

【Tentative Translation】

**Guidelines for Application of
the Telecommunications Business Act
and Related Regulations on
Telecommunications Accidents and Incidents
(5th Edition)**

January 27, 2020

**Ministry of Internal Affairs and Communications,
JAPAN**

(In case of any inconsistency between the Japanese and English versions, the Japanese version shall prevail.)

Revision History

Edition	Date of creation	Revision
First Edition	September 29, 2010	Formulation of the First Edition in response to the partial report from the Information and Communications Council.
Second Edition	August 26, 2015	Revised in response to the revision of the reporting system for accidents and incidents (revision of the reporting standards and formats for serious accidents and quarterly reporting formats according to the Order of the Ministry of Internal Affairs and Communications No. 29 and 30 of 2015).
Third Edition	April 1, 2019	Revised in response to the review of the reporting system for accidents and incidents (revision of the serious accident reporting standards and quarterly reporting format by the Order of the Ministry of Internal Affairs and Communications No. 23 of 2019).
Fourth Edition	June 27, 2019	Revised in response to the review of the reporting system for accidents and incidents, etc. (Revision of the reporting standards for serious accidents by the Order of the Ministry of Internal Affairs and Communications No. 18 of 2019).
Fifth Edition	January 27, 2020	Revised in response to the review of the types of telecommunications services (addition of local 5G services by the Order of the Ministry of Internal Affairs and Communications No.3 of 2019).

Table of Contents

I. Purpose of the Guidelines	3
II. Coverage	4
III. Applicable Laws and Regulations.....	4
IV. Criteria for Determining Accidents and Incidents.....	4
1. Serious Accidents.....	6
2. Accidents and Incidents Requiring Quarterly Reporting.....	22
3. Minor Accidents and Incidents with No Reporting Required	29
V. Review of Guidelines.....	30

I. Purpose of the Guidelines

The number of telecommunications accidents and incidents is on the rise with the progress of IP networks and other new factors. In particular, the number of accidents related to Internet connection services and email services is increasing rapidly.

Considering these trends, the Information and Communications Council (Chaired by OTOSHI Takuma, Chairman at IBM Japan) deliberated issues on telecommunications accidents in response to inquiry No. 2020, *Technical Conditions for Telecommunications Facilities Compatible with IP Networking*, dated October 31, 2005. The Ministry of Internal Affairs and Communications (hereafter referred to as “MIC”) received the Council’s partial reports on May 24, 2007, and July 28, 2009. These reports (hereafter referred to as the “partial reports”) were entitled *Matters concerning Safety and Reliability Measures in Response to the IP Conversion of Networks* and *Matters concerning Technical Conditions and Telecommunications Accidents related to IP Telephone Terminals, etc.*

In response to the partial reports, MIC formulated *the Guidelines for Application of the Telecommunications Business Act and Related Regulations on Telecommunications Accidents and Incidents* (hereafter referred to as the “Guidelines”). The Guidelines set a reference for the range of accidents and incidents that need to be reported to the Minister for Internal Affairs and Communications (hereafter referred to as the “Minister”) under the Telecommunications Business Act (Act No. 86 of 1984; hereafter referred to as the “TBA”) and related orders of MICs. Also, MIC expected that the Guidelines would serve as a reference for telecommunications carriers (hereafter referred to as “carriers”) making reports in compliance with relevant laws and regulations.

After that, the number of carriers increased, and the services provided became diversified and complicated due to the further progress of IP networks and broadband networks. Along with this, the causes and factors of telecommunications accidents and incidents are becoming more diverse and complex. In response to the situation, MIC reviewed the Guidelines in August 2015.

Furthermore, with the spread of IoT (Internet of Things) services in recent years, the communications networks as their infrastructure have become more sophisticated. The facility configuration has been becoming more complex, and the usage patterns have been diversifying rapidly. It is expected that telecommunications accidents and incidents mainly related to low-power wide-area network (LPWA) services will occur. That is the reason the Guidelines were reviewed.

MIC will more effectively analyze and evaluate telecommunications accidents and incidents on the basis of carriers’ reports. MIC will further endeavor to improve the safety and reliability on the provision of telecommunications services (hereafter referred to as “services”).

II. Coverage

The subject of the Guidelines is accidents and incidents that occur to carriers. Carriers are **those who have obtained registrations pursuant to the provisions of Article 9 of the TBA or those who have filed notifications pursuant to the provisions of Article 16 Paragraph 1 of the TBA**. Refer to Manual for Market Entry into Japanese Telecommunications Business [Supplementary Edition], for applicable carriers.

III. Applicable Laws and Regulations

The laws and regulations related to the Guidelines are as follows:

- TBA (Telecommunications Business Act)
- Order of MIC No. 25 of 1985: Regulations for Enforcement of the Telecommunications Business Act (hereafter referred to as the “Enforcement Regulations”)
- Order of MIC No. 46 of 1988: Rules for Reporting on Telecommunications Business (hereafter referred to as the “Reporting Rules”)
- MIC Notice No. 248 of 2004 (Matters related to Establishment of Criteria Applied when the Minister Finds It Difficult to Grasp the Number of Users Affected by Suspension of the Provision of Services)
- MIC Notice No. 136 of 2010 (Matters related to Decision of Accidents and Incidents, Forms, and Minor Accidents and Incidents Separately Notified by the Minister)

IV. Criteria for Determining Accidents and Incidents

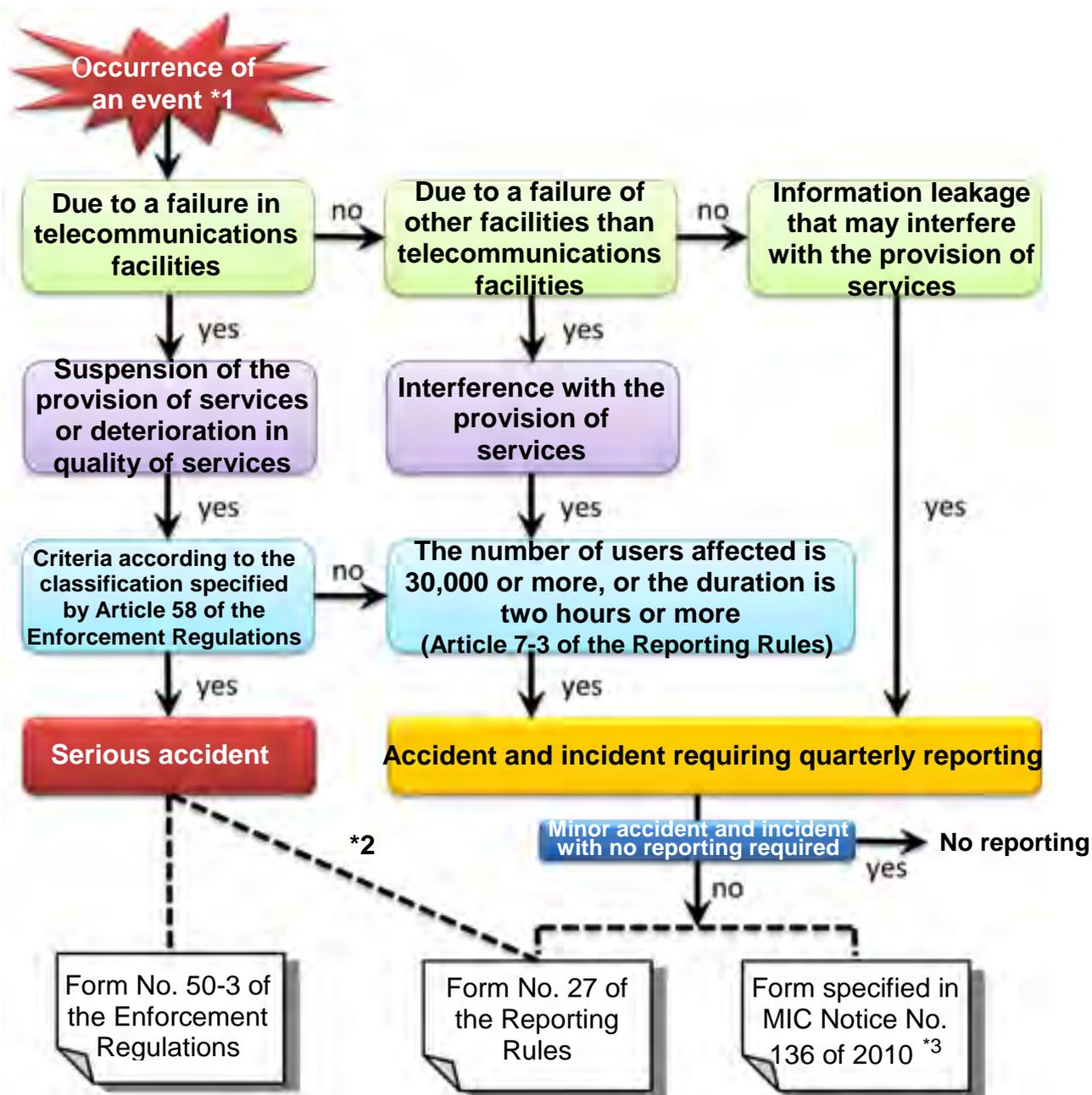
The types of accidents and incidents that carriers shall report to the Minister following the above applicable laws and regulations are specified below.

