# Guidelines for Operators of Sound Broadcasting Service and Domestic Free TV Programme Service for Outage Reporting

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#### 1 Introduction

- 1.1 Sound broadcasting services (i.e. conventional sound broadcasting of amplitude modulation (AM) and frequency modulation (FM)) and domestic free TV programme services (hereinafter referred to as the Broadcasting Services) as provided free of charge are important to the general public in Hong Kong as sources of education, entertainment and information. Most people rely on the Broadcasting Services especially to keep alert of essential information, breaking news and announcements. From time to time, the Office of the Communications Authority (OFCA) receives complaints / enquiries from the general public about the reception of the Broadcasting Services. In the event of outage of the Broadcasting Services, the broadcasting operators<sup>1</sup> (hereinafter referred to as the Operators) concerned are required to report to OFCA in accordance with the requirements specified in this document.
- 1.2 Both the Operators and OFCA should play their respective roles in advising the viewers / listeners and the public on the outage of Broadcasting Services. Operators, having the first-hand information about the operational status of their broadcasting networks and services, should be responsible for providing prompt information and advice to their viewers / listeners on any service outages or degradation. Where the outage or degradation falls within the reporting criteria stipulated in this document, the Operator concerned should, in addition to providing information and advice to its respective viewers / listeners, report to OFCA within the specified timeframe. OFCA, upon receiving such information, may help disseminate the information to the public, and provide guidance where necessary if the outage or degradation is assessed to have territory-wide and significant implications.

#### 2 Reportable Outages

An outage refers to any event that adversely affects the normal reception of the Broadcasting Services by viewers / listeners. It is classified into critical outage (C-Outage) and major outage (M-Outage) depending on the extent of affected situations. Examples are the failure of a master control facility affecting transmission of TV programmes to the broadcasting network, and breaking down of

For the purpose of these guidelines, "broadcasting operators" refers to the licensees of sound broadcasting services and domestic free television programme services, and the Radio Television Hong Kong.

the studio-to-transmitter link or a transmitting station of the broadcasting network.

2.2 The triggering criteria for reporting C-Outage and M-Outage are specified in <u>Appendix 1</u> and <u>Appendix 2</u> respectively. Examples of reportable outages are given in <u>Appendix 3</u>. Operators should, whenever necessary, report other outage events not necessarily listed in <u>Appendices 1, 2, and 3</u>.

#### **3** Reporting Timeframe

3.1 If an outage of the Broadcasting Service occurs and meets the triggering criteria as specified in <u>Appendix 1</u>, <u>Appendix 2</u> or <u>Appendix 3</u>, the Operator concerned should report the outage by sending an initial outage report to OFCA in accordance with the reporting timeframe specified in <u>Appendix 4</u>.

#### 4 Information to be provided by Operators when Reporting an Outage

- 4.1 When reporting an outage of Broadcasting Services, the Operator concerned should provide OFCA with the following information, whenever possible:
  - (a) name of the operator;
  - (b) brief description of the incident;
  - (c) date and time of onset of the incident;
  - (d) affected stations/areas;
  - (e) actions taken or being taken; and
  - (f) name of contact person as well as the person's telephone number and email address.

#### **5** Updates on Service Status

5.1 During the recovery stage, the Operator concerned should keep OFCA informed of the status of the affected service. Under critical circumstances, OFCA may specify the update frequency and the information to be provided by the Operator concerned to facilitate the assessment on the impact of the outage and the progress of recovery of the affected service.

#### **6** Incident Report

- 6.1 A report giving a detailed account of the incident, the events that lead to the occurrence of the outage and the remedial actions taken should be submitted to OFCA within two weeks after the incident.
- 6.2 Where requested by OFCA, a full report giving a detailed account of the measures which have been taken (or will be taken) in order to prevent similar incidents from happening again should be submitted to OFCA within one month after the incident.

#### **7** Contact Points for Reporting Outages

7.1 OFCA's contact points for reporting outages are given in Appendix 5.

# Triggering Criteria for Reporting C-Outages (applicable to Domestic Free TV Broadcasting Operators)

	Outage Events	Duration of the	Extent of the outage
		outage	
		(minutes)	
-	Failure of the master control	> 15	- All viewers will be affected
	facility (e.g. studio, common		
	control unit in the studio, etc.)		
-	Failure of the principal TV	> 15	Viewers within the coverage area
	transmitting station at Temple		of Temple Hill principal
	Hill (e.g. transmitter /		transmitting station will be
	studio-to-transmitter link, etc.)		affected

# **Triggering Criteria for Reporting C-Outages** (applicable to Sound Broadcasting Operators)

Outage Events	Duration of the	Extent of the outage
	outage	
	(minutes)	
- Failure of the master control	> 15	- All listeners will be affected
facility (e.g. studio, common		
control unit in the studio, etc.)		
- Failure of the principal FM	> 15	- Listeners within the coverage
transmitting stations at Mount		area of the concerned principal
Gough/ Kowloon Peak		transmitting station will be
(e.g. transmitter /		affected
studio-to-transmitter link, etc.)		

