

International Civil Aviation Organization

The Third Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/3)

Bangkok, Thailand, 16 – 19 April 2024

Agenda Item 6: ATM Contingency Plans and Search and Rescue

REGIONAL ATM CONTINGENCY PLANNING AND CONTINGENCY OPERATIONS UPDATE

(Presented by Secretariat)

SUMMARY

This paper presents information on ATM contingency planning in the Asia/Pacific Region, including an update of State-reported implementation of the performance expectations of the Asia/Pacific Regional ATM Contingency Plan. A brief outline of ATM contingency operations in the APAC Region since the last report to ATM/SG/11 is also provided.

1. INTRODUCTION

- 1.1 The *Asia/Pacific Regional ATM Contingency Plan*, developed by the Regional ATM Contingency Plan Task Force (RACP/TF), was first adopted by the Twenty-Seventh Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/27) in September 2016. Version 3.0 of the Contingency Plan was approved by ATM/SG/7 in August 2019.
- 1.2 The Contingency Plan and the Regional ATM Contingency Plan Monitoring and Reporting form are available on the ICAO Regional Office eDocuments web-page (ATM section, Contingency sub-section) at:

https://www.icao.int/APAC/Pages/eDocs.aspx.

1.3 The Contingency Plan is subsidiary to the *Asia/Pacific Seamless ANS Plan*.

2. DISCUSSION

Regional ATM Contingency Plan Performance Expectations

- 2.1 The *Asia/Pacific Regional ATM Contingency Plan* includes in its performance improvement plan the following performance expectations relating to promulgation and reporting of State contingency plans:
 - 7.20 National ATM Contingency Plans should be promulgated on the website of the Air Navigation Service Provider.
 - 7.21 States should report the status of their contingency planning to the ICAO APAC Regional Office, as follows:
 - 1. Promulgation of the national ATM Contingency Plan, together with the hyperlink to the website location of the Plan;
 - 2. State Contingency Points-of-Contact; and

- 3. The establishment of contingency arrangements with each neighbouring State.
- Note 1: Information of a sensitive nature such as that related to matters of national security need not be included in promulgated contingency plans.
- Note 2: the Regional List of State Contingency Points-of-Contact is provided at **Appendix H**.
- Note 3: APANPIRG Air Navigation Deficiencies may be raised against the provisions of Annex 11 paragraph 2.30 for States that do not report promulgation of their national ATS contingency plan.
- 7.22 States should report the status of implementation of the performance expectations of the Regional ATM Contingency Plan at least once annually, by not later than 31 May each year, using the Regional ATM Contingency Plan Monitoring and Reporting Form.
- 2.2 The performance expectations of the Regional ATM Contingency Plan were expected to be implemented by 10 November 2016, reflecting the Annex 11 standard requiring that Air Traffic Services (ATS) Authorities shall develop and promulgate contingency plans.

Regional ATM Contingency Plan Status Reporting

- 2.3 Regional ATM Contingency Plan Monitoring and Reporting status report forms have been received as for the following reporting years (as of 28 February 2024):
 - 2019 Australia, Bangladesh, Hong Kong China, Macao China, France (New Caledonia), Indonesia, Japan, Malaysia, Myanmar, Nepal, Philippines, Singapore, Viet Nam, United States.
 - 2020 Bangladesh, Cambodia, Hong Kong China, Macao China, Indonesia, Pakistan, Republic of Korea, Thailand, Viet Nam.
 - 2021 Hong Kong China, Macao China, Indonesia, Myanmar, Nepal Pakistan, Republic of Korea, Singapore, United States, Thailand, Viet Nam.
 - 2022 Bangladesh, Cambodia, Indonesia, Nepal, Pakistan, Republic of Korea, Thailand, Viet Nam.
 - 2023 Australia, Bangladesh, Bhutan, Hong Kong China, Macao China, Fiji, France (French Polynesia), Indonesia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, United States, Viet Nam.
 - 2024 Australia, Bangladesh, Cambodia, China, Hong Kong China, Macao China, Fiji, Indonesia, Japan, Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, United States, Viet Nam.
- Using standardized regional criteria first used for assessment of State implementation of the elements of the APAC Performance-Based Navigation (PBN) Implementation Plan, and now applied to various other regional plans in the ATM, AIM and SAR fields, status reports are assessed by the Regional Office on the basis of the overall implementation of applicable elements of the Regional ATM Contingency Plan:

90 - 100% = Robust

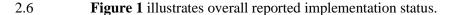
70-89% = Marginal0-69% = Incomplete

2.5 **Table 1** summarizes Asia/Pacific Region Contingency Plan implementation status, as reported to the ICAO Regional Office. The collated data provided in State reports is provided in **Attachment A**:

Administration	% Implementation	Implementation Status
Afghanistan	no report	Did Not Report
Australia	94 ↓	Robust
Bangladesh	29 ↑	Incomplete
Bhutan	18	Incomplete
Brunei Darussalam	no report	Did Not Report
Cambodia	21 ↓	Incomplete
China	94	Robust
Hong Kong, China	94 ↑	Robust
Macao, China	79 ↑	Marginal
Cook Islands	no report	Did Not Report
DPR Korea	no report	Did Not Report
Fiji	65 ↓	Incomplete
France (French Polynesia)	29	Incomplete
India	no report	Did Not Report
Indonesia	97	Robust
Japan	79	Marginal
Kiribati	no report	Did Not Report
Lao PDR	no report	Did Not Report
Malaysia	84 ↑	Marginal
Maldives	3	Incomplete
Marshall Islands	no report	Did Not Report
Micronesia	no report	Did Not Report
Mongolia	63 ↑	Incomplete
Myanmar	60	Incomplete
Nauru	no report	Did Not Report
Nepal	47 ↑	Incomplete
New Caledonia	29	Incomplete
New Zealand	95 ↑	Robust
Pakistan	80↑	Marginal

Administration	% Implementation	Implementation Status
Palau	no report	Did Not Report
Papua New Guinea	26	Incomplete
Philippines	72 ↓	Marginal
Republic of Korea	79↓	Marginal
Samoa	no report	Did Not Report
Singapore	91	Robust
Solomon Islands	no report	Did Not Report
Sri Lanka	70 ↑	Marginal
Timor Leste	no report	Did Not Report
Tonga	no report	Did Not Report
Thailand	94	Robust
Tuvalu	no report	Did Not Report
United States	82	Marginal
Vanuatu	no report	Did Not Report
Viet Nam	81 ↓	Marginal

 Table 1: Reported ATM Contingency Plan Implementation Status



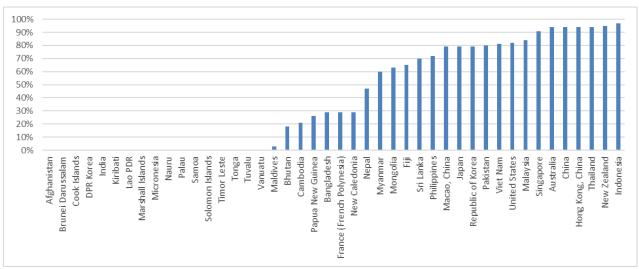


Figure 1: Regional ATM Contingency Plan – Overall Implementation Status

2.7 The meeting is reminded that the ICAO Regional Office is expected to annually report the receipt, or non-receipt, of completed Contingency Plan Monitoring and Reporting Forms, in accordance with the performance expectations of the Regional ATM Contingency Plan, for consideration for addition to the APANPIRG ANS Deficiencies List. This is related to the <u>standard</u> in Annex 11 - Air *Traffic Services* relating to ATM Contingency Planning:

2.32 Contingency Arrangements

Air traffic services authorities shall develop and promulgate contingency plans for implementation in the event of disruption, or potential disruption, of air traffic services and related supporting services in the airspace for which they are responsible for the provision of such services. Such contingency plans shall be developed with the assistance of ICAO as necessary, in close coordination with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.

Note 1.— Guidance material relating to the development, promulgation and implementation of contingency plans is contained in Attachment C.

- Note 2.— Contingency plans may constitute a temporary deviation from the approved regional air navigation plans; such deviations are approved, as necessary, by the President of the ICAO Council on behalf of the Council.
- 2.8 States that have failed to provide any status reports are particularly urged to do so. Any status updates received during the ATM/SG/8 meeting will be reflected in the meeting report.