1. **Serious accidents**
2. **Accidents and incidents requiring quarterly reporting (excluding minor accidents and incidents with no reporting required)**

The reporting of accidents and incidents that do not fall under any of the above is voluntary. Still, it is desirable to provide as much information as possible to the Minister in view of social impacts and else.

Whether an accident or an incident is subject to the above reporting is to be determined individually by each carrier following the above laws and regulations, and the Guidelines. If it cannot be determined, the carrier shall contact MIC.

If multiple accidents and incidents occur within a certain period due to the same cause and factor, these shall be treated as one accident and incident.



*1. The reporting of accidents and incidents may be required for a breakdown of own facilities or own causes and factors, as well as a breakdown of facilities leased from other companies or causes and factors by other parties. (See 1.1 (5) and the proviso of (6) for details.)

*2. A serious accident is required to report both in the Form No. 50-3 of the Enforcement Regulations and the Form No. 27 of the Reporting Rules.

*3. In the case of an accident due to any of the following failures of telecommunications facilities, a report may be made using the Form stipulated in MIC Notice No. 136 of 2010.

- Terminal system transmission line facilities interconnected to mobile terminal facilities
- Station-installed remote accommodation devices and or feeder/line-point remote accommodation devices
- Digital subscriber line access multiplexer (DSLAM)

Fig. 1 Determination on the Applicability of Accidents and Incidents Requiring Report to Event Occurred

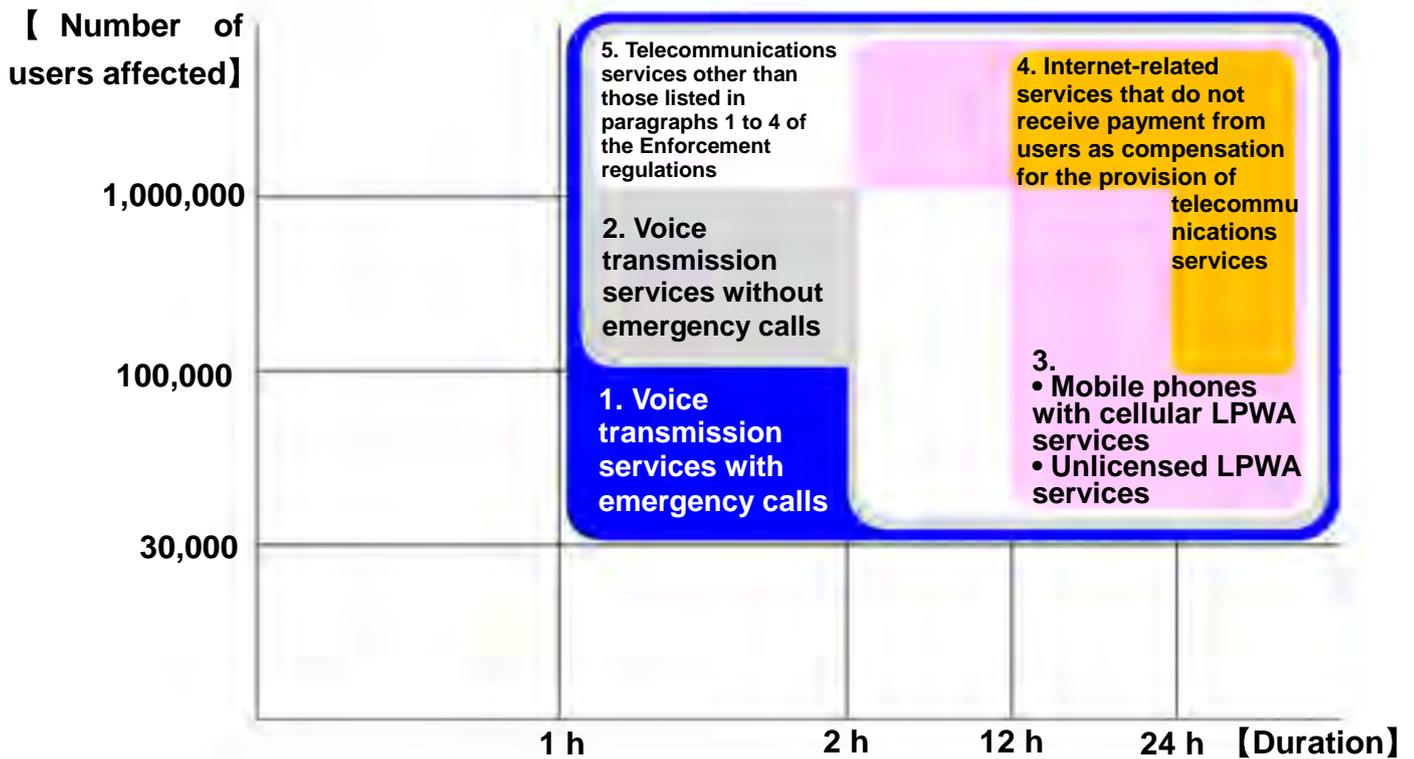


Fig. 2 Criteria according to the Classification of Services Specified in the Upper Part of the Table in Article 58, Item (1) of the Enforcement Regulations

1. Serious Accidents

1.1 Laws and Regulations regarding Serious Accidents

- **TBA**

(Reporting on the Suspension of Telecommunications Operations and on Serious Accidents)

Article 28 If a telecommunications carrier suspends its telecommunications operations (omitted) or any other serious accident specified by Order of the Ministry of Internal Affairs and Communications has occurred with respect to telecommunications operations, it must report without delay to the Minister for Internal Affairs and Communications to that effect including its reason or cause.

