

INTERNATIONAL CIVIL AVIATION ORGANIZATION

D R A F T



ASIA/PACIFIC ATM CONTINGENCY PLAN

DRAFT Version 0.1, MONTH YEAR

This Plan was developed by the Asia/Pacific Regional ATM Contingency
Plan Taskforce

Approved by APANPIRG/XX and published by the
ICAO Asia and Pacific Office, Bangkok

OBJECTIVES

Paraphrased from TF TOR. Do we need to amend or add more?

Plan Objectives

- 2.1 The objectives of the Plan are to
- i. provide a contingency response framework for Asia/Pacific States;
 - ii. ensure timely, harmonized and appropriate responses to events that affect the provision of Air Traffic Services (ATS), or in which ATTS is involved; and
 - iii. provide a greater degree of certainty for airspace and aerodrome users during contingency operations.
- 2.2 In order to meet these objectives the Plan:
- i. Reviews that status of ATM Contingency Plans and contingency preparedness of Asia/Pacific Region States;
 - ii. Identifies areas where ATM contingency planning requires improvement to comply with ICAO Standards and Recommended Procedures defined in Annex 11 *Air Traffic Services* and accepted best practices;
 - iii. makes recommendations for improvement;
 - iv. analyses contingency procedures in use in other ICAO Regions and harmonizes with similar work in adjacent airspaces;
 - v. takes into account the varying levels of contingency response necessary for a range of precipitating events;
 - vi. provides principles for ATM contingency planning;
 - vii. details recommended contingency responses to events such as severe meteorological and geological phenomena, pandemics, military conflicts and industrial relations issues; and
 - viii. provides contingency planning templates for States.
- 2.3 Uniform policy and guidance for responding to reasonably foreseeable operational restrictions.
- 2.4 Guidance to ensure that actions taken are commensurate with the nature and duration of the operational restriction.
- 2.5 Short, medium, long term actions.
- 2.6 Prevent overload of the contingency system.
- 2.7 Guidance for implementation and resumption.

2.8 the Plan should state the objective of the continuation of aircraft operations between unaffected FIRs, through affected FIRs;

2.9

2.10 x

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MILESTONES, TIMELINES, PRIORITIES AND ACTIONS

The development and implementation of the plan requires that we have milestones, timelines and priorities. Actions perhaps should be kept under consideration.

As a first task, we should determine our priorities: what are the current problems in contingency readiness in the region, and which should have the highest priority for improvement? This should be reflected in the Plan. We may even consider an appendix that lists each state (the analysis), and provides priorities for their implementation of contingency plans

For example:

By XXX Date all upper airspace sectors will have a contingency plan for category A events.

By xXX date all States will have a contingency plan for category B events.

Etc.

9.1 Category A and B events should be considered for prioritization in the following descending order of priority order;

- ATM System Failure;
- National Security, and Staff Availability;
- Inundation, Flood, Tsunami and Pandemic;
- Volcanic Ash Cloud (noting that the SWG members' States did not have active volcanoes);

9.2 Concerted effort was required to gather contingency readiness information from non-respondent States, to then better determine regional priorities.

APPENDIX X: ATM Contingency Planning Principles

Level 1 (Internal State) Contingency Plans

1. All ATS units, including ATC Sectors, Units, Centres and supporting Flight Information and Briefing Offices should have a Contingency Plan.
2. Contingency Plans should define the following where applicable:
 - A Contingency Route Structure supported by a Flight Level Allocation Scheme;
 - Minimum longitudinal spacing between consecutive aircraft;
 - Frequency transfer arrangements;
 - Details of delegation of ATC separation services (if any);
 - Details of delegation of FIS and SAR Alerting Services (if any)
 - xxxxxxxxxx
 - xxxxxxxxxx
3. xxxxx

Level 2 (Inter-State) Contingency Plans

4. Level 2 Contingency Plans should be included in bi-lateral or multi-lateral agreements between States in all cases where activation of any Level 1 Contingency Plan will impact upon a neighbouring State's ATSU.
5. Contingency plans are required to ensure the safe transit of international traffic in the event of disruption or withdrawal of ATS, or.....
6. Contingency Flight Level allocation scheme planning should afford priority for the highest allocated levels to long-haul routes.
7. Contingency routes must be vertically separated whenever in lateral conflict.

And so on....

