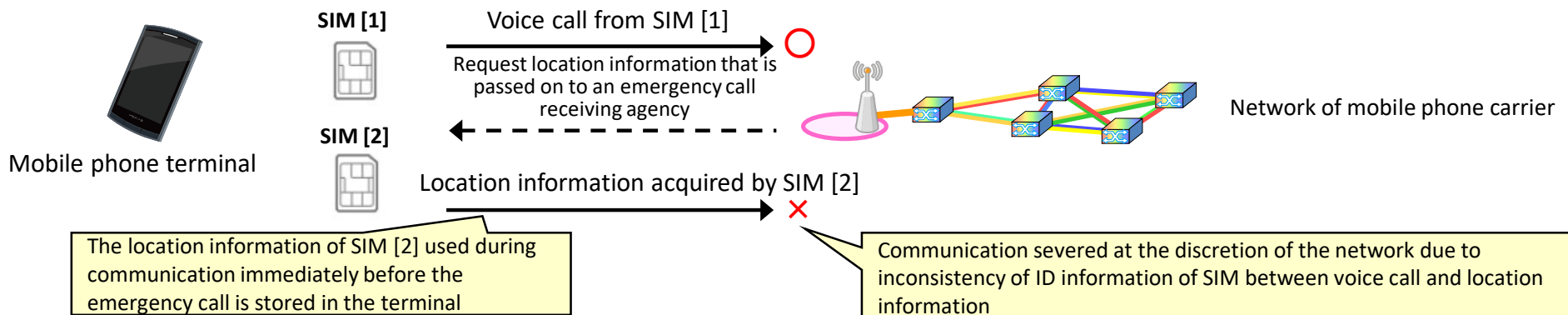
- There are cases where emergency calls cannot be connected. For example, mobile phone terminals supporting multiple SIMs may attempt to send emergency calls from a data-only SIM, or the communication path may be severed when exchanging location information for emergency calls due to inconsistency of ID information of SIM.
- This is because the mobile phone networks of multiple mobile phone carriers and communication procedures affect each other. So, the interconnectivity and interoperability that are necessary for emergency calls have not been fully secured. Therefore, the IP Network Facilities Committee conducted a study on the technical requirements for telecommunications facilities to ensure interconnectivity.

[Case A] Emergency call made from a data-only SIM

Make an emergency call with data-only SIM
(The terminal cannot determine whether a voice contract is present.)



[Case B] Communication severed during location information exchange



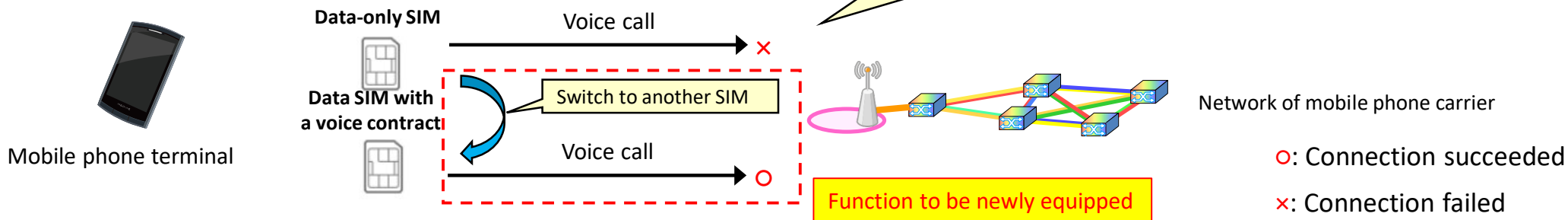
Direction of response regarding mobile phone terminals

- If an emergency call made with one SIM fails to connect, the mobile phone terminal should switch to another SIM to complete the call. It is appropriate to require that the mobile phone terminal include such functionality on the Regulations for Terminal Facilities.

< Image of the new function that mobile phone terminals should have >

Make an emergency call with data-only SIM
(The terminal cannot determine whether a voice contract is present.)

Cannot be connected due to the absence of a voice contract



Key points of amendment

- Require mobile phone terminals that support multiple SIMs to be equipped with a function that automatically switches SIMs and retries sending an emergency call if it fails from one SIM.
 - Establish new methods for testing mobile phone terminals supporting multiple SIMs.
- * Scheduled date of enforcement: July 1, 2025 (with some test methods scheduled to be enforced on January 1, 2026)

- Among the "Technical Standards for Connecting Terminal Facilities" (Regulations for Terminal Facilities), the insulation resistance and dielectric strength between the power supply circuit for the terminal facilities and telecommunications facilities for the use of telecommunications business are specified in accordance with IEC60950.
- IEC62368 has been newly established as a successor standard to IEC60950. The "Technical Standards for Connecting Terminal Facilities" should be reviewed in line with this standard.