- **Enforcement Regulations of the TBA (Order of MIC No. 25 of 1985)**

(Serious Accidents Requiring Reporting)

Article 58 The serious accidents specified by the Order of the Ministry of Internal Affairs and Communications under Article 28 of the TBA shall be as follows:

(1) Accidents that suspend the provision of all or part of telecommunications services (excluding those related to the provision of additional functions) or deteriorate the quality of telecommunications services due to a failure in telecommunications facilities (including a failure in any other telecommunications carrier's telecommunications facilities), provided not only that the number of users affected by the suspension of the provision of the services or the deterioration in quality of the services is greater than or equal to the number, also that the duration is more than or equal to the hours listed in the table below according to the classification of telecommunications services.

(If the Minister of Internal Affairs and Communications finds it difficult to grasp the number of users affected, it falls under the criteria stipulated in the MIC Notice separately announced by the Minister of Internal Affairs and Communications)

Classification of telecommunications services	Hours	Number of users affected
1. Voice transmission services with emergency calls	1 hour	30,000
2. Voice transmission services without emergency calls	2 hours	30,000
	1 hour	100,000
3. Mobile phones (excluding telecommunications services listed in the above 1 or 2) with cellular LPWA (radio facilities that meet the conditions specified in Article 49-6-9, Paragraphs 1 and 5 or Paragraphs 1 and 6 of the Order of MIC No.18 of 1950: Regulating Radio Facilities) services and unlicensed LPWA services stipulated in Article 1, Paragraph 2, Item 18 of the Reporting Rules	12 hours	30,000
	2 hours	100,000
4. Internet-related services that do not receive payment from users as compensation for the provision of telecommunications services (excluding telecommunications services listed in the above items 1 to 3)	24 hours	100,000
	12 hours	100,000
5. Telecommunications services other than those listed in the above 1 to 4	2 hours	30,000
	1 hour	100,000

(2) Accidents in which all communications are disabled for two hours or more due to a failure in satellites, submarine cables, or other similar important telecommunications facilities installed by telecommunications carriers.

- **MIC Notice No. 248 of 2004 (Matters related to Establishment of Criteria Applied when the Minister for Internal Affairs and Communications Finds It Difficult to Grasp the Number of Users Affected by Suspension of the Provision of Services)**

Pursuant to the provisions of Article 58, Item (1) of the Enforcement Regulations of the Telecommunications Business Act (Order of MIC No. 25 of 1985), the criteria to be applied if the Minister for Internal Affairs and Communications finds it difficult to grasp the number of users affected by suspension of the provision of telecommunications services are set as follows:

- (1) The total transmission speed of telecommunications facilities related to the suspension of the provision of telecommunications services exceeds two million kilobits per second.
- (2) The following criteria shall apply to the suspension of the provision of telecommunications services that intermediate communications up to the connection point to the Internet by using mobile phone services, PHS services, or terminal system transmission line facilities (limited to facilities where one end is connected to mobile terminal facilities) connected to users' telecommunications facilities.
 - i. In the case of base stations related to the suspension of the provision of the telecommunications service, 30,000 or more users are in the telecommunications service area of the base stations during the service suspension. (if it is difficult to grasp it, in principle, the number of users who were in the area on any day up to one week before the suspension)
 - ii. If it is deemed difficult to use the above i., 30,000 or more users when multiplying the number of all users who receive the telecommunications service by the number of base stations related to the suspension of the provision of telecommunications services divided by the number of all base stations used to provide the telecommunications service .

[Commentary]

In the case of a serious accident, the carrier must promptly* give MIC the first report on **the date and time of the occurrence, location of the accident, the services affected by the accident, scope of the impact, number of users affected** (hereafter referred to as “**the number of affected users**”), **cause and factor of the occurrence, emergency measures and measures to prevent recurrence, status of complaints from users, and other reference matters**. Also, the carrier must submit a serious accident report by using **Form 50-3** to MIC **within 30 days from the date of the occurrence of the accident**.

* There are cases where the number of affected users or the duration are unknown immediately after the occurrence of the accident. Even in such cases, the carrier must promptly report if there is a potential of a serious accident.

The report destinations are as follows (Table 3):

Table 3 Report Destinations of Serious Accidents

	The main business area of the carrier exceeds the jurisdiction of one Regional Bureau of Telecommunications (or Okinawa Office of Telecommunications; the same shall apply hereafter)		The main business area of the carrier does not exceed the jurisdiction of one Regional Bureau of Telecommunications	
	First report	Report by Form 50-3	First report	Report by Form 50-3
Carrier with the registration pursuant to the provisions of Article 9 of the TBA	MIC	MIC	Regional Bureau of Telecommunications	Regional Bureau of Telecommunications
Carrier with the notification pursuant to the provisions of Article 16 Paragraph 1 of the TBA	Regional Bureau of Telecommunications	MIC	Regional Bureau of Telecommunications	Regional Bureau of Telecommunications

- Accidents in which a ⁽¹⁾ failure in telecommunications facilities occurs and ⁽²⁾ the provision of all or part of telecommunications services ⁽³⁾ excluding those related to the provision of additional functions resulting in ⁽⁴⁾ the suspension or quality deterioration of the services, provided that the ⁽⁵⁾ number of affected users who have been affected and the ⁽⁶⁾ duration fall under the criterias specified in the ⁽⁷⁾ classification of telecommunications services listed in the above table of Article 58, Item (1) of the Enforcement Regulations.
- Accidents in which a failure in ⁽⁸⁾ important telecommunications facilities (e.g., satellites, submarine cables, or other similar important telecommunications facilities) causing ⁽⁹⁾ all communications disabled for two hours or more.

(1) Failure in telecommunications facilities

1) “Telecommunications facilities” mean machines, equipment, wires and cables or other electrical facilities for conducting telecommunications (Article 2, Item (2t) of the TBA). The Guidelines refer to those owned by carriers. For this reason, failures in user terminal facilities are not subject to reporting on serious accidents.

2) “Failures”^{*1} do not include only hardware error in facility or facility failures due to natural disasters (earthquakes, fires, etc.) in a narrow sense. They also include software error (general software bugs, etc.) unintended by carriers, work mistakes by human error, errors in communication path route settings, or cyberattacks^{*2} on telecommunications facilities, and other failures caused by the malfunctioning of telecommunications facilities.

**1. A failure is a lack of success in achieving or doing something; an occasion when a machine or part of your body stops working properly [Longman Dictionary of Contemporary English (6th Edition)]*

**2. Including DDoS attacks, DoS attacks, attacks that infect malware, like ransomware, through a network without the intervention of the recipient, or route hijacking attacks and other attacks*

3) On the other hand, failures do not include a temporary suspension of the provision of services for pre-planned facility refurbishment (maintenance) and transmission restrictions to reduce congestion in the event of a disaster, such as an earthquake or a pre-planned event under the control of carriers. These are necessary measures for maintaining telecommunications facilities and services.

(2) Telecommunications Services

For carriers who have obtained registration pursuant to the provisions of Article 9 of the TBA, telecommunications services are those listed in Form 4 (A document concerning telecommunications services to be provided) stipulated in Article 4, Paragraph 3, Item (2) of the Enforcement Regulations. For carriers who have filed notification pursuant to the provisions of Article 16 Paragraph 1 of the TBA, telecommunications services are those listed in Form 4 (A document concerning telecommunications services to be provided) stipulated in Article 9, Paragraph 1, Item (2) of the Enforcement Regulations.

The concept of “all or part” is described in the below “(4) Suspension or quality deterioration of the services.”

In determining matters falling under the service, refer to Article 164 (Exemptions) of the TBA and “Manual for Market Entry into Japanese Telecommunications Business [Supplementary Edition]” published by MIC.

