

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**



**DRAFT**

**ASIA-PACIFIC REGIONAL GUIDANCE**

**FOR**

**CONTINGENCY PLANNING AND RESPONSE TO NOTAM SERVICE DISRUPTION**

Approved by the  
Eleventh Meeting of the Air Traffic Management  
Sub-Group of APANPIRG  
(ATM/SG/11, October 2023)

APAC Guidance for Contingency Planning and Response  
NOTAM Service Disruption

## 1. INTRODUCTION, SCOPE AND PURPOSE

1.1 The Eighteenth Meeting of the Asia/Pacific Aeronautical Information Systems – Aeronautical Information Management Implementation Task Force (AAITF/18, Bangkok, Thailand, 19 to 23 June 2023) discussed the ICAO standards<sup>1</sup> requiring that a flight not commence unless it had been ascertained by every reasonable means that ground and/or water facilities, airspace, and departure, destination and alternate aerodromes are:

- adequate for the type of operation;
- adequately operated for the purpose; and
- will safely be used for the planned operation.

1.2 *Reasonable means* in the standards are intended to denote the use, at the point of departure or while the aircraft is in flight, of information available to the operator either through official information published by the aeronautical information services or readily available from other sources.

1.3 To provide information meeting this requirement, International NOTAM Offices (NOFs) establish agreements for the exchange of NOTAMs<sup>2</sup> supporting the pre-flight information service, and to meet the need for in-flight information.

1.4 The NOTAM service provided in accordance with ICAO Standards and Recommended Practices (SARPS) and Procedures is critical to the safety and regularity of flight. System architecture should provide appropriate levels of redundancy including, according to local needs, such considerations as back-up systems (at diverse sites, where possible), frequently or dynamically updated back-up data bases, full safety risk assessment and ongoing safety management of service operations, regular system and procedure testing, and service level agreements specifying reliability, availability and required restoration times. However, experience has shown that NOTAM services may be disrupted by unexpected failure of a wide range of contributing hardware, software and human systems.

1.5 Due to the irregular nature of issuance of NOTAM a NOF may not be aware of disruption to services provided by another NOF with which it exchanges NOTAM. Similarly, airport and airspace users, Air Traffic Services (ATS) units and data originators such as aerodrome operators are also unlikely to be aware of disruptions to NOTAM services. The degree or level of service interruption could range from minor impact to major outage, which may vary the response. Contingency arrangements may therefore consider degraded systems operation or complete system outages, and/or other issues such as facility or staff availability.

1.6 This document, *The Asia/Pacific Guidance for Contingency Planning and Response – NOTAM Service Disruption*, was developed by AAITF/18 with inclusions proposed by Australia, Cambodia, China, Hong Kong China, Fiji, India, Japan, Malaysia, Pakistan, Singapore, Viet Nam, IATA and ICAO. It is intended to provide information and guidance for the contingency planning and response to outages of the NOTAM service in the event that unexpected failure or degradation of any system or process used for the collection of data and/or the, preparation, storage and transmission of NOTAMs results in interruption to the NOTAM service. The document is maintained by ICAO, on behalf of AAITF, as a stand-alone regional guidance document to facilitate its update in response to future developments and lessons learned.

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<sup>1</sup> Annex 6 *Operation of Aircraft* Part I paragraphs 4.1.1 and 4.1.2

<sup>2</sup> Annex 15 *Aeronautical Information Services* paragraph 2.2.4

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1.7 The checklist of considerations in Section 2 of this document assumes complete outage of the NOTAM service. The use or application of the checklist should be varied according to actual circumstances. The checklist is not exhaustive, and may be supplemented by additional considerations, as locally determined.