Annex 11 Provisions and Contingency Coordination Teams

- 2.9 Annex 11 Attachment C Material Relating to Contingency Planning provides guidelines supporting the Standard specified in Chapter 2, to assist in providing for the safe and orderly flow of international air traffic in the event of disruptions of air traffic services and related supporting services, and in preserving the availability of major world air routes in such circumstances. Complementing the requirement in the Standard that contingency plans shall be developed with the assistance of ICAO as necessary, the guidelines in Attachment C set forth the allocation of responsibility among States and ICAO for the conduct of contingency planning and the measures to be taken into consideration in developing, applying and terminating the application of such plans. The allocation of responsibility outlined in the guidelines includes, inter alia:
 - a requirement for international coordination, with the assistance of ICAO as appropriate;
 - contingency plans should be developed in consultation with other States and airspace users concerned and with ICAO, as appropriate, whenever the effects of the service disruption(s) are likely to affect the services in adjacent airspace;
 - The responsibility for appropriate contingency action in respect of airspace over the high seas continues to rest with the State(s) normally responsible for providing the services until, and unless, that responsibility is temporarily reassigned by ICAO to (an)other State(s):
- 2.10 In the event of receipt of notification of ATM contingency operations the ICAO Asia/Pacific Regional Office will, where considered necessary, form a Contingency Coordination Team (CCT) to assist affected States in coordinating the activation and operation of contingency plans, and the orderly resumption of normal operations. For this reason the Regional Office maintains a list of ATC and CCT points of contact for all APAC Administrations.

CCT Communications

2.11 Recent CCT operations in the Asia/Pacific Region resulted in some enquiry on the form of communication used by ICAO for the notification of the formation of CCTs, coordinating information updates and for notification of online CCT meetings. The meeting may note that, as evidenced by the direct experience of the ICAO Regional Office in successfully forming and running multiple CCTs in recent years, they usually comprise more than 50 persons at the initial stages and their

size increases rapidly. It is therefore not feasible for the ICAO Regional Office to use forms of direct one-on-one communications such as telephone calls for the purpose of forming and coordinating with the CCT.

2.12 It is also noted that email is a recognized form of communication used by business, government and international organizations, and that 'push-email' and later technology enabling the direction of emails to smart phones and other personal devices has been readily available for many years. ICAO therefore requests that all CCT Points of Contact ensure they provide an up-to-date email address, and that their Administration ensures their nominees for this purpose are enabled to receive and respond appropriately to official email communications out-of-hours.

Kabul FIR Contingency Operations – August 2021 to present date

2.13 The Kabul FIR CCT has been in place since August 2021 due to the continued unavailability of en-route ATS in the FIR. Some limited ATS is available at selected aerodromes.

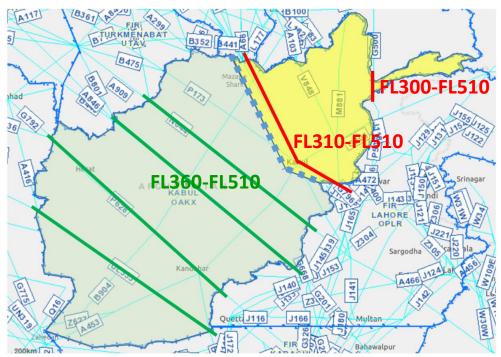


Figure 2: Kabul FIR Contingency arrangement for overflights

- 2.14 Regular meetings of the CCT were held by video teleconference, supplemented by bilateral meetings between Afghanistan and the ICAO APAC Regional Office. A dedicated Kabul FIR CCT web page is provided on the ICAO Asia/Pacific Regional Office website, for sharing information with the broader community of stakeholders beyond the CCT.
- 2.15 Noting that ATS routes through the Kabul FIR are part of the major traffic flows between South Asia/Southeast Asia and Europe, and that the great majority of airspace users flights that would normally operate flights through the Kabul FIR have elected to deviate around it, ICAO wishes to recognize the efforts of States managing the additional traffic that continues to operate on non-normal routes through their FIRs, particularly (but not limited to) India and Pakistan, and the Middle East Region States.

Other Contingency Operations and Information Sharing Coordinated by ICAO APAC Regional Office in 2024

2.16 In addition to the ongoing Afghanistan contingency operation, the following were coordinated by the ICAO APAC Regional Office since ATM/SG/11.