[Examples those other than telecommunications services]

- Television broadcasting
- In-house LANs and extension phones

(3) Those related to the Provision of Additional Functions

A suspension or quality deterioration of the services provided as additional functions is not subject to reporting on serious accidents.

[Example of Additional Functions]

- Charge-related services
 - Discount service, incoming call billing service, charge notification service
- Various functional services
 - Call waiting, message service, access restrictions, virus check
- Solution-related services
 - Help desk, website hosting

(4) Suspension or quality deterioration of the services

Cases of a suspension of the provision of services include those where the services are completely stopped and cases where, for example, either transmission or reception is stopped. Quality deterioration refers to cases where **failures in telecommunications facilities of carriers cause a situation equivalent to users’ inability to use the services.** The criteria for judging individual services are as follows:

1) Voice transmission service

For analog phone, ISDN, mobile phone, and PHS services, it is assumed that the call quality and connection quality stipulated in the Regulations for Telecommunications Facilities for the Use of Telecommunications Business (Order of MIC No. 30 of 1985) are satisfied. For 0AB-J-IP phones, it is assumed that the overall quality, network quality, and stable quality stipulated in the above Order are met. Moreover, a case that falls under any of the following is defined as quality deterioration.

- A state where the quality is below the level that is normally considered acceptable (a state where the call loss rate is equal to or higher than the maximum level for call restriction in the event of a large-scale disaster, or generally more than 80%).
- A state where it is practically difficult to make a call, such as when the noise level is high or when the call is interrupted in the middle.

It should be noted that a state of silent call state or one-sided call correspond to a suspension of the provision of services because such call has not been established in the first place.

2) Data transmission service (Best-effort service)

A state where a link or session cannot be established between users' terminal equipment etc. and the line concentrator etc. of the carriers' is regarded as a suspension of the provision of services.

3) Email service

Quality deterioration is a state where the email delay (retention) time within the carrier's network exceeds approximately one day due to a failure in the telecommunications facilities within the own network of the carrier. Here, the carrier's own network is from the demarcation point (interconnection point) with other carriers or users to the demarcation point (interconnection point) of different carriers or users via the carrier's telecommunications facilities.

A failure in email services* and loss of email correspond to a suspension of the provision of services.

** Cases such as where users cannot access the email server (POP, SMTP, HTTP, etc.) due to a failure in the telecommunications facilities.*

However, carriers may refuse the provision of email services if there is a justifiable reason to prevent sending and receiving email. This refusal is stipulated in the provisions of Article 11 of the Act on Regulation of the

Transmission of Specified Electronic Mail (Act No. 26 of 2002). If that is the case, there are cases where carriers delete mass-sent emails to the extent necessary to prevent interference with the smooth provision of email services. As a general rule, a suspension of the provision of services caused by the result does not correspond to an “accident.” Cases where transmission and reception are interfered such as loss of normal email due to a collateral.

4) Unlicensed LPWA service

A state where a link or session cannot be established between a user’s telecommunications facilities and the terminal transmission line facilities or terminal facilities of a carrier shall be deemed a suspension of the provision of services. It should be noted that an unintended failure may occur due to the use of radio facilities in a frequency band that does not require a license. Therefore, a delay or a stop of communication between a user’s telecommunications facilities and the terminal transmission line facilities or terminal facilities of the carrier will not be regarded as an accident requiring reporting.

5) Mobile phones using cellular LPWA

A link or session not established between a user’s telecommunications facilities and the terminal transmission line facilities of the carrier shall be regarded as a suspension of the provision of services.

(5) Number of affected users

The number of affected users shall be calculated as follows:

- 1) Only users affected actually by a suspension of the provision of services or quality deterioration are calculated. Users not affected by a suspension of the provision of services or quality deterioration due to duplication, route distribution or else are not counted.

For voice transmission services with emergency calls, the number of affected users is the total number of users under the failed telecommunications facilities, including those who do not use the services during the failure.

- 2) The Minister may find it difficult to grasp the number of users affected by a suspension of the provision of services. In that case, the following criteria (MIC Notice No. 248 of 2004) shall apply.
 - i. The transmission speed of telecommunications facilities related to the

suspension of the provision of services (If the total exceeds 2 Gbps, the number of affected users is considered to be 30,000 or more.)

ii. The number of users in the service area of the stopped base station in the case of mobile phones, PHS, etc.

(i) If it is difficult to grasp the number, as a general rule, the number of users in the area in the same time on any day up to one week before the accident.

(ii) If it is difficult to grasp the number by the above(i), the number of users calculated by the following formula:

$$\frac{\text{(Number of stopped base stations)}}{\text{(Total number of base stations)}} \times \text{(Total number of users)}$$

3) The contract for unlicensed LPWA services is mainly for connecting a considerable number of sensor terminals and others. The number of users is calculated on a contract-by-contract basis. However, the calculation is not limited to the number of contracts.

4) Mobile phones that use a cellular LPWA are expected to have similar usage pattern to unlicensed LPWA services. In that case, the degree of impact of the accident on all users is not proportional to the number of lines used which are affected by the accident. Therefore, it is unlikely that it will have the same social impact as a mobile phone accident. For that reason, multiple lines used by a single contractor for a specific purpose (including those for which the same access point name (APN) is set) shall be calculated as one user in the same way as unlicensed LPWA services.

5) Failures in the telecommunications facilities of relay carriers^{*1} may affect users of subscriber carriers^{*2}. In that case, the following method shall apply to the calculation of the number of affected users of the relay carriers and subscriber carriers:

i. If the relay carriers can grasp the number of affected users for each subscriber carrier, the number of affected users shall be reported. If it cannot be grasped, the number of affected users may be defined as the number of subscriber carriers (one user per subscriber carrier if they are corporations).

Even if the relay carriers are not be able to grasp the number of affected users, in the case that a serious accident or a possibility of a serious accident occurred to the subscriber carriers, and MIC can grasp the number of affected users for each subscriber carrier, the relay carriers have to use that number to calculate the number of affected users (see Fig. 4).

ii. The subscriber carriers shall try to calculate the number of own users affected as much as possible.

Even if a serious accident occurs to the relay carriers, the subscriber carriers' obligation to report a serious accident is not eliminated. A serious accident report shall be made by both the subscriber carriers and the relay carriers.

*1. Relay carriers: Business operators that provide services by providing interconnection and wholesale telecommunications services to subscriber carriers, rather than providing services directly to users (end users).

*2. Subscriber carriers: Business operators that provide services directly to users (end users).

