



ICAO

International Civil Aviation Organization

**The First Meeting of the South Asia, Indian Ocean and  
Southeast Asia ATM Coordination Group (SAIOSEACG/1)**

Video Teleconference, 28 March – 01 April 2022

## Agenda Item 7: ATM Contingency Plans and Search and Rescue

### REGIONAL ATM CONTINGENCY PLANNING AND STATUS REPORTING

(Presented by Secretariat)

#### SUMMARY

This paper presents information on contingency planning in the Asia/Pacific Region. The paper includes an update on the Asia/Pacific Regional ATM Contingency Plan with regard to State reporting of implementation of its performance expectations, a brief outline of recent ATM contingency events in the APAC Region, and a proposal to conduct an update of the Regional contingency plan.

## 1. INTRODUCTION

1.1 The *Asia/Pacific Regional ATM Contingency Plan*, developed by the Regional ATM Contingency Plan Task Force (RACP/TF), was adopted by the Twenty-Seventh Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/27) in September 2016.

1.2 The Contingency Plan and the Regional ATM Contingency Plan Monitoring and Reporting form (MS Excel) are available on the ICAO Regional Office eDocuments web-page (ATM section, Contingency sub-section) at:

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

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 requirement for contingency plans that has been applicable since November 2003.

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:

2018 – Macao China, Singapore, Sri Lanka; and

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, USA, Thailand, Viet Nam.

2022 – Indonesia, Viet Nam.

2.4 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% = *Marginal*

0 – 69% = *Incomplete*

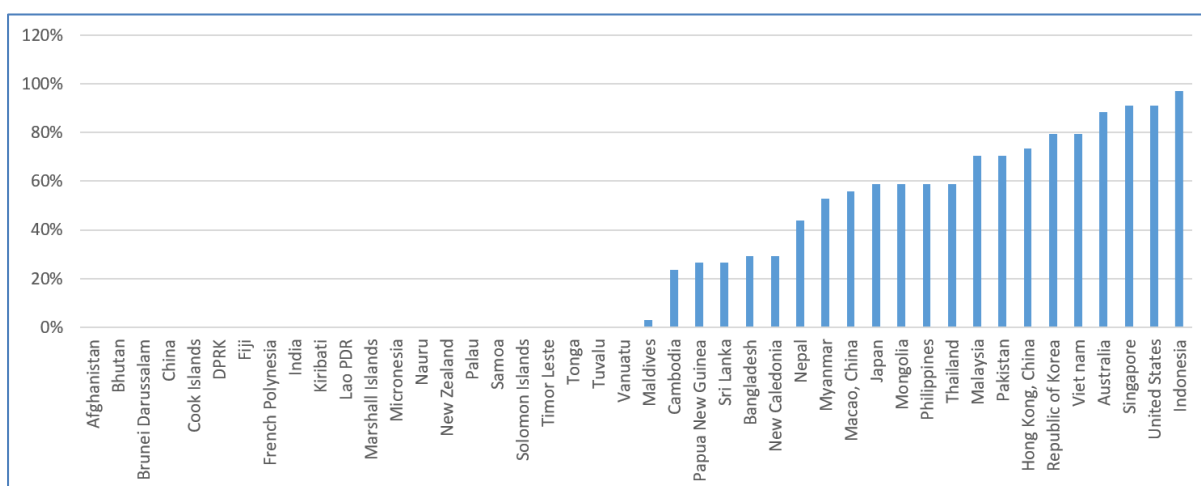
2.5 **Table 1** summarizes Asia/Pacific Region Contingency Plan implementation status, as reported to the ICAO Regional Office. The collated data provided in State reports is provided in **Attachment A**:

<b>Administration (Tier)</b>	<b>% Implementation</b>	<b>Implementation Status</b>
Afghanistan*	<i>no report</i>	Did Not Report
Australia	88	Marginal
Bangladesh	29	Incomplete
Bhutan	<i>no report</i>	Did Not Report
Brunei Darussalam	<i>no report</i>	Did Not Report
Cambodia	24	Incomplete
China	<i>no report</i>	Did Not Report
Hong Kong, China	74 ↑	Marginal
Macao, China	56	Incomplete
Cook Islands	<i>no report</i>	Did Not Report
Fiji	<i>no report</i>	Did Not Report
France (French Polynesia)	<i>no report</i>	Did Not Report
DPR Korea	<i>no report</i>	Did Not Report
India	<i>no report</i>	Did Not Report
Indonesia	97	Robust
Japan	59	Incomplete
Kiribati	<i>no report</i>	Did Not Report
Lao PDR	<i>no report</i>	Did Not Report
Malaysia	71	Marginal
Maldives	3	Incomplete
Marshall Islands	<i>no report</i>	Did Not Report
Micronesia	<i>no report</i>	Did Not Report
Mongolia	59	Incomplete
Myanmar	53 ↑	Incomplete
Nauru	<i>no report</i>	Did Not Report
Nepal	44 ↑	Incomplete
New Caledonia	29	Incomplete
New Zealand	<i>no report</i>	Did Not Report
Pakistan	71 ↓	Marginal
Palau	<i>no report</i>	Did Not Report
Papua New Guinea	26	Incomplete
Philippines	59	Incomplete
Republic of Korea	79 ↑	Marginal
Samoa	<i>no report</i>	Did Not Report

Administration (Tier)	% Implementation	Implementation Status
Singapore	91	Robust
Solomon Islands	<i>no report</i>	Did Not Report
Sri Lanka	26	Incomplete
Timor Leste	<i>no report</i>	Did Not Report
Tonga	<i>no report</i>	Did Not Report
Thailand	59 ↑	Incomplete
Tuvalu	<i>no report</i>	Did Not Report
United States	91 ↓	Robust
Vanuatu	<i>no report</i>	Did Not Report
Viet Nam	79	Marginal
*Afghanistan did not report the ATM Contingency Plan Implementation, but provided the Contingency Plan.		

**Table 1:** Reported ATM Contingency Plan Implementation Status

2.6 **Figure 1** illustrates overall reported 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 standard established by 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 at all are particularly urged to do so.

#### COVID-19-Related ATM Contingency Planning

2.9 During 2020 and 2021 ICAO Asia/Pacific Regional Office conducted several activities in relation to ATM contingency planning in response to the COVID-19 pandemic. These activities included ATM-specific seminars by video teleconference, and presentations and proposed recommendations to the Asia/Pacific COVID-19 Contingency and Recovery Planning Group (ACCRPG).

2.10 Presentations and other documents provided to the various seminars and meetings are available at the following locations:

1. APAC COVID-19 BCP Measures and Guidelines Information Sharing web-page:  
<https://www.icao.int/APAC/Pages/COVID-19-BCP.aspx>
2. COVID-19-Related ATM Economics Seminar web-page:  
<https://www.icao.int/APAC/Meetings/Pages/2020-COVID-19-ATM-Seminar.aspx>
3. Meeting pages for the ACCRPG/1 – 8, available on the ICAO APAC Regional Office Meetings web-page:  
<https://www.icao.int/APAC/Meetings/Pages/default.aspx>

2.11 The *APAC Regional Strategy for COVID-19-related ATM Contingency Recovery* is available on the APAC COVID-19 BCP Measures and Guidelines Information Sharing web-page. The strategy document includes a list of ANSP and ICAO Regional Office actions, a checklist of contingency operations considerations for ANSPs, a collation of relevant document references and links, and the APAC ATC and Contingency Coordination Team (CCT) points of contact list.

2.12 The meeting is particularly urged to consider the impact of re-opening of traffic to service travel bubbles or city pairs, or a more general re-opening as COVID-19 vaccination rates increase, and the need to ensure that the ATM capacity of all affected FIRs is taken into account, as described in the list of ANSP and ICAO actions in the strategy document.

2.13 Pending the outcome of global efforts to manage and recover from the COVID-19 pandemic, lessons learned will be included where relevant in an update of the Regional ATM Contingency Plan to provide further specific guidance on management of pandemic-related contingencies.

### Annex 11 Provisions and Contingency Coordination Teams

2.14 Annex 11 Attachment C – *Material Relating to Contingency Planning* provides guidelines supporting the standards 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);

2.15 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.