Mogadishu FIR Contingency Coordination Team (CCT)

- 2.17 The ICAO Eastern and Southern African Regional Office (ESAF) was notified on 16 February 2024 of events in the Mogadishu FIR that were hazardous to flight safety. The events were described to involve unknown persons posing as Mogadishu ACC, jamming and transmitting on to the Mogadishu Area frequency 132.5MHz and Hargeisa Tower frequency 118.7MHz, contradicting ATS instructions to pilots operating in the vicinity of Hargeisa airport and surrounding area extending to 150 NM radius centered at position HARGA.
- 2.18 Following the notification, the ESAF RO immediately engaged the Somalia CAA, intending to understand the situation better. During this engagement, it became known that the SCAA had issued a NOTAM (A0017/24 NOTAMN) on 13 February 2024 to mitigate the dangers caused by the interference. The SCAA has also activated the internal contingency team, collecting data and carrying out daily briefs internally and with concerned operators, and also reported that since the release of the NOTAM (**Figure 3**), the incidents had reduced significantly except for isolated reports coming widely separated.

A0022/24 NOTAMR A0017/24

- Q) HCSM/QCALF/IV/B/E/000/999/0514N05041E999
- A) HCSM
- B) 2402191830 C) 2403312359 EST
- E) UNLAWFUL VHF INTERFERENCE ON FREQ 132.5 MHZ AND 118.7 MHZ WITHIN 150NM CENTERED ON POSITION HARGA (093121N0440530E). FLIGHTS WITHIN THIS AREA SHOULD NOT EXPECT LEVEL CHANGE UNLESS IN CONTACT WITH MOGADISHU ACC VIA CPDLC (HCSM) OR THE FOLLOWING SATCOM NUMBERS? +25261857390, +2521857391, +2521857392, +2521857393, +252613350047, +252623350047. CREWS TO EXERCISE CAUTION WHEN OPERATING IN THIS AREA.

Figure 3: Mogadishu FIR Contingency NOTAM

2.19 The first meeting led by the ICAO ESAF Regional Office, was held on 21 February 2024 using the MS Teams platform for virtual meetings. India (Mumbai ACC) was invited to the CCT as an adjacent FIR.

Unauthorized transmission on Tehran ACC frequencies

- 2.20 There were some pilots' reports of unauthorized transmission on Tehran ACC frequencies, 121.5MHz and 132.5MHz, which was a female-sounding computer-generated message in four languages (i.e., English, Arabic, Russian, and Persian) on 27 March 2024.
- 2.21 Following the notification, the ICAO Middle East Regional Office (MID) immediately engaged the Iran CAA to better understand the situation. To take the necessary steps, a high-level ad hoc meeting led by the ICAO MID was convened to review reports and tasks of relevant organizations in technical, safety, and security aspects. A NOTAM (**Figure 4**) was distributed on the unauthorized transmission in Tehran ACC. (A0982/24 NOTAMN

Q)OIIX/QCALF/IV/B/AE/000/999/ A)OIIX B)2403291830 C)2404021830 E)UNAUTHORIZED TRANSMISSION ON ATC FREQUENCY MAY BE EXPERIENCED IN THE NORTHWEST OF IRAN. PILOTS SHALL REPORT TO ATC ANY COMMUNICATION ANOMALIES INCLUDING UNAUTHORIZED USE OF ATC FREQUENCY AS SOON AS POSSIBLE. THE SAFETY AND SECURITY ASSESSMENTS HAS SHOWN NO SAFETY CONCERN EFFECT ON THE OPERATION OF THE FLIGHT IN TEHRAN FIR.