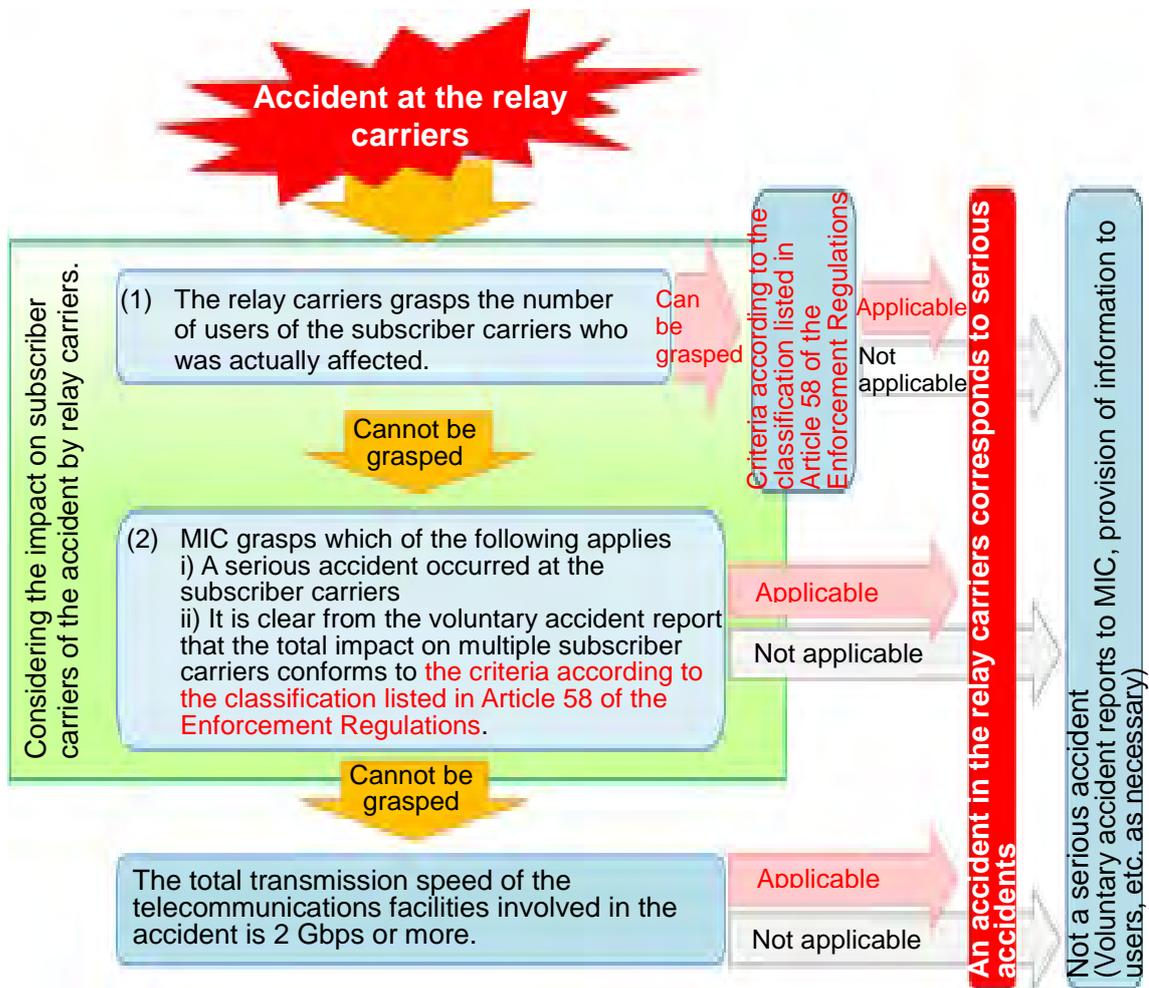


Fig. 4 Decision on Accident of Relay Carriers

(6) Duration

The calculation of time during a suspension of the provision of services or quality deterioration shall be as follows:

- 1) As a general rule, it should be a continuous time.
- 2) The time after reaching the criteria of a suspension of the provision of services or quality deterioration until falling below the criteria.

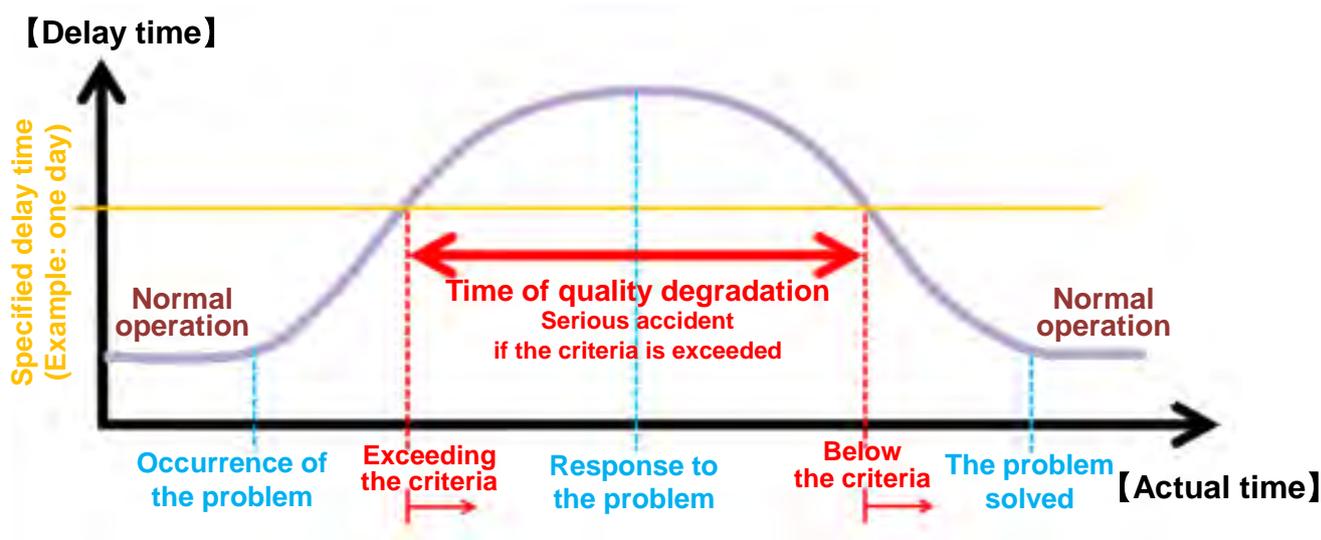


Fig. 5 Concept of Duration (in the Case of Quality Deterioration of Email Services)

An accident can suspend all or part of the provision of services or result in quality deterioration due to a failure in other carriers' telecommunications facilities. In that case, the duration shall be calculated* for each carrier that suspends all or part of the provision of services or causes quality deterioration.

* Following the above (5) 5), the calculation should be made in cooperation with the relay carriers and the subscriber carriers.

(7) Classification of telecommunications services listed in Article 58 of Enforcement Regulations

Which classification the accident falls into shall be determined based on the provisions of the Enforcement Regulations. For reference, the types and classification of telecommunications services listed in Form 4 of the Enforcement Regulations are illustrated (Table 6).

Note 6 of Form 4 of the Enforcement Regulations specifies that only 31 shall be checked in the case of virtual mobile telecommunications services corresponding to the items (limited to 6, 7, 16, 17, 18, or 23) in the Type of Telecommunications Service. However, the classification of telecommunications services listed in Article 58 of the Enforcement Regulations shall be determined

according to the applicable classification in Table 6.

Depending on the content, another judgment may be made. Therefore, if carriers are unsure, they should contact MIC. Besides, in the *Accident Overview* of the serious accident report (Form 50-3 of the Enforcement Regulations), the applicable items from this classification shall be filled in.