**2. CHECKLIST OF CONSIDERATIONS**

<b>Disruption to Your Administration's NOTAM Service</b>	
<b>1.</b>	<b>Contingency Planning/Preparation for Unexpected Failure:</b>
a.	Develop and publish a NOTAM service contingency plan on the AIS website and/or website of the relevant authority/service provider, either as part of the Business Continuity Plan, ATM Contingency Plan, or as a stand-alone contingency plan.
b.	Determine a maximum period of NOTAM service outage after which the contingency plan will be activated.
c.	Include in the NOTAM service contingency plan a process for prioritization of NOTAMs promulgating immediate or near-term safety-related information, and deferment of others, including procedures for notification of data originators and any domestic NOTAM offices.
d.	Make advance formal arrangements with another AIS, NOF or, if available, domestic NOTAM Office, to transmit NOTAMs on behalf of the disrupted NOF, including the AFTN/AMHS and/or email distribution list for all NOTAM series covered by the arrangement and, where practicable, PIB production. <i>Note: formal arrangements may be stand-alone, or included in ATS or similar operational letters of agreement.</i>
e.	Establish and maintain a list of Points of Contact (POCs) for 24/7 contact with all NOFs with which NOTAMs are exchanged. POC details should include AFTN Address, email address, website URL (if any) and telephone numbers.
f.	If possible, include provision for access to NOTAMs on the AIS website.
g.	Publish the URL of the website (if any) to be used for disruption notifications and contingency NOTAM promulgation in AIP GEN 3.1. (GEN 3.1.1)
h.	Prepare address/distribution list (AFTN/AMHS and email) of receiving NOFs, relevant ATS units, and other organizations including airspace users and data originators that have subscribed or registered for notifications.
i.	Establish an automated process or, if not available, manual procedure to publish notifications on the website and immediately distribute notification to receiving NOFs, relevant ATS units, and other organizations including airspace users and data originators that have subscribed or registered for notifications.
j.	Make arrangements/agreements for alternative means of promulgating information during the disruption such as, where available/appropriate: <ul style="list-style-type: none"> <li>• Neighbouring AIS;</li> <li>• Email;</li> <li>• Alternative systems such as D-ATIS, ACARS, Data Link;</li> <li>• Automated phone messages.</li> </ul>

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<b>Disruption to Your Administration's NOTAM Service</b>	
<b>2.</b>	<b>When disruption occurs:</b>
a.	<p>Prepare a disruption notification including:</p> <ul style="list-style-type: none"> <li>• Time the disruption commenced;</li> <li>• Availability of AFTN/AMHS communication;</li> <li>• Availability of NOTAM issuance/distribution;</li> <li>• Availability of NOTAMs on the AIS or other website, if any;</li> <li>• Availability of PIBs;</li> <li>• A schedule of non-urgent NOTAM promulgation, if any (ideally every <b>XX</b> hours)</li> <li>• Contact information;</li> <li>• Alternative measures to collect NOTAM, if any;</li> <li>• Expected date/time of recovery</li> </ul>
b.	If possible, publish NOTAM to notify the service disruption
c.	Post the disruption notification on the website, if any.
d.	Send the disruption notification to all parties in the address/distribution list.
e.	<p>When practicable, post a summary of NOTAMS current at the time of the disruption on the website and send the summary to all recipients of the disruption notification. Alternately, disruption notifications could include direction to third-party international NOTAM databases.</p>
f.	Where practicable, limit the number of NOTAMs promulgated during the disruption to the minimum extent possible by applying priority to NOTAMs promulgating immediate or near-term safety-related information, and deferring others.
g.	Commence promulgating information by alternative means, where available/appropriate.
h.	Update the notification as soon as possible when there is any change in the situation, and in any event at intervals of, ideally, not less than <b>XX</b> hours.

<b>Disruption of the NOTAM Service of another Administration with which NOTAMs are Exchanged.</b>	
<b>3.</b>	<b>Baseline Assumptions:</b>
a.	All NOTAMS existing at the time the disruption commenced will remain valid;
b.	PERM NOTAMs will remain unchanged unless advised;
c.	NOTAMs with expiry date/time will expire at that time unless otherwise advised of renewal, cancellation or amendment.
d.	Updates will be at scheduled times as advised in the disruption notification, except in the case of urgent, safety critical information.

<b>NOTAM Service Resumption</b>	
<b>4.</b>	<b>When full NOTAM Service Capability is Restored</b>
a.	Notify all recipients of disruption notifications.
b.	Promulgate a checklist of NOTAMs

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