Figure 5: Tehran ACC unauthored transmission NOTAM

2.22 All the necessary information was shared with Pakistan as an adjacent FIR.

ICAO APAC/MID ATM Contingency Planning Workshop

- 2.23 The ICAO APAC/MID ATM Contingency Planning Workshop (25-27 June 2024) will be held at the ICAO Asia and Pacific Regional Office, Bangkok, Thailand from 25-27 June 2024. The workshop will be supported by the APAC Air Navigation Service Providers Committee (AAC). The objectives of the workshop are to:
 - emphasize the criticality of robust contingency planning and the State's obligations for contingency arrangements under Annex 11 aiming to improve regional compliance with the relevant ICAO provisions;
 - familiarize States with the revised APAC and MID Regional ATM Contingency Plans and performance expectations;
 - examine case studies of contingency plans, responses, and outcomes, including those related to volcanic ash; and
 - review and provide input to enhance the APAC and MID Regional ATM Contingency Plans ensuring inter-regional harmonization.
- 2.24 At this workshop, ICAO and subject matter experts from States, ANSPs, airspace users, and International Organizations will present an overview of relevant ICAO provisions, a review of the current regional ATM Contingency Framework, case studies on ATM contingency planning of operations, meteorology phenomena affecting ATM operation, etc. The workshop will also provide the opportunity to discuss how contingency management could work better and provide recommendations to improve the regional contingency plans.
- 2.25 To demonstrate the effectiveness and benefits of ATM contingency response and coordination processes, the workshop will include a Contingency Tabletop Exercise (28 June 2024) that will be conducted by the APAC Air Navigation Service Providers (ANSP) Committee (AAC), CANSO and Space Vehicle Launch and Re-entry Coordination Small Working Group (SVLRC SWG) of the APAC ATM/SG.
- Due to seat limitation, delegation acceptance will be based on a first-come, first-serve and might be limited to two participants per delegation if required. The relevant information is provided on the meeting web page at https://www.icao.int/APAC/Meetings/Pages/2024-ATM-Contingency-WS-TTX.aspx.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the performance expectations of the Regional ATM Contingency Plan relating to promulgation and reporting;
 - b) provide Regional ATM Contingency Plan status reports at least once annually;
 - c) comply with the Annex 11 provisions and Regional ATM Contingency Plan elements for contingency operations and coordination, and cooperate with Contingency Coordination Teams when formed; and
 - d) update ATC and CCT Points of Contact (see WP/25);
 - e) urge States/Administrations to participate in the ICAO APAC/MID ATM Contingency Planning Workshop; and

f)	discuss any relevant matters.	

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Indicate whether your Admininistration has:	Australia	Bangladesh	Bhutan	Brunei Darussalam	Cambodia	China	Hong Kong, China	Macao, China	Cook Islands	DPRK	Fiji
1. Established an ATM contingency Central Coordinating Committee, its terms of reference and procedures for activating the ATM Operational Contingency Group											
function.	1.0	1.0	0.5		0.0	1.0	1.0	1.0			0.5
2. Developed contingency plans for Category A, B and C contingency events, for all ATS units.	1.0	0.0	0.5		1.0	1.0	1.0	1.0			0.5
3. Developed human performance-based training and procedures for response to ATM contingency operations, for all ATS staff.	1.0	0.0	0.0		1.0	1.0	1.0	1.0			1.0
4. Implemented a program of regular desktop and inter-unit coordinated contingency exercises of all Level 1 contingency plans	1.0	0.0	0.0		0.0	1.0	1.0	1.0			1.0
5. Implemented process to review and analyze the outcomes of any testing, pre-activation or activation of a contingency plan, or any contingency exercise.	1.0	0.0	0.0		0.5	1.0	1.0	1.0			1.0
6. Published details of ATS contingency routes and flight level allocation schemes in AIP.	0.0	0.0	0.0		0.0	1.0	0.7	1.0			0.0
7. Made relevant sections of contingency plans available on the public internet website of the ANSP	1.0	1.0	0.0		1.0	1.0	1.0	0.0	\Box	\Box	0.0
8. Formalized Level 2 (inter-State) contingency arrangements for all relevant Level 1 contingency plans.	1.0	0.0	0.5		0.0	1.0	0.7	1.0			0.5
9. Harmonized, where practicable, contingency ATS routes and flight level allocation schemes with those of neighbouring States.	1.0	1.0	0.0		0.0	0.5	0.5	1.0		$\neg \neg$	0.0
10. Ensured regulatory provisions relating to flight into airspace affected by volcanic ash are in accordance with the guidance provided ini ICAO Doc 9974 - Flight								\Box	$\neg \neg$	\Box	
Safety and Volcanic Ash .	1.0	0.0	1.0		0.0	1.0	1.0	0.5			0.0
11. Developed airspace and airport management policies and procedures for response to volcanic ash cloud, in accordance with the provisions of Doc 9974 and										$\neg \neg$	
ICAO Doc 4444 - PANS-ATM 15.8.1c and Note 2.	1.0	0.0	0.0		0.0	1.0	1.0	1.0			0.5
12. Developed and maintained a list of relevant volcanoes as specified in the Smithsonian Institution List of Volcanoes of the World for VAAC Use, available at										$\neg \neg$	
http://www.volcano.si.edu/projects/vaac-data/	1.0	0.0	0.0		0.0	1.0	1.0	0.0			1.0
13. Made available a series of templates for different stages of volcanic activity, to assist Meterological Watch Office (MWO) and Aeronautical Information Service										\neg	
(AIS) staff in expediting the issuance of relevant MET and AIS messages.	1.0	0.0	0.0		0.0	1.0	1.0	1.0			1.0
14. Conducted, at least annually, multi-lateral volcanic ash cloud exercises.	1.0	0.0	0.0		0.0	0.5	1.0	0.0			1.0
15. Established a mechanism to provide regular and timely updates of information to all stakeholders during a volcanic eruption and/or ash cloud event.	1.0	0.0	0.0		0.0	1.0	1.0	1.0		\neg	1.0
16. Established an internal crisis management centre to support the collaborative and timely sharin gof information such as volcanic eruptions that will have a											
significant impact on airport and/or airspace management	1.0	1.0	0.0		0.0	1.0	1.0	1.0			1.0
17. Promulgated the national ATM contingency plan on the website of the Air Navigation Service Provider.											
18. Reported the status of contingency planning and contingency points-of-contact to the ICAO APAC Regional Office.	1.0	1.0	0.5		0.0	1.0	1.0	1.0	\neg	\neg	1.0
Total (of 17)	16.0	5.0	3.0	0.0	3.5		15.9	13.5	0.0	0.0	
Implementation %	94%	29%	18%	0%	21%	94%	94%	79%	0%	0%	65%
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^{*2024} Update - Higher than the previous year