**Table 6 Examples of Telecommunications Service Classifications
Listed in Article 58 of Enforcement Regulations*1**

Classification of telecommunications services	Types of telecommunications services listed in Form 4 of Enforcement Regulations	
I. 1. Voice transmission services with emergency calls (*2)	1. Subscribed phone 2. Information Network System (INS) or ISDN (Integrated Services Digital Network) services (related to this classification) 5. Public telephone 6. Mobile phone 7. PHS 8. IP phone (0AB-J IP phone)	10. FMC (Fixed Mobile Convergence) services 27. Dedicated services (related to this classification) 29. Value-added services using services No. 1 to 28 (related to this classification) 31. Virtual mobile telecommunications services (related to this classification) 34. Services other than No. 1 to 33 (related to this classification)
2. Voice transmission services without emergency calls (*3)	3. Relay phone (other than international calls, etc.) 4. International calls, etc. 8. IP phone (050-IP phone, etc.) 27. Dedicated services (related to this classification)	29. Value-added services using services No. 1 to 28 (related to this classification) 31. Virtual mobile telecommunications services (related to this classification) 34. Services other than No. 1 to 33 (related to this classification)
3. Mobile phones (excluding telecommunications services listed in the above 1 or 2) with cellular LPWA (radio facilities that meet the conditions specified in Article 49-6-9,	6. Mobile phones (related to this classification) 28. Unlicensed LPWA services	

<p>Paragraphs 1 and 5 or Paragraphs 1 and 6 of the Order of MIC No.18 of 1950: Regulating Radio Facilities) , and unlicensed LPWA services stipulated in Article 1, Paragraph 2, Item 18 of the Reporting Rules</p>	<p>31. Virtual mobile telecommunications services (related to this classification)</p>	
<p>4. Internet-related services that do not receive payment from users as compensation for the provision of telecommunications services (excluding telecommunications services listed in the above items 1 to 3) (* 4)</p>	<p>30. Internet-related services (free of charge) (* 4) 29. Value-added services using services No. 1 to 28 (related to this classification)</p>	<p>34. Services other than No. 1 to 33 (related to this classification)</p>
<p>5. Telecommunications services other than those listed in the above 1 to 4</p>	<p>2. Information Network System (INS) or ISDN (Integrated Services Digital Network) services (related to this classification) 11. Internet connection services 12. FTTH access services 13. DSL access services 14. FWA access services 15. CATV access services 16. Mobile/PHS access services 17. 3.9th-4th generation mobile communications access services 18. 5th generation mobile communications access services 19. Local 5G services 20. Frame Relay Services 21. ATM exchange services 22. Public wireless LAN access services</p>	<p>23. BWA access services 24. IP-VPN services 25. Wide-area Ethernet services 27. Dedicated services (related to this classification) 29. Value-added services using services No. 1-28 (related to this classification) 30. Internet-related services (charged) (*5) 31. Virtual mobile telecommunications services (related to this classification) 33. Telegram 34. Services other than No. 1-33 (related to this classification)</p>

<p>II. Accidents in which all communications are disabled for two hours or more due to a failure in satellites, submarine cables, or other similar important telecommunications facilities installed by telecommunications carriers.</p>	<p>9. Satellite mobile communication services</p> <p>26. Satellite access services</p>	<p>*Other services that have influenced by a failure in submarine cables</p>
--	--	--

*1. Service numbers may be revised. In that case, replace the numbers as appropriate.

*2. Example: Accidents of analog phones, 3G or VoLTE dedicated mobile phones, and accidents of emergency calls on 3G lines for the same mobile phone terminal on condition that emergency calls are provided on 3G lines but not provided by VoLTE services fall into this classification.

*3. Example: Accidents of IP phones, accidents of communication apps, and accidents of emergency calls on 3G lines for the same mobile phone terminal on condition that emergency calls are provided on 3G lines but not provided by VoLTE services fall into this classification.

*4. Example: Free mail and free SNS (provided to users who have a contract for mobile phones or fixed broadband services through applications on the Internet, etc. without collecting payment as compensation for the services).

*5. IP phones are excluded.

(8) Important telecommunications facilities

Important telecommunications facilities are satellites, submarine cables, and similar facilities. Satellite and submarine cables include those for both domestic and international communications.

(9) All communications disabled for two hours or more

The following accidents do not fall under the category of all communications disabled.

- i. Failures in some transponders (repeaters) of a satellite, etc.
- ii. Communication outage between the landing site of submarine cables and some other landing sites

1.2 Example of Description of Serious Accident Report (Enforcement Regulations Form 50-3)

**Table 7 Example of Description of Serious Accident Report
(Enforcement Regulations Form 50-3)**

Time and date of occurrence	<i>(Example)</i> <i>hh:mm/MM/DD (day of the week)/YY</i>	Restoration time and date	<i>(Example)</i> <i>hh:mm/MM/DD (day of the week)/YY</i> <i>(Duration: hh:mm)</i>
Place of occurrence	<ul style="list-style-type: none"> Describe the installation location of the facilities where the accident occurred. <i>(Example)</i> <i>XX Center, ZZ Building(Address, including the city and prefecture names)</i>		
Accident overview	<ul style="list-style-type: none"> Describe the classification of the service that had influenced in Article 58, Item 1 of the Enforcement Regulations, and an overview of the accident. <i>(Example)</i> <i>Affected telecommunications service classification: Voice transmission services with emergency calls</i> <i>Event A occurred in Facilities B due to Cause C, affecting Service D, and caused E.</i>		
Overview of the facilities that caused the accident	<ul style="list-style-type: none"> Describe the normal operation of the facilities that caused the accident. Also, describe the operation of the facilities when the accident occurred (including the facility configuration) to understand the difference among them. If necessary, attach a facility configuration diagram, etc. on a separate sheet. 		
Occurrence status	<ul style="list-style-type: none"> Describe the details of the accident, such as the event that occurred, the number of users affected, and the area affected. If necessary, attach the calculation basis for the number of affected users and traffic transition during the duration of the failure in a separate sheet. 		
Measures (accident response status)	<ul style="list-style-type: none"> Describe in detail the measures taken from the occurrence of the accident to the restoration, including the responders, in chronological order. Attach a separate sheet if necessary. <i>(Example)</i> <i>hh:mm [Responder: XX Department] (Detection)</i> <i>hh:mm [Responder: YY Department] (Emergency recovery measures)</i> <i>hh:mm....</i>		
Cause and factor	<ul style="list-style-type: none"> In addition to the root/initial cause of the accident, describe the cause and factor that expanded the accident into a large-scale and long-term accident, classified by the management process (i.e., the design, construction, maintenance, and operation) of the facilities in the accident. If necessary, attach a reference that illustrates the cause and factor of the occurrence. If multiple accidents occur at the same time, describe on an accident-by-accident basis. 		

	<p><i>(Example)</i></p> <p>1) <i>Cause at the time of designing: Missing assumption of Cause A</i> Originally, it was considered possible to handle assumed Case F with the corresponding design capacity. However, due to Cause A, which was unexpected, the operation of Facilities B stopped, and the function could not be used.</p> <p>2) <i>Cause at the time of construction: Insufficient confirmation of Procedure Manual G</i> Regular maintenance was not carried out according to Procedure Manual G. The load on Facilities B became high, and Facilities B stopped.</p> <p>3) <i>Cause during maintenance and operation: Insufficient monitoring of Facilities B</i> Due to the lack of monitoring of Facilities B, it was impossible to detect the unstable operation of Facilities B.</p> <p>4) <i>Cause of the accident becoming longer and larger: Configuration of Facilities B</i> The facility configuration was such that when Facility B stopped, related services stopped at the same time. As a result, the range of failures increased, and the number of affected users expanded. Furthermore, the carrier assumed that the regular maintenance was carried out according to Procedure Manual G, it took a long time to isolate the cause.</p>
<p>Measures to prevent recurrences</p>	<ul style="list-style-type: none"> • Describe temporary measures for emergency restoration, permanent measures to prevent future recurrences, and the expected operation of the facilities (including facility configuration) with the improvements, together with the time of implementation. If necessary, attach the implementation schedule of recurrence prevention measures, equipment configuration diagram, etc. on a separate sheet. <p><i>(Example)</i></p> <p>1) <i>Temporary measures: Corrected Cause A. [Completed on MM/DD/YY]</i></p> <p>2) <i>Permanent measures</i></p> <p>i) <i>About the lack of recognition of Cause A, XX was implemented. [Completed on MM/DD/YY]</i></p> <p>ii) <i>About lack of compliance with Procedure Manual G, XX was implemented. [Completed on MM/DD/YY]</i></p> <p>iii) <i>About the lack of monitoring of Facility B, XX was implemented. [Completed on MM/DD/YY]</i></p> <p>iv) <i>About the configuration of Facility B, XX was implemented. [Completed on MM/DD/YY]</i></p>
<p>User support status</p>	<ul style="list-style-type: none"> • Describe the number of inquiries and complaints from users by phone, email and others, along with the calculated date and time. • Describe the method to inform the users (e.g., website posting, individual notice by telephone or email, and dissemination by TV ticker messages, etc.) together with the date and time. • Furthermore, if a noteworthy user response is made, describe the details of the response along with the date and time.
<p>Related laws and regulations</p>	<ul style="list-style-type: none"> • If there are related laws, rules and regulations, list the relevant articles and describe the relationship with recurrence prevention measures.

