



*International Civil Aviation Organization*

**The Nineteenth Meeting of the Southeast Asia ATM Coordination Group (SEACG/19)**

Bangkok, Thailand, 1 – 4 May 2012

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**Agenda Item 6: Development of State Contingency Plans**

**Regional ATM Contingency Planning**

(Presented by the Secretariat)

**SUMMARY**

This paper presents a summary of the discussion and outcomes of the First Meeting of the Regional ATM Contingency Planning Task Force (RACP/TF/1), held in Bangkok, Thailand, from 17 – 20 April 2012.

This paper relates to –

**Strategic Objectives:**

- A: *Safety – Enhance global civil aviation safety*
- C: *Environmental Protection and Sustainable Development of Air Transport – Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

**Global Plan Initiatives:**

- GPI-6 Air traffic flow management
- GPI-7 Dynamic and flexible ATS route management
- GPI-8 Collaborative airspace design and management
- GPI-16 Decision support systems and alerting systems
- GPI-18 Aeronautical information
- GPI-19 Meteorological Systems
- GPI-22 Communication infrastructure

**1. INTRODUCTION**

1.1 The Twenty-Second Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/22), held at Bangkok, Thailand from 5 until 9 September 2011, reached the following Conclusion:

***Conclusion 22/9 – Regional ATM Contingency Plan Task Force***

*That, a Regional ATM Contingency Plan Task Force (RACP/TF) be formed, reporting to APANPIRG through the ATM/AIS/SAR Sub-Group for planning, coordination and implementation of a regional ATM contingency plan, with a link to the METWARN/I Task Force, in accordance with the Terms of Reference as provided in Appendix G to the Report on Agenda Item 3.2.*

1.2 The objective of the RACP/TF, as stated in its Terms of Reference (**Attachment A**), is:

In collaboration with affected stakeholders and ensuring inter-regional harmonization, develop and implement a Regional ATM Contingency Plan that:

- i) provides a contingency response framework for States;
- ii) ensures a timely, harmonised and appropriate response to events that affect the provision of Air Traffic Services (ATS), or which ATS is involved in; and
- iii) provides a greater degree of certainty for airspace and aerodrome users during contingency operations.

1.3 The First Meeting of the RACP/TF discussed and considered a number of agenda items including a global ATM contingency analysis and related inter-regional strategies, and the status of current contingency plans within the Asia/Pacific Region. From these considerations a framework for an Asia/Pacific Regional ATM Contingency Plan was proposed for further development.