Heading

8. the overriding contingency planning principle of safety over efficiency having primacy over optimal levels and routes;
9. there is a need to clearly establish (and justify) a benchmark for lateral separation of contingency routes that are not vertically separated in the FLAS.
10. there is a need to define airspace classification requirements during contingency events;
11. xxxxxxxxxxxxxxxxx

Heading

12. xxxxxxxxxxxxxxxxx
13. xxxxxxxxxxxxxxxxx

Heading

14. xxxxxxxxxxxxxxxxx

15. xxxxxxxxxxxxxxxxx

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APPENDIX X: Basic Plan Elements

Add, amend or propose removal (with justification)

Element 1: Administration

- a) Record of signatories, version control and records of amendment.
- b) Definition of the objectives, applicable airspace and operations, and exclusions.

Element 2: Plan Management

- c) List of States and FIRs affected, and the agreed methods of notification in the event of activation of the plan.
- d) Details of the arrangements in place for management of the plan, including provisions for a Central Coordinating Committee to authorize and oversee the activation of the plan and arrange for ATS restoration in the event of an extended outage, an ATM Operational Contingency Group for 24 hour coordination of operational and supporting activities under the plan, and the terms-of-reference, structure and contact details for each.

Element 3: Airspace

- e) Procedures and determinants for implementation and activation of Special Use Airspace including, where necessary, Restricted or Prohibited Areas in territorial airspace, or Danger Areas over the high seas.

Element 4: ATM Procedures

- f) Details of re-routing to avoid the whole or part of the airspace concerned, normally involving establishment of:
 - i. additional routes or route segments with associated conditions for their use; or
 - ii. a simplified route network through the airspace concerned, together with a Flight Level Allocation Scheme, to ensure that a standard

minimum vertical separation is applied where less than a specified minimum lateral separation exists between routes.

- g) Details of how domestic traffic, departing and arriving flights and SAR, humanitarian and State aircraft flights will be managed during the contingency period.
- h) Procedures for transition from normal services levels to contingency services, and resumption of normal service.
- i) Provisions for reduced levels of service, if any, within the affected airspace.
- j) Establishment of arrangements for controlled access to the contingency area to prevent overloading of the contingency system.
- k) Procedures for adjacent service providers to establish longitudinal separation at the entry point, and to maintain such separation through the airspace; and/or
- l) Reassignment of responsibility for providing air traffic services over the high seas or in delegated airspace.
- m) Coordination and frequency transfer procedures for aircraft entering and leaving the affected airspace.

Element 5: Pilot/Operator Procedures

- n) Requirements for flight plan submission during the contingency period, including contingency route planning requirements, and arrangements if airspace is closed when no contingency route is available;
- o) Emergency procedures, including In-flight requirements for broadcast of position and other information, and for continuous listening watch, on specified pilot-pilot and GUARD VHF frequencies;
- p) Requirements for display of navigation and anti-collision lights;
- q) Requirements for climbing and descending well to the right of the centreline of specifically identified routes;

- r) Requirements for all operations to be conducted in accordance with IFR, including operating at IFR flight levels from the relevant Table of Cruising Levels in Appendix 3 of Annex 2, except where modified by a Flight Level Allocation Scheme.

Element 6: Communications Facilities and Procedures

- s) Provision and operation of adequate air-ground communications, AFTN and ATS direct speech links;
- t) Specification of radio frequencies to be used for particular contingency routes.
- u) Log-on and connection management for CPDLC aircraft, where appropriate;
- v) Use of ADS-C automatic position reporting in lieu of voice position reporting to ATS.

Element 7: Aeronautical Support Services including AIS and MET

- w) AIP Information regarding the Contingency Planning, and notification by NOTAM of anticipated or actual disruption of air traffic services and/or supporting services, including associated contingency arrangements, as early as practicable and, in the case of foreseeable disruption, not less than 48 hours in advance
- x) Reassignment to adjacent States of the responsibility for providing meteorological information and information on status of navigation aids.

Element 8: Contact Details

- y) Contact details for the RCC responsible for the affected FIR, and coordination arrangements.
- z) Contact details of adjacent States and other international organisations participating in the contingency plan.

- preparation time for an adjacent FIR to activate contingency procedures. Priority 1 should be the immediate handling of the situation, with priority 2 being the activation of the contingency plan;
- the draft pilot/operator procedure to climb or descend well to the right of route may require further consideration, particularly input from IATA;

- ATM procedures should specify where there was a reduced level of service;
- there was uncertainty about the practicality of using ADS-C and CPDLC for communications in contingency airspace;
- there was uncertainty about the assigning of meteorological services to an adjacent State;
- the Plan should define *SAR Alerting* as a contingency plan element, rather than *SAR*;
- Contingency Plans should be made readily and easily available via electronic means to ensure rapid response to events;

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