Trends in related accidents occurrence	<ul style="list-style-type: none"> • If there was an accident in the past due to the same cause and factor as this accident, describe the outline of the accident. <p>(Example)</p> <p>1) MM/DD/YY of occurrence. A failure in Facilities B failure during temporary maintenance due to insufficient compliance with Procedure Manual G</p> <p>2) MM/DD/YY of occurrence. Unavailability of related services due to high system load on Facilities B.</p>
Name of the General Manager of Telecommunications Facilities	(Example) SOMU, Taro
Name of the Chief Telecommunications Engineer who confirmed the measures for the accident and the type of Qualification	(Example) SOMU, Taro (Qualification: Transmission exchange)

2. Accidents and Incidents Requiring Quarterly Reporting

2.1 Laws and Regulations related to Quarterly Reporting

The laws and regulations related to accidents and incidents that require quarterly reporting are as follows:

- TBA

<p>(Reports and Inspections)</p> <p>Article 166 (1) To the extent necessary for enforcement of this Act, The Minister for Internal Affairs and Communications may have a telecommunications carrier or person entrusted with intermediation, etc. report on their business, or commission ministerial officials to enter into the offices, business offices, or other places of business of the telecommunications carrier or person entrusted with intermediation, etc. in order to inspect their telecommunications facilities (limited to cases in which the ministerial officials enter the place of business of a telecommunications carrier), books, documents, and other items.</p> <p>(2) to (8) (Omitted)</p>
--

- **Reporting Rules (Order of MIC No. 46 of 1988: Rules for Reporting on Telecommunications Business)**

(Reporting on Accident and Incident Occurrence Situation)

Article 7-3 In the event of an accident and an incident that falls under any of the following, the telecommunications carrier shall submit to the Minister for Internal Affairs and Communications in writing or any other proper method within two months after the lapse of each quarter in accordance with Form 27. However, reports on any of the types of accidents and incidents notified separately by the Minister for Internal Affairs and Communications may be submitted in a format separately specified by the Minister for Internal Affairs and Communications.

(1) An accident that suspend the provision of all or part of telecommunications services (excluding those related to the provision of additional functions) or deteriorate the quality of telecommunications services due to a failure in telecommunications facilities (including a failure in any other telecommunications carriers' telecommunications facilities) and falls under either one of the following:

- i. The number of users affected by the suspension of the provision of the services or the deterioration in quality of the services is 30,000 or more (or falls under the criteria separately notified by the Minister of Internal Affairs and Communications if the Minister of Internal Affairs and Communications finds it difficult to grasp the number of users affected).
- ii. The duration of the suspension of the provision of the services or the deterioration in quality of the services is two hours or more.

(2) An accident that interferes with the provision of telecommunications services due to failures in other facilities than telecommunications facilities and falls under any of the following:

- i. The number of users affected by the accident that interferes with the provision of telecommunications services (including those who intend to conclude a contract on the provision of telecommunications services with telecommunications carriers) is 30,000 or more.
- ii. The duration which the users are affected by the accident that interferes with the provision of telecommunications services is two hours or more.

(3) An incident which information leakage on telecommunications facilities may interfere with the provision of telecommunications services

- **MIC Notice No. 136 of 2010 (Matters related to Decision of Accidents and Incidents, Forms, and Minor Accidents and Incidents Separately Notified by the Minister for Internal Affairs and Communications)**

Under the provisions of Article 7-3 of the Rules for Reporting on Telecommunications Business (Order of MIC No. 46 of 1988), the types of accidents and incidents, report form, and minor accidents and incidents separately notified by the Minister for Internal Affairs and Communications shall be defined as follows:

(1) Accidents and incidents separately notified by the Minister for Internal Affairs and Communications prescribed in Article 7-3, Paragraph 1 of the Rules for Reporting on Telecommunications Business (Order of MIC No. 46 of 1988; hereafter referred to as the "Reporting Rules") shall fall under any of the following types:

- i. An accident and incident caused by a failure in terminal system transmission line facilities (limited to those interconnected to mobile terminal facilities at one end) interconnected to users' telecommunications facilities at one end over the radio.
- ii. An accident caused by a failure in station-installed remote accommodation devices or feeder/line-point remote accommodation devices, and the scope of the impact of the accident is limited to a part of those who use the line accommodated in the device.
- iii. An accident caused by a failure in a digital subscriber line access multiplexer (DSLAM), and the scope of the impact of the accident is limited to a part of those who use the line accommodated in the multiplexer.

(2) The form specified separately by the Minister for Internal Affairs and Communications prescribed in Article 7-3, Paragraph 1 of the Reporting Rules shall be designated in the appendix.

[Commentary]

An accident and incident shall be subject to quarterly reporting if any of the following applies. The carrier shall report it to MIC (the headquarters) in **Form 27 within two months after each quarter.**

- Accidents in which a ⁽¹⁾ failure in telecommunications facilities occurs and ⁽²⁾ the provision of all or part of telecommunications services ⁽³⁾ excluding those related to the provision of additional functions resulting in ⁽⁴⁾ the suspension or quality deterioration of the services, provided that the ⁽⁵⁾ number of affected users who have been affected is 30,000 or more **or** the ⁽⁶⁾ duration is two hours or more. (Article 7-3, Item (1) of the Reporting Rules)
- Accidents in which a failure in ⁽⁷⁾ facilities other than telecommunications facilities occurs and the ⁽⁸⁾ provision of telecommunications services is interfered, and the number of users affected by the accident (including ⁽⁹⁾ those who intend to conclude a contract on the provision of telecommunications services with the telecommunications carrier) is 30,000 or more or the duration is two hours or more. (Article 7-3, Item (2) of the Reporting Rules)
- Incidents which ⁽¹⁰⁾ information leakage on telecommunications facilities ⁽¹¹⁾ may interfere with the provision of telecommunications services (Article 7-3, Item (3) of the Reporting Rules)

However, in the case of an accident and incident due to a failure of any of the following facilities, it can be reported in the form specified in MIC Notice No. 136 of 2010.

- Accidents and Incidents caused by a failure in ⁽¹²⁾ terminal system transmission line facilities (limited to those interconnected to mobile terminal facilities at one end) interconnected to users' telecommunications facilities at one end over the radio
- Accidents caused by a failure in station-installed remote accommodation devices or feeder/line-point remote accommodation devices, and ⁽¹³⁾ the scope of the impact of the accident is limited to a part of those who use the line accommodated in the device
- Accidents caused by a failure in a digital subscriber line access multiplexer (DSLAM), and ⁽¹³⁾ the scope of the impact of the accident is limited to some of the users of the line accommodated in the device

For the definitions of (1) to (6), see **1. Serious accidents** on P10~16.