Outline of Technical Standards for Connecting Terminal Facilities

To prevent damage or functional failures of terminal facilities when connecting them to telecommunications line equipment (networks), the Telecommunications Business Act requires that the terminal facilities complies with the technical standards specified in the Regulations for Terminal Facilities.

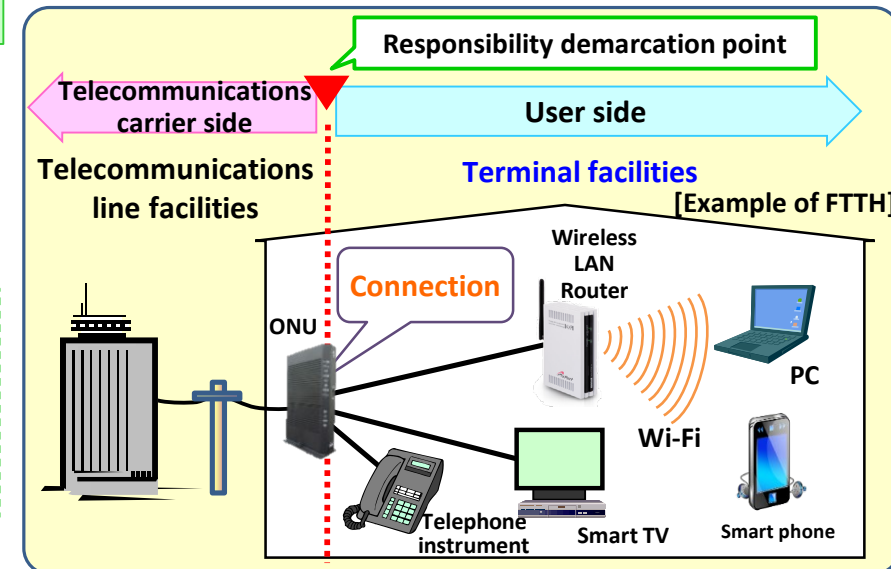
- Technical standards apply to **terminal facilities**.
- Certification for conformity with technical standards, etc. targets **terminal equipment***

* Equipment of the type specified in Article 3 of the Regulations for Certifying Terminal Equipment Compliance with Technical Standards




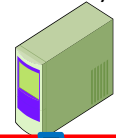



- "Terminal facilities" refers to telecommunications facilities interconnected to one end of telecommunications line facilities and a part is installed in the same premises or building where other parts of those facilities are installed.

Key points of amendment

- The insulation resistance specified in the Regulations for Terminal Equipment is modified to comply with IEC 62368.
- * Scheduled date of enforcement: January 1, 2025



- Regarding the marking of compliance with the technical standards for terminal equipment connected to telecommunications line facilities (networks) of telecommunications carriers, terminal equipment is classified into six types (categories) from A to F. For equipment that falls into multiple categories, multiple symbols are used to indicate compliance with the technical standards.
- For analog phone terminals (symbol A) and terminal equipment connected to comprehensive digital communication equipment (symbol C), the use of a single symbol to indicate compliance with technical standards has been decreasing. For mobile phone terminals designed for use before 3G (symbol A), 3G services are expected to be terminated around March 2026. In light of these circumstances, MIC reviews the types (categories) of terminal equipment.

Symbol	A	B	C	D	E	F
	<p>Analog phone terminal</p>  <p>Mobile phone terminal (Before 3G)</p> 	<p>Terminal equipment to be connected to wireless call facilities (Pager)</p> 	<p>Terminal equipment connected to comprehensive digital communication facilities (ISDN terminal)</p> 	<p>Terminal equipment connected to dedicated communication line facilities or digital data transmission facilities (routers, etc.)</p> 	<p>Internet protocol phone terminals (IP telephony)</p> 	<p>Internet protocol mobile phone terminals</p> 