^{*2024} Update - Less than the previous year

^{*2024} Update - No Change

Indicate whether your Admininistration has:	French Polynesia	India	Indonesia	Japan	Kiribati	Lao PDR	Malaysia	Maldives	Marshall Islands	Micronesia	Mongolia
1. Established an ATM contingency Central Coordinating Committee, its terms of reference and procedures for activating the ATM Operational Contingency Group											
function.	0.0		1.0	0.5			0.75	0.0			1.0
2. Developed contingency plans for Category A, B and C contingency events, for all ATS units.	1.0		1.0	1.0			0.75	0.5			0.1
3. Developed human performance-based training and procedures for response to ATM contingency operations, for all ATS staff.	0.2		1.0	0.5			1.00	0.0			1.0
4. Implemented a program of regular desktop and inter-unit coordinated contingency exercises of all Level 1 contingency plans	0.3		1.0	1.0			0.75	0.0			0.5
5. Implemented process to review and analyze the outcomes of any testing, pre-activation or activation of a contingency plan, or any contingency exercise.	1.0		1.0	0.5			0.50	0.0			1.0
6. Published details of ATS contingency routes and flight level allocation schemes in AIP.	0.0		1.0	1.0			0.50	0.0			1.0
7. Made relevant sections of contingency plans available on the public internet website of the ANSP	0.0		1.0	0.5			0.50	0.0			1.0
8. Formalized Level 2 (inter-State) contingency arrangements for all relevant Level 1 contingency plans.	0.0		1.0	1.0			0.50	0.0			0.2
9. Harmonized, where practicable, contingency ATS routes and flight level allocation schemes with those of neighbouring States.	0.5		0.5	1.0			1.00	0.0			1.0
10. Ensured regulatory provisions relating to flight into airspace affected by volcanic ash are in accordance with the guidance provided ini ICAO Doc 9974 - Flight											
Safety and Volcanic Ash.	0.0		1.0	0.0			1.00	0.0			0.8
11. Developed airspace and airport management policies and procedures for response to volcanic ash cloud, in accordance with the provisions of Doc 9974 and ICAO Doc 4444 - PANS-ATM 15.8.1c and Note 2.	0.0		1.0	1.0			1.00	0.0			0.8
12. Developed and maintained a list of relevant volcanoes as specified in the Smithsonian Institution List of Volcanoes of the World for VAAC Use, available at http://www.volcano.si.edu/projects/vaac-data/	0.0		1.0	1.0			1.00	0.0			0.0
13. Made available a series of templates for different stages of volcanic activity, to assist Meterological Watch Office (MWO) and Aeronautical Information Service (AIS) staff in expediting the issuance of relevant MET and AIS messages.	0.0		1.0	1.0			1.00	0.0			0.0
14. Conducted, at least annually, multi-lateral volcanic ash cloud exercises.	0.0		1.0	1.0			1.00	0.0			0.0
15. Established a mechanism to provide regular and timely updates of information to all stakeholders during a volcanic eruption and/or ash cloud event.	1.0		1.0	1.0			1.00	0.0	\neg		0.5
16. Established an internal crisis management centre to support the collaborative and timely sharin gof information such as volcanic eruptions that will have a											
significant impact on airport and/or airspace management	1.0		1.0	1.0			1.00	0.0			1.0
17. Promulgated the national ATM contingency plan on the website of the Air Navigation Service Provider.									\neg	$\overline{}$	\neg
18. Reported the status of contingency planning and contingency points-of-contact to the ICAO APAC Regional Office.	0.0		1.0	0.5		$\neg \neg$	1.00	0.0	\rightarrow	$\overline{}$	0.8
	5.0	0.0	16.5	13.5	0.0	0.0	14.3	0.5	0.0	0.0	10.7
Implementation %	29%	0%	97%	79%	0%	0%	84%	3%	0%	0%	63%