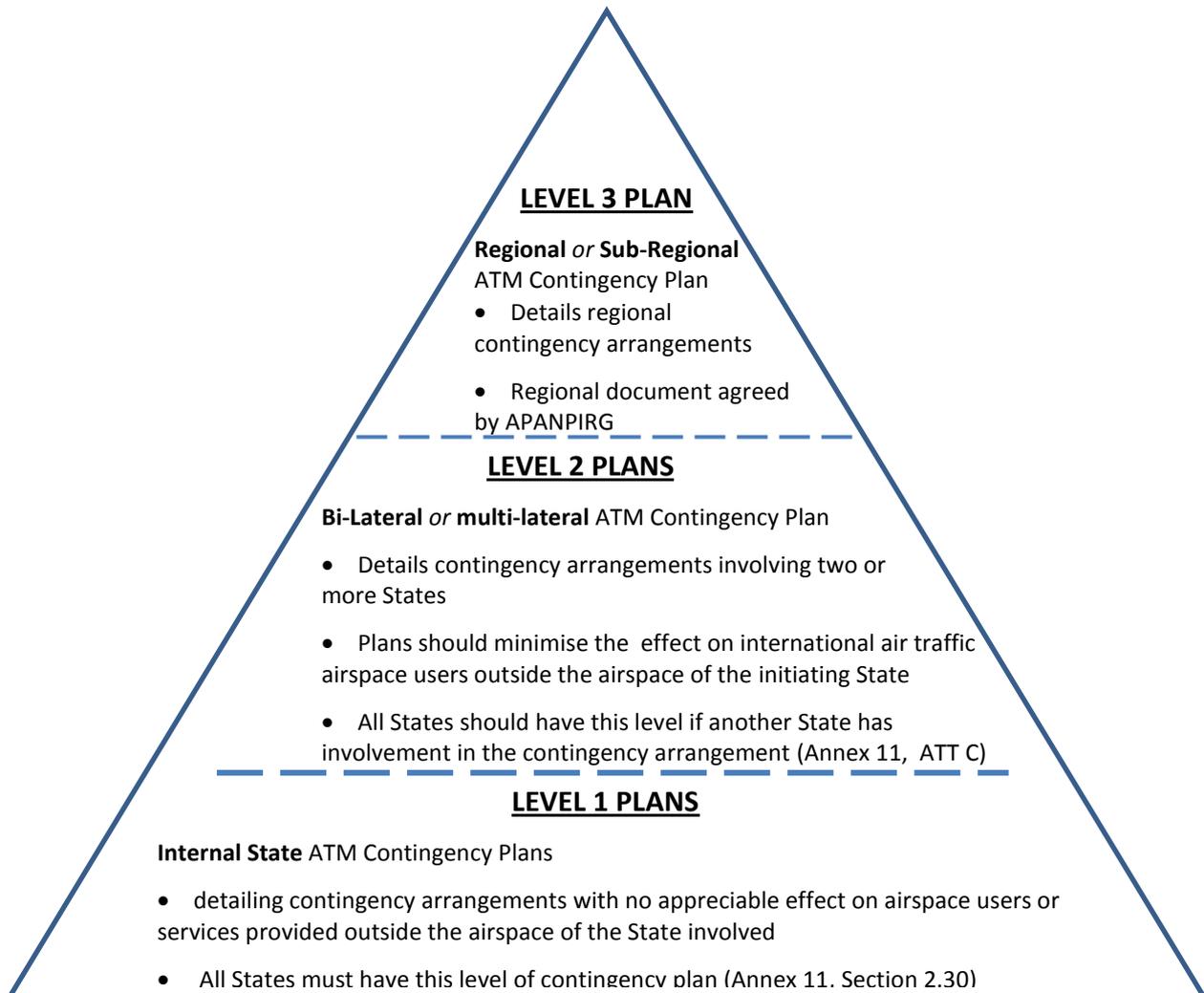
## 2. DISCUSSION

2.1 The proposed framework for the Regional ATM Contingency Plan includes:

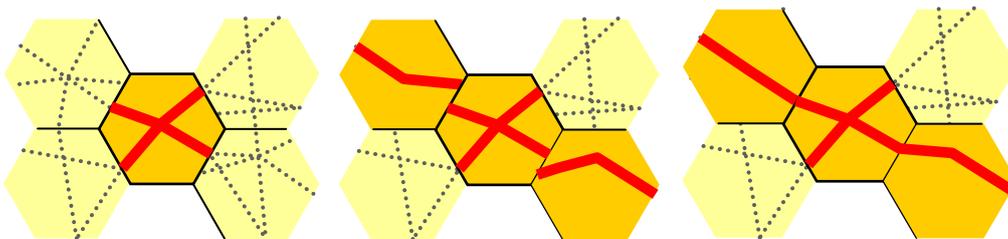
- a) A hierarchy of contingency plans:
  - i. **Level 1**, for domestic (internal State) plans having little or no effect on external air navigation service providers;
  - ii. **Level 2**, for coordinated (inter-State) contingency plans involving two or more States; and
  - iii. **Level 3**, for sub-Regional or Regional contingency plans, detailing contingency arrangements affecting airspace users or services provided outside the contingency airspace.
- b) Categories of contingency plans:
  - i. **Category A – Airspace Safe, but Restricted or No ATS**, due to causal events such as industrial action, pandemic, earthquake, nuclear emergency affecting the provision of ATS, or ATM system failure or degradation;
  - ii. **Category B – Airspace Not Safe**, due to causal events such as Volcanic Ash Cloud (VAC), nuclear emergency, military activity; and
  - iii. **Category C – Airspace Not Available**, due to causal events such as pandemic, national security – normally a political decision.

2.2 The RACP/TF meeting noted that Level 1 (internal State) plans would not be part of the Regional ATM Contingency Plan, but could be referred to in that document. Level 2 (Inter-State) planning, which involved or affected other States, was considered to be a priority for the RACP/TF analysis, as it was these that needed to be harmonised to allow a seamless Level 3 (Regional) Plan. Moreover, it was recognised that Level 1 and 2 plans

needed to address all three categories of contingency response (A, B or C), even if the category B procedures were simple and of a tactical nature to deal with a changing situation. **Figure 1** illustrates the hierarchy of contingency plans. **Figure 2** demonstrates the outcomes of either fragmented or harmonized contingency plans.



**Figure 1:** Hierarchy of Contingency Plans



**Figure 2:** Contingency Plan Harmonisation (single FIR, fragmented dual and harmonised dual activation showing ATS contingency routes in red).

2.3 A proposed set of standardized Basic Plan Elements (BPE) were presented for discussion, including Administration, Plan Management, Airspace, ATM Procedures, Pilot/Operator Procedures, Communications Facilities and Procedures, Aeronautical Support Services including AIS and MET, and Contact Details. These BPE will be developed in use until the RACP/TF/2 meeting, at which the draft BPE will be formally presented for consideration of incorporation into the draft Regional ATM Contingency Plan.