# Triggering Criteria for Reporting M-Outages (applicable to Domestic Free TV Broadcasting Operators)

Outage Events	Duration of the	Extent of the outage
	outage	
	(minutes)	
- Failure of other TV	> 30	- Viewers within the coverage area
transmitting stations,		of the concerned transmitting
including fill-in stations		stations will be affected
(e.g. transmitter /		
studio-to-transmitter link, etc.)		
- Failure of network	> 30	- Part of viewers within the
synchronization/timing		overlapping areas of the
equipment for TV transmitting		concerned transmitting stations
stations		will be affected

# **Triggering Criteria for Reporting M-Outages** (applicable to Sound Broadcasting Operators)

Outage Events	Duration of the outage	Extent of the outage
	(minutes)	
	, ,	
- Failure of AM transmitting	> 30	- Listeners of AM services will be
station (e.g. transmitter /		affected
studio-to-transmitter link, etc.)		
- Failure of FM transmitting	> 30	- Listeners within the coverage
stations (other than Mount		area of the concerned
Gough/Kowloon Peak),		transmitting stations will be
including fill-in transmitting		affected
stations		
(e.g. transmitter /		
studio-to-transmitter link, etc.)		

#### **Examples of Reportable Outages**

#### 1. Failure of Master Control Facility

The following incidents are examples which may cause outage of the master control facility in the studio:

- When a common control unit fails;
- When there is a loss of AC power supply and the backup power supply fails to start.

#### 2. Failure of Studio-to-Transmitter Link (STL)

A designated radio or landline link will be deployed to link up the broadcasting house / live studio and transmitting stations.

Examples of STL failures are:

- When there is a failure of STL equipment;
- When the designated STL (e.g. radio link, landline link, etc.) is not capable of conveying the signals to the transmitting station.

#### 3. Failure of Transmitting Station

Examples leading to the failure of the transmitting station are:

- Failure of common control unit;
- When the signal source is blocked / being severely interfered with;
- When there is a failure of transmission equipment.

#### 4. Failure of Network Equipment

Examples of network equipment failures are:

- When there is a failure in the Global Positioning System (GPS) module for precise timing reference;
- When there is a failure in any timing reference/control equipment;
- When there is a failure in the core network equipment.

Note: The list above is by no means exhaustive. Operators should report other outages causing the service impact comparable to any of the events listed in Appendices 1 or 2.

# Timeframe for Reporting Outages (applicable to Domestic Free TV Broadcasting Operators)

# (a) <u>C-Outage</u>

Occurrence Time	Initial Report	Restoration of Service
From 00:00 to 23:59	The operator concerned	The operator concerned
	should after one of the	should report to OFCA
	triggering criteria for	within 60 minutes after the
	reporting a C-Outage is	restoration of the service
	met report the C-Outage to	is confirmed.
	OFCA within 60 minutes.	

### (b) <u>M-Outage</u>

Occurrence Time	Initial Report	Restoration of Service
<u>Time Zone 1</u>	The operator concerned	The operator concerned
From 08:00 to 23:00	should after one of the	should report to OFCA
	triggering criteria for	within 2 hours after the
	reporting a M-Outage is	restoration of the service
	confirmed report the	is confirmed.
	M-Outage to OFCA	
	within 2 hours.	
<u>Time Zone 2</u>	The operator concerned	The operator concerned
From 23:00 to 08:00	should after one of the	should report to OFCA
	triggering criteria for	within 2 hours after the
	reporting a M-Outage is	restoration of the service
	confirmed report the	is confirmed or by 08:30,
	M-Outage to OFCA	whichever is later.
	within 2 hours or by	
	08:30, whichever is later.	

# Timeframe for Reporting Outages (applicable to Sound Broadcasting Operators)

### (a) <u>C-Outage</u>

Occurrence Time	Initial Report	Restoration of Service
<u>Time Zone 1</u>	The operator concerned	The operator concerned
From 09:00 to 18:00 on	should after one of the	should report to OFCA
business day	triggering criteria for	within 2 hours after the
	reporting a C-Outage is	restoration of the service
	met report the C-Outage to	is confirmed.
	OFCA within 2 hours.	
<u>Time Zone 2</u>	The operator concerned	The operator concerned
Other period outside Time	should after one of the	should report to OFCA
Zone 1	triggering criteria for	within 2 hours after the
	reporting a C-Outage is	restoration of the service
	met report the C-Outage to	is confirmed or by 11:00
	OFCA within 2 hours or	on business day,
	by 11:00 on business day,	whichever is later.
	whichever is later.	

### (b) <u>M-Outage</u>

Occurrence Time	<b>Initial Report</b>	<b>Restoration of Service</b>
<u>Time Zone 1</u>	The operator concerned	The operator concerned
From 09:00 to 18:00 on	should after one of the	should report to OFCA
business day	triggering criteria for	within 2 hours after the
	reporting a M-Outage is	restoration of the service
	confirmed report the	is confirmed.
	M-Outage to OFCA	
	within 2 hours.	
<u>Time Zone 2</u>	The operator concerned	The operator concerned
Other period outside Time	should after one of the	should report to OFCA
Zone 1	triggering criteria for	within 2 hours after the
	reporting a M-Outage is	restoration of the service
	confirmed report the	is confirmed or by 11:00
	M-Outage to OFCA	on business day,

within 2 hours or by 11:00	whichever is later.
on business day,	
whichever is later.	

# **Contact Points for Reporting Outages**

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