### Yangon FIR Contingency Operations February 2021 – Lessons Learned

#### *Key Issues for Lessons Learned*

2.16 The following should be considered the key issues arising from the Yangon FIR contingency operation in February 2021, for consideration in a review of the Regional ATM Contingency Plan:

- sporadic contact or, in some cases, no contact at all between CCT POCs in affected FIRs and ICAO;
- uncertainty about what VHF frequency was intended to be used for TIBA;
- the need for the Level 2 contingency plan to be publicly available to all stakeholders;
- the need for formalization of Level 2 contingency arrangements in formal agreements with all neighbouring Administrations;
- the need identified by neighbouring Administrations and airspace users for additional contingency flight levels, and at least one additional contingency ATS route;
- en-route holding to achieve 15 minutes' longitudinal separation before entering the Yangon FIR;
- problematic NOTAM information and handling;
- resumption of normal operations not in accordance with the guidance provided in the Asia/Pacific Regional ATM Contingency Plan.

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Kabul FIR Contingency Operations – August 2021 to present date

2.17 In June 2021 ICAO Regional Office wrote to Afghanistan to seek clarification of matters related to contingency planning, recognizing that the planned withdrawal of foreign military forces from Afghanistan by the end of August may lead to potential disruption of civil aviation. No reply was received from Afghanistan.

2.18 Afghanistan had published the Kabul FIR ATM Contingency Plan, which included incorrect assumptions on the availability of Air Traffic Flow Management services provided by Aeronautical Radio of Thailand (AEROTHAI) and EUROCONTROL, and other significant inconsistencies. The Inter-Regional Afghanistan Contingency Arrangements, also known as the Kabul FIR bypass plan, was available but had not yet been formally agreed by all affected States.

2.19 16 August 2021 ICAO Regional Office was informed of major political/government instability in Afghanistan and the potential for significant security challenges that could disrupt Air Traffic Services ATS and AIS in the Kabul FIR. ICAO attempts to contact the Afghanistan CAA were unsuccessful.

2.20 ICAO consequently issued the Kabul FIR Contingency Coordination Team Bulletin 2021/001, notifying Afghanistan, States administering FIRs adjacent to the Kabul FIR, States administering FIRs that may be affected by traffic avoiding the Kabul FIR, and relevant International Organizations, of the formation of the CCT. The bulletin was issued at 0230 UTC on 16 August.

2.21 The situation in Afghanistan deteriorated rapidly. CCT Bulletin 2021/002 was issued at 0500, notifying the CCT of information received by ICAO (from a third party) that the Kabul ACC had ‘released the airspace to the military’, and that transit aircraft should be advised to reroute. CCT and ATC Points of Contact in Afghanistan continued to disregard all ICAO attempts to contact them.

2.22 All ATS and the AIS in Afghanistan were entirely unavailable until 30 August 2021, when ICAO was informed of the appointment of a number of officials to a new aviation administration in Afghanistan. Some very limited ATS and AIS capability has been implemented since that time, and Afghanistan is now engaged in weekly conferences with ICAO, and in the (currently) fortnightly conferences of the Kabul FIR CCT. 18 CCT meetings and 20 bilateral meeting with ICAO have been conducted.

2.23 Approximately 15 to 20 flights per day are currently operating in the Kabul FIR except for ATS Route P500, where ATC is delegated to Tajikistan under a previous arrangement, and traffic is transferred directly between Pakistan and Tajikistan. The Kabul FIR is crossed by major traffic flows from South and Southeast Asia to Europe. All of the flights that would normally cross the Kabul FIR are now avoiding it. Many flights are subject to very large increases in flight time due to extensive deviations required to avoid the Kabul FIR, and other FIRs where there are pre-existing limitations in place.

2.24 The volume of traffic on P500 between Pakistan and Tajikistan had increased compared with pre-COVID in 2020. Thus, vectoring of aircraft by the neighbouring was required to meet 10 minutes longitudinal spacing at the same flight level. However, after the Ukraine crisis commenced in February 2022 the volume of traffic on P500 has been reduced due to flights avoiding Ukraine and Russian airspace. **Table 2** summarizes the traffic on P500.

Date	Number of flights on P500 per day
Jan 2020 (pre-COVID)	59
23-27 Nov 2021	70
11-14 Jan 2022	80
24-28 Jan 2022	88
24-27 Feb 2022 (after Ukraine crisis)	53-58

**Table 2:** Number of traffic on P500

2.25 12 CCT bulletins have been issued, and are available on a dedicated Afghanistan ATM Contingency 2021 web-page, publicly accessible through the ICAO Asia/Pacific Regional Office website (<https://www.icao.int/apac/Pages/default.aspx>.)