(7) Facilities other than telecommunications facilities

Facilities that belong to the following systems and do not directly affect telecommunications services but have a large impact on users if the facilities malfunction.

- Clerical processing systems for mobile number portability (MNP)
- Systems related to contracts with users, including new subscription contracts

(8) Provision of telecommunications services is interfered

It does not refer to an actual occurrence of suspension of the provision of services or deterioration in quality of services but a lack of the premise of provision of services. For example, it is a state where services cannot be provided because the contract has not been concluded due to a suspension of systems related to new subscription contracts, if it was possible to provide services if a contract was concluded with a new contract applicant.

(9) Those who intend to conclude a contract on the provision of telecommunications services

Those who have applied for a contract, though the contract has not been concluded yet. For example, those who have applied for number transfer or acquisition by MNP, and newly applied for a subscription contract, etc.

(10) Information leakage on telecommunications facilities

Information on telecommunications facilities includes security information about carriers' telecommunications facilities, information on the configuration of the facilities, and information (in-house confidential know-how) in which the carriers or third parties with a contractual relationship with the carriers have some property interest. However, it does not include the secrecy of communications or personally identifiable information.

(11) May interfere with the provision of telecommunications services

It refers to an actual risk of suspension or deterioration in quality of the carriers' or other carriers' services.

(12) Terminal system transmission line facilities (limited to those interconnected to mobile terminal equipment at one end) interconnected to users'

telecommunications facilities at one end over the radio

These facilities refer to wireless base stations for mobile communications.

(13) The scope of the impact of the accident is limited to a part of those who use the line accommodated in the device

This condition refers to a state where the provision of services to some users can be continued. The impact of the accident does not affect the entire device because the accommodation for each user is physically divided by the line card, etc. within the device.

2.2 Example of Description of Quarterly Reporting Form (Reporting Rules Form 27)

Table 8 Example of Description of Quarterly Reporting Form (Reporting Rules Form 27)

From MM YYYY (month and year)
To MM YYYY (month and year)

Name of the carrier: XX Communications Inc.

Registration date and number / notification date and number: MM DD, YYYY No. ZZZZ

Name of general manager of telecommunications facilities: TTTT

Name of chief telecommunications engineer: SSSS

Time and date of occurrence	Restoration time and date	Affected area	Number of users affected	Main cause and factor	Management process of facilities	Facilities in failure *1	Measures	Remarks	Classification of telecommunications services affected	Affected telecommunications services				
										*	*	*	*	
hh:mm/mm/dd/yyyy	hh:mm/mm/dd/yyyy	Areas that do not exceed one	1,234	human error	Construction	Router	System switching		Others		★	●		

*1. Table 9 illustrates examples corresponding to transmission exchange facilities and servers.

*2. For the affected telecommunications services, select all applicable services. When selecting multiple services, put ★ for the main service, such as the one with the largest number of affected users, and put ● for the other services.

Table 9 Examples of Facility Classification in the Selection of Facilities in Failure

Facilities/Devices		Examples of applicable equipment etc.
Transmission exchange facilities		Facilities other than servers (see examples below) in conventional transmission exchange facilities
Subscriber accommodation device		A device used to accommodate subscriber lines and relays data to the upper network
L2SW		A device used to relay data based on the address information of the MAC layer
L3SW/Router		A device used to relay data based on packet address information in the network layer
Relay/Control device		A data relay device of core network, control device for network service, etc., or barrier devices, including XGSN, PGW, or SGW
Base station controller device		A device used to handle call processing functions, such as line connection control and location registration control, in multiple wireless base stations under its control, including RNC or MME, etc.
Network termination device		A device that performs the conversion of signals and transmission/reception at network interconnection points
Others		Devices other than the above
Servers		Servers in conventional transmission exchange facilities
Authentication/Call control server	Server	A server used to perform subscriber authentication, service authentication and call control, including SIP server, HLR, HSS, or AAA, etc.
	Ancillary device	A control device such as load balancer, or attached router, etc.
Application server	Server	An application server including mail server, web server, or DNS server, etc.
	Ancillary device	A control device such as load balancer, or attached router, etc.
Power supply, circuit exchange facilities, transmission line facilities, ancillary facilities		The conventional classification applies.
Unknown		The types of facilities are unknown.
Others		Devices other than the above. * Free description as remarks.

3. Minor Accidents and Incidents with No Reporting Required

The following are the laws and regulations regarding minor accidents and incidents that do not require reporting:

- **Reporting Rules (Order of MIC No. 46 of 1988: Rules for Reporting on Telecommunications Business)**

(Reporting on Accident and Incident Occurrence Situation)
Article 7-3

(2) Notwithstanding the provision of the preceding paragraph, the submission of reports is not required for minor accidents and incidents that are separately notified by the Minister for Internal Affairs and Communications.

- **MIC Notice No. 136 of 2010 (Matters related to Decision of Accidents and Incidents, Forms, and Minor Accidents and Incidents Separately Notified by the Minister for Internal Affairs and Communications)**

Under the provisions of Article 7-3 of the Rules for Reporting on Telecommunications Business (Order of MIC No. 46 of 1988), the types of accidents and incidents, report form, and minor accidents and incidents separately notified by the Minister for Internal Affairs and Communications shall be defined as follows:

(3) Minor accidents and incidents separately notified by the Minister for Internal Affairs and Communications in Article 7-3, Paragraph 2 of the Rules for Reporting on Telecommunications Business shall fall under any of the following types:

- i. An accident caused by a failure in telecommunications facilities for the use of telecommunications business installed in the user's building or a similar place, where the scope of impact is limited on the same premises (including within the equivalent areas) or within the same building.
- ii. An accident caused by a failure in terminal system transmission line facilities (excluding those interconnected to users' telecommunications facilities at one end over the radio), where the location of the failure is a section of an overhead line.

[Commentary]

No report is required if an accident occurs due to a failure in the following facilities:

- Accidents caused by a failure in ⁽¹⁾ telecommunications facilities for the use of telecommunications business in the user's building or a similar place, where the scope of impact is limited on the same premises (including within the equivalent areas) or within the same building.
- Accidents caused by a failure in ⁽²⁾ terminal system transmission line facilities (excluding those interconnected to users' telecommunications facilities at one end over the radio), where the ⁽³⁾ location of the failure is a section of an overhead line.

(1) Telecommunications facilities for the use of telecommunications business in the user's building or similar place

These facilities include terminal adapters (TAs), modems, set-top boxes (STBs), etc. installed in the users' home.

(2) Terminal system transmission line facilities (excluding those interconnected to users' telecommunications facilities at one end over the radio)

These facilities refer to the part of access line of subscriber carriers, such as electric wires, utility poles, service lines (including those to apartment buildings such as condominiums), protectors, etc. However, the facilities do not include radio base stations for mobile system communications, devices related to FWA (fixed wireless access), and trunk lines for CATV (community antenna television).

(3) Location of the failure is a section of an overhead line

It means that the facilities in failure are located in an overhead area, such as an area from a feeder/line point to a protector.

V. Review of Guidelines

MIC will continue reviewing the contents of the Guidelines and revise them as necessary, taking into account the future sophistication and diversification of telecommunications services, changes in circumstances due to the accumulation of cases of telecommunication accidents and incidents based on reports such as serious accidents, accidents and incidents requiring quarterly reporting and others, and other reasonable situations.