^{*2024} Update - Higher than the previous year

^{*2024} Update - Less than the previous year

^{*2024} Update - No Change

Indicate whether your Admininistration has:	Myanmar	Nauru	Nepal	New Caledonia	New Zealand	Pakistan	Palau	Papua New Guinea	Philippines	Republic of Korea	Samoa
1. Established an ATM contingency Central Coordinating Committee, its terms of reference and procedures for activating the ATM Operational Contingency Group	1.0		0.5	0.0	1.0	1.00		0.0	1.00	1.0	
function. 2. Developed contingency plans for Category A, B and C contingency events, for all ATS units.	1.0		1.0	1.0	0.8	0.75	$\overline{}$	0.0	0.70	1.0	
3. Developed human performance-based training and procedures for response to ATM contingency operations, for all ATS staff.	0.9		0.5	1.0	1.0			0.5	1.00	1.0	-
4. Implemented a program of regular desktop and inter-unit coordinated contingency exercises of all Level 1 contingency plans	0.9		0.5	0.0	1.0			0.0	1.00	1.0	
5. Implemented process to review and analyze the outcomes of any testing, pre-activation or activation of a contingency plan, or any contingency exercise.	0.5		0.5	0.0	1.0	1.00		0.0	1.00	1.0	
3. Implemented process to review and analyze the outcomes of any testing, pre-activation of activation of a contingency plan, or any contingency exercise.	1.0		0.5	1.0	1.0	1.00		0.0	1.00	1.0	
6. Published details of ATS contingency routes and flight level allocation schemes in AIP.	1.0		0.0	0.0	0.8	1.00		0.0	0.15	0.5	
7. Made relevant sections of contingency plans available on the public internet website of the ANSP	1.0		0.0	0.0	1.0			0.0	0.00	1.0	
8. Formalized Level 2 (inter-State) contingency arrangements for all relevant Level 1 contingency plans.	1.0		0.5	0.0	0.5	0.50		0.0	0.15	0.0	
9. Harmonized, where practicable, contingency ATS routes and flight level allocation schemes with those of neighbouring States.	1.0		0.5	0.0	1.0			0.5	0.25	0.0	
10. Ensured regulatory provisions relating to flight into airspace affected by volcanic ash are in accordance with the guidance provided ini ICAO Doc 9974 - Flight										$\overline{}$	-
Safety and Volcanic Ash.	0.0		1.0	0.5	1.0	0.20		0.0	1.00	1.0	
11. Developed airspace and airport management policies and procedures for response to volcanic ash cloud, in accordance with the provisions of Doc 9974 and									\neg	$\overline{}$	
ICAO Doc 4444 - PANS-ATM 15.8.1c and Note 2.	0.5		1.0	0.5	1.0	0.60		0.0	1.00	1.0	
12. Developed and maintained a list of relevant volcanoes as specified in the Smithsonian Institution List of Volcanoes of the World for VAAC Use, available at									\neg	\neg	
http://www.volcano.si.edu/projects/vaac-data/	0.0		0.5	0.0	1.0	0.50		1.0	1.00	1.0	
13. Made available a series of templates for different stages of volcanic activity, to assist Meterological Watch Office (MWO) and Aeronautical Information Service									\neg	\neg	
(AIS) staff in expediting the issuance of relevant MET and AIS messages.	0.0		0.0	0.0	1.0	1.00		0.5	1.00	1.0	
14. Conducted, at least annually, multi-lateral volcanic ash cloud exercises.	0.0		0.0	0.0	1.0	1.00		0.5	1.00	0.0	
15. Established a mechanism to provide regular and timely updates of information to all stakeholders during a volcanic eruption and/or ash cloud event.	0.0		0.5	0.0	1.0	1.00		0.5	1.00	1.0	
16. Established an internal crisis management centre to support the collaborative and timely sharin gof information such as volcanic eruptions that will have a											
significant impact on airport and/or airspace management	0.0		0.0	1.0	1.0	1.00		0.5	1.00	1.0	
17. Promulgated the national ATM contingency plan on the website of the Air Navigation Service Provider.										$\overline{}$	
18. Reported the status of contingency planning and contingency points-of-contact to the ICAO APAC Regional Office.	1.0		1.0	0.0	1.0	1.00		0.0	0.00	1.0	
	10.3	0.0	8.0	5.0	16.1	13.6	0.0	4.5	12.3	13.5	0.0
Implementation %	60%	0%	47%	29%	95%	80%	0%	26%	72%	79%	0%