2.26 Afghanistan has been working on updating the contingency plan, and it will be available soon as version 3.0. One of the neighbouring States of Kabul FIR has not yet signed the agreement with Afghanistan. As a consequence, a robust contingency arrangement has not yet been established, and consequently there continues to be very few overflights through the Kabul FIR.

#### *Key Issues for Lessons Learned*

2.27 In addition to the lessons already learned from the Pakistan (2019) and Myanmar contingency situations, and noting that many of the issues encountered were common to both the Myanmar and Afghanistan situations, the following is a not exhaustive list of lessons from the Kabul FIR contingency:

- regular full review of contingency plans, and additional reviews when known risks or threats to normal ATS provision may be reasonably foreseen;
- contingency plan exercises to test all elements, particularly when reasonably foreseeable risks or threats are arising;
- formal agreement of all neighbouring States, and of all agencies that are ‘expected’ to provide services supporting contingency operations;
- inclusion in contingency plans of formally agreed arrangements for a neighbouring State to originate and distribute NOTAMs on behalf of the State subject to the contingency situation;
- stakeholder understanding that a contingency plan provides a valuable means of ensuring all stakeholders have input to and prior knowledge of how contingency operations may be conducted;
- stakeholder understanding that the elements of a contingency plan are not formally in effect unless published in AIP, AIP Supplement or NOTAM; and
- engagement in the CCT by all neighbouring States;
- early and frequent communication with ICAO, all neighbouring States, and the CCT.

Ukraine and Russian airspace restrictions

2.28 In February 2022, Ukraine and adjacent airspace was closed due to military activities, and then Russian airspace was restricted. This required many airlines to cancel flights and take detours to avoid the airspace. Flights between Europe and North Asia may take northern or southern routes in APAC FIRs. States are urged to monitor the traffic volume carefully to ensure the capability is in place to manage traffic where demand may exceed capacity.

Review of the Regional ATM Contingency Plan

2.29 The Asia/Pacific Region has experienced three major ATM contingency events in the last two to three years: the Pakistan airspace closure in Q1 – Q2 2019, the Yangon FIR contingency operation in February 2021, and the current and ongoing Kabul FIR contingency operation. Lessons learned from the Pakistan airspace closure were included in an update of the Regional ATM Contingency Plan in 2019.

2.30 Lessons learned from the Yangon FIR contingency operation, and the current Kabul FIR contingency operation, including but not limited to the information provided above will be considered for inclusion in another update of the Regional ATM Contingency Plan. The update of the Plan should also include routine editorial corrections, and amendments where necessary to ensure the Plan is aligned with the provisions of Annex 11 Attachment C.

2.31 Work to update the Plan has been, and will continue to be conducting offline, coordinated by ICAO in consultation with relevant regional experts and airspace user representatives, and presented to the ATM Sub-Group for approval. The first draft of the updated plan will be provided separately.

2.32 APAC Administrations wishing to participate in the review of the contingency plan are invited to nominate a single POC.

**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) note the information provided on COVID-19 pandemic-related ATM contingency planning, particularly the *APAC Regional Strategy for COVID-19-related ATM Contingency Recovery*;
- d) comply with the Annex 11 provisions and Regional ATM Contingency Plan elements for contingency operations and coordination;
- e) update ATC and CCT Points of Contact ; and
- f) nominate experts to participate in the review of the Regional ATM Contingency Plan (one POC per APAC Administration).

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**ATM CONTINGENCY PLAN MONITORING AND REPORTING FORM**

The following indicators are based on the Performance Improvement Plan of the Asia/Pacific Regional Contingency Plan, which should be read in conjunction with this form. The information provided will be used by the relevant Regional bodies to assess individual Administration and overall regional compliance with the Contingency Plan, and may be used by Administrations to internally evaluate their implementation status.