Aggregate

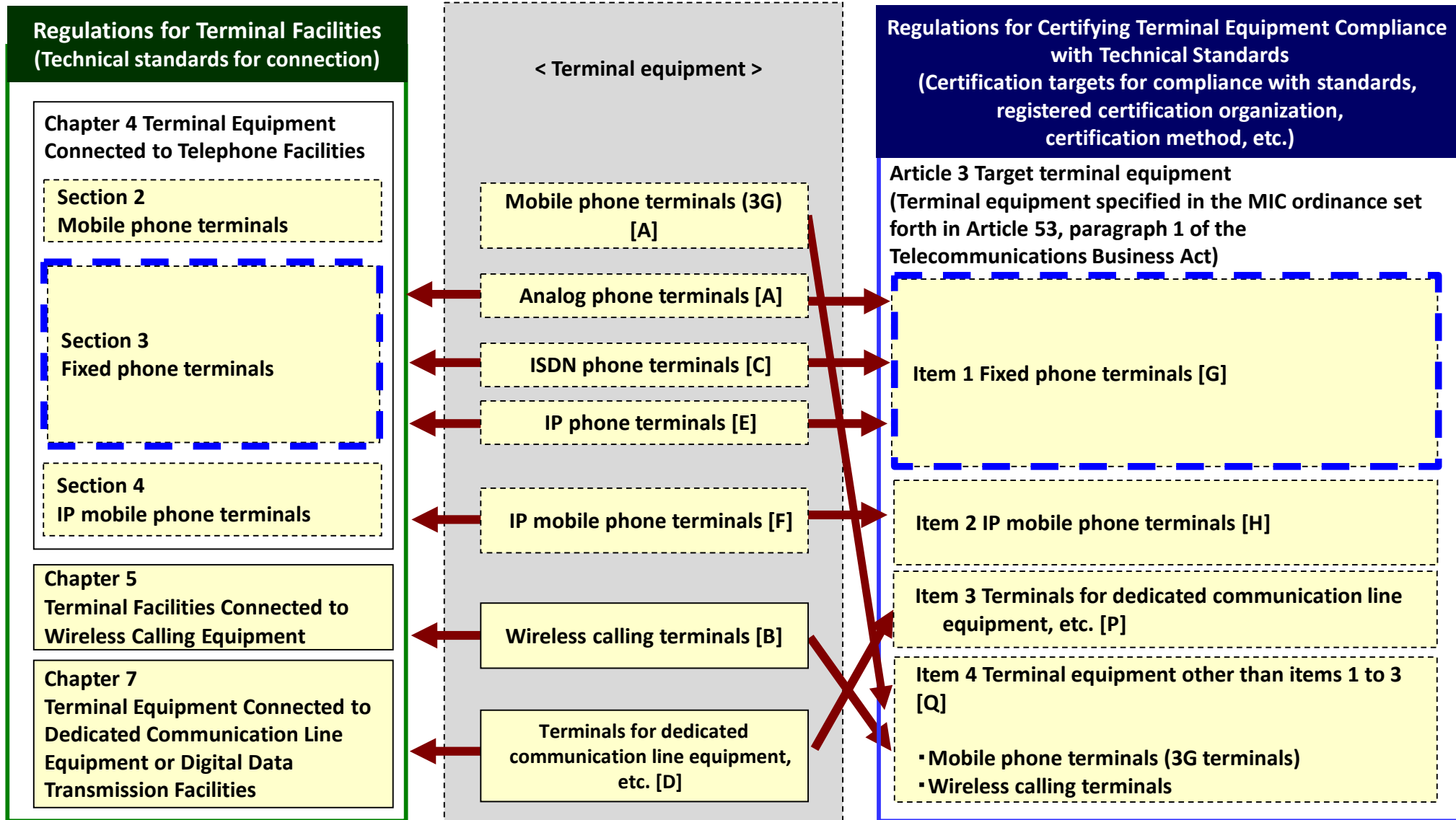
Aggregate

Key points of amendment

- Technical standards for analog phone terminals and terminal equipment connected to comprehensive digital communication facilities shall be specified in a public notice and deleted from the Regulations for Terminal Facilities.
- The public notice outlining technical standards for analog phone terminals and terminal equipment connected to comprehensive digital communication facilities, based on the current Regulations for Terminal Facilities, will be incorporated into the above public notice and subsequently abolished.
- With the number of terminal equipment categories changing from six to four, it is important to prevent confusion with the original categories. To address this, new symbols for the categories will be introduced in the Regulations for Certifying Terminal Equipment Compliance with Technical Standards.

* Scheduled date of enforcement: January 1, 2025

In conjunction with the revision of the "Regulations for Terminal Equipment," the types (categories) of terminal equipment in the "Regulations for Certifying Terminal Equipment Compliance with Technical Standards" are reorganized as follows:



< Draft Amendment to Regulations for Certifying Terminal Equipment Compliance with Technical Standards (Article 3 and Form No. 7) >

Type of terminal equipment (after revision)	Symbol	Type of terminal equipment (before revision)	Symbol
Fixed phone terminal	G	IP phone terminal	E
		Analog phone terminal	A
		ISDN terminal	C
IP mobile phone terminal	H	IP mobile phone terminal	F
Terminals for dedicated communications line equipment, etc.	P	Terminals for dedicated communications line equipment, etc.	D
Other terminals	Q	Mobile phone terminals (3G) up to March 2026	A
		Wireless calling terminals	B