^{*2024} Update - Higher than the previous year

^{*2024} Update - Less than the previous year

^{*2024} Update - No Change

	Singapore	Solomon Islands	Sri Lanka	Timor Leste	Tonga	Thailand	Tuvalu	United States	Vanuatu	Viet nam
Indicate whether your Admininistration has:	Š	Ň	N.	E	Ţ	F	Ē	D	>	>
1. Established an ATM contingency Central Coordinating Committee, its terms of reference and procedures for activating the ATM Operational Contingency Group										
function.	1.0		1.0			1.0		1.0		1.0
2. Developed contingency plans for Category A, B and C contingency events, for all ATS units.	1.0		1.0			0.5		1.0		1.0
3. Developed human performance-based training and procedures for response to ATM contingency operations, for all ATS staff.	1.0		0.6			1.0		1.0		1.0
4. Implemented a program of regular desktop and inter-unit coordinated contingency exercises of all Level 1 contingency plans	1.0		0.8			1.0		1.0		1.0
5. Implemented process to review and analyze the outcomes of any testing, pre-activation or activation of a contingency plan, or any contingency exercise.	1.0		0.8			1.0		1.0		0.5
6. Published details of ATS contingency routes and flight level allocation schemes in AIP.	0.5		0.0			1.0		0.0		1.0
7. Made relevant sections of contingency plans available on the public internet website of the ANSP	1.0		0.5			1.0		0.0		1.0
8. Formalized Level 2 (inter-State) contingency arrangements for all relevant Level 1 contingency plans.	0.5		1.0			1.0		0.5		0.4
9. Harmonized, where practicable, contingency ATS routes and flight level allocation schemes with those of neighbouring States.	0.5		0.6			1.0		0.5		0.4
10. Ensured regulatory provisions relating to flight into airspace affected by volcanic ash are in accordance with the guidance provided ini ICAO Doc 9974 - Flight Safety and Volcanic Ash.	1.0		0.0			1.0		1.0		1.0
11. Developed airspace and airport management policies and procedures for response to volcanic ash cloud, in accordance with the provisions of Doc 9974 and	1.0		0.0			1.0		1.0		1.0
ICAO Doc 4444 - PANS-ATM 15.8.1c and Note 2.	1.0		1.0			1.0		1.0		1.0
12. Developed and maintained a list of relevant volcanoes as specified in the Smithsonian Institution List of Volcanoes of the World for VAAC Use, available at										
http://www.volcano.si.edu/projects/vaac-data/	1.0		1.0			1.0		1.0		0.5
13. Made available a series of templates for different stages of volcanic activity, to assist Meterological Watch Office (MWO) and Aeronautical Information Service										
(AIS) staff in expediting the issuance of relevant MET and AIS messages.	1.0		0.5			1.0		1.0		0.5
14. Conducted, at least annually, multi-lateral volcanic ash cloud exercises.	1.0		0.5			1.0		1.0		1.0
15. Established a mechanism to provide regular and timely updates of information to all stakeholders during a volcanic eruption and/or ash cloud event.	1.0		1.0			1.0		1.0		1.0
16. Established an internal crisis management centre to support the collaborative and timely sharin gof information such as volcanic eruptions that will have a										
significant impact on airport and/or airspace management	1.0		0.6			0.5		1.0		0.5
17. Promulgated the national ATM contingency plan on the website of the Air Navigation Service Provider.										
18. Reported the status of contingency planning and contingency points-of-contact to the ICAO APAC Regional Office.	1.0		1.0			1.0		1.0		1.0
	15.5	0.0		0.0	0.0		0.0		0.0	13.8
Implementation %	91%	0%	70%	0%	0%	94%	0%	82%	0%	81%

^{*2024} Update - Higher than the previous year

^{*2024} Update - Less than the previous year

^{*2024} Update - No Change