	Australia	Bangladesh	Cambodia	Hong Kong, China	Macao, China	Indonesia	Japan	Malaysia	Maldives	Mongolia	Myanmar	Nepal
<b>Indicate whether your Administration has:</b>												
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	0.5	1.0	1.0	0.5	0.5	0.0	1.0	1.0	0.5
2. Developed contingency plans for Category A, B and C contingency events, for all ATS units.	1.0	0.5	0.5	0.5	1.0	1.0		0.0	0.5	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	0.5	1.0	1.0	1.0	0.5	0.0	0.0	1.0	0.5	0.5
4. Implemented a program of regular desktop and inter-unit coordinated contingency exercises of all Level 1 contingency plans	1.0	0.0	0.5	1.0	1.0	1.0	0.5	0.5	0.0	1.0	1.0	0.0
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	0.5	1.0	1.0	1.0	1.0	1.0	0.0	1.0	0.5	0.0
6. Published details of ATS contingency routes and flight level allocation schemes in AIP.	1.0	0.0	0.0	0.5	1.0	1.0	0.5	0.0	0.0	1.0	1.0	0.0
7. Made relevant sections of contingency plans available on the public internet website of the ANSP	0.0	1.0	0.0	0.5	0.0	1	0.5	0.0	0.0	1.0	0.0	0.0
8. Formalized Level 2 (inter-State) contingency arrangements for all relevant Level 1 contingency plans.	1.0	0.0	0.5	0.5	0.5	1.0	1.0	1.0	0.0	1.0	1.0	0.5
9. Harmonized, where practicable, contingency ATS routes and flight level allocation schemes with those of neighbouring States.	1.0	0.5	0.5	0.5	1.0	0.5	1.0	1.0	0.0	1.0	1.0	0.5
10. Ensured regulatory provisions relating to flight into airspace affected by volcanic ash are in accordance with the guidance provided in ICAO Doc 9974 - <i>Flight Safety and Volcanic Ash</i> .	1.0	0.0	0.0	0.5	0.0	1.0		1.0	0.0	0.0	0.0	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 ICAO Doc 4444 - PANS-ATM 15.8.1c and Note 2.	0.5	0.0	0.0	1.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	1.0
12. Developed and maintained a list of relevant volcanoes as specified in the Smithsonian Institution <i>List of Volcanoes of the World for VAAC Use</i> , available at <a href="http://www.volcano.si.edu/projects/vaac-data/">http://www.volcano.si.edu/projects/vaac-data/</a>	1.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.5
13. Made available a series of templates for different stages of volcanic activity, to assist Meteorological Watch Office (MWO) and Aeronautical Information Service (AIS) staff in expediting the issuance of relevant MET and AIS messages.	0.5	0.0	0.0	1.0	0.0	1.0		1.0	0.0	0.0	0.0	1.0
14. Conducted, at least annually, multi-lateral volcanic ash cloud exercises.	1.0	0.0	0.0	0.5	0.0	1.0	1.0	1.0	0.0	0.0	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	0.0	0.0	1.0	0.0	1.0	1.0	1.0	0.0	0.0	0.5	1.0
16. Established an internal crisis management centre to support the collaborative and timely sharing of information such as volcanic eruptions that will have a significant impact on airport and/or airspace management.	1.0	1.0	0.0	0.5	1.0	1.0	0.5	1.0	0.0	0.0	0.5	0.0
17. Promulgated the national ATM contingency plan on the website of the Air Navigation Service Provider.	0.0									1.0		
18. Reported the status of contingency planning and contingency points-of-contact to the ICAO APAC Regional Office.	1.0	1.0	0.5	1.0	1.0	1.0	0.0	1.0	0.0	0.0	1.0	0.5
<b>Total (of 17)</b>	<b>15.0</b>	<b>5.0</b>	<b>4.0</b>	<b>12.5</b>	<b>9.5</b>	<b>16.5</b>	<b>10.0</b>	<b>12.0</b>	<b>0.5</b>	<b>10.0</b>	<b>9.0</b>	<b>7.5</b>
<b>Implementation %</b>	<b>88%</b>	<b>29%</b>	<b>24%</b>	<b>74%</b>	<b>56%</b>	<b>97%</b>	<b>59%</b>	<b>71%</b>	<b>3%</b>	<b>59%</b>	<b>53%</b>	<b>44%</b>

\*2021 Update - Higher than the previous year

\*2021 Update - Less than the previous year

\*2021 Update - No Change