2.4 A general scheme was considered, including such items as standardized minimum lateral and longitudinal spacing, FLAS, standardized ATS and pilot phraseologies and procedures, and a template for Inter-State and sub-Regional plans. The Indonesia Air Traffic Services Contingency Plan Part 1 – Jakarta FIR was adopted as the basis for a template for Inter-State planning (although it was recognised that the template may not be suitable for all States, and could be further developed over time).

2.5 A Task Force Review Team was established to review the current status of ATM contingency plans and the contingency preparedness of Asia and Pacific Region States, as required by the Terms of Reference. The Review Team will, with the support of the Secretariat, work via electronic communication to assess and analyse Level 1 and Level 2 Contingency Plan readiness using the draft BPEs, and report back to the RACP/TF/2. India, Indonesia, Singapore and Thailand offered to be members of the Contingency Task Force Review Team. To support the review a ‘smart’ questionnaire will be formulated, providing the opportunity for States to provide the relevant portions of their Contingency Plans required for assessment of their plans against the draft BPE, without the need to divulge information beyond the scope or requirements of the review.

2.6 The meeting noted that temporary delegation of airspace in a contingency situation did not mean that full Air Traffic Control (ATC) services would be provided, and that there were possible legal, communication and ATS surveillance issues associated with this. In spite of this, delegation where necessary was viewed by the meeting as a positive, especially if data sharing could be instigated. The Secretariat clarified that States were under no obligation to delegate airspace and that sovereign rights were not affected by such arrangements. However, it was also pointed out that provision should be made for the continuation of aircraft operations on regional air routes within international airspace (over the High Seas) or of undetermined sovereignty.

2.7 To further understand and develop the required link between RACP/TF (see Terms of Reference) and the METWARN/I TF, the Secretariat participated in the final day of the METWARN/I TF/2 meeting, and noted items of interest to Regional ATM Contingency Planning.

2.8 AIM/AIS/SAR SG/21 WP05 was presented to the METWARN/I TF meeting to review the progress of contingency plans. The WP provided information on progress in developing a framework for a regional contingency plan for weather phenomena that includes volcanic ash, tropical cyclone, radioactive cloud and tsunami, including general principles and requirements. The METWARN/I TF Secretariat will present a working paper on regional contingency planning for weather phenomena to RACP/TF/2.

2.9 The meeting was advised that at the Fourth meeting of the Meteorological Warnings Study Group (MWSG/4), scheduled for 15 – 18 May 2012, a recommendation would be made that States arrange to receive Tsunami warnings directly from the responsible National body or from the appropriate International Tsunami Warning Centre.

2.10 The RACP/TF Secretariat advised the METWARN/I TF meeting that any contingency planning for tsunami and other phenomena such as tropical revolving storms and volcanic activity needed to take into account protection of ATM facilities, navigation aids and ATS surveillance installations, and the consequential effect on aerodromes and air traffic flow management.

### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to note the information contained in this paper.

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## **Terms of Reference**

### **Regional ATM Contingency Plan Task Force** **(RACP/TF)**

1) The objective of the Regional ATM Contingency Plan Task Force is:

In collaboration with affected stakeholders and ensuring inter-regional harmonization, develop and implement a Regional ATM Contingency Plan that:

- i) provides a contingency response framework for States;
- ii) ensures a timely, harmonised and appropriate response to events that affect the provision of Air Traffic Services (ATS), or which ATS is involved in; and
- iii) provides a greater degree of certainty for airspace and aerodrome users during contingency operations.

2) To meet this objective the Task Force shall:

- a) Review the current status of ATM Contingency Plans and the contingency preparedness of Asia and Pacific Region States;
- b) Identify areas where ATM contingency planning requires improvement in terms of compliance with Annex 11 and accepted best practice, and to make recommendations on those areas of improvement;
- c) Analyse contingency procedures in use in other ICAO Regions, and cooperate with other groups which are involved with similar work in adjacent airspaces, in order to achieve harmonized inter-regional solutions;
- e) Develop a Regional ATM Contingency Plan that:
  - i) takes into account the varying levels of contingency response necessary, commensurate with precipitating events;
  - ii) takes into account the varying levels of State contingency capability;
  - iii) provides principles for Regional ATM Contingency planning;
  - iv) details recommended Regional contingency practices to events such as severe meteorological and geological phenomena, health emergencies (pandemics, etc), military conflicts and industrial relations issues; and
  - v) where practical, provides contingency planning templates for States.

The Task Force reports to APANPIRG through the ATM/AIS/SAR Sub-Group for planning, coordination and implementation of a regional ATM contingency plan, with a link to the METWARN/I Task Force.