



*International Civil Aviation Organization*

**The Third Meeting of the Regional ATM Contingency Plan Task Force  
(RACP/TF/3)**

Bangkok, Thailand, 12 – 15 November 2013

**CONTINGENCY PLANNING REVIEW**

(Presented by the Secretariat)

**SUMMARY**

This paper provides a review of contingency planning concepts.

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-10 Terminal area design and management

GPI-12 Functional integration of ground systems with airborne systems

GPI-13 Aerodrome design and management

GPI-16 Decision support systems and alerting systems

GPI-18 Aeronautical information

GPI-19 Meteorological Systems

GPI-22 Communication infrastructure

**ANNEX 11**

**2.30 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.*

## **ANNEX 11 Attachment C – Material Relating to Contingency Planning**

1.3 The guidelines have been developed in recognition of the fact that circumstances before and during events causing disruptions of services to international civil aviation vary widely and that contingency measures, including access to designated aerodromes for humanitarian reasons, in response to specific events and circumstances must be adapted to these circumstances. They 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.

1.4 The guidelines are based on experience which has shown, inter alia, that the effects of disruption of services in particular portions of airspace are likely to affect significantly the services in adjacent airspace, thereby creating a requirement for international coordination.....

### **DGCA Conference**

The Conference of Directors General of Civil Aviation, Asia and Pacific Regions (DGCA/47, Macao, China, 25-29 October 2010) recognized the need for ATM Contingency Plans to be developed and implemented on a regional basis. DGCA/47 requested the Regional Office to consider the establishment of a task force for planning, coordination and implementation of a regional ATM Contingency Plan (Action Item 47/1).

### **APANPIRG/22 (September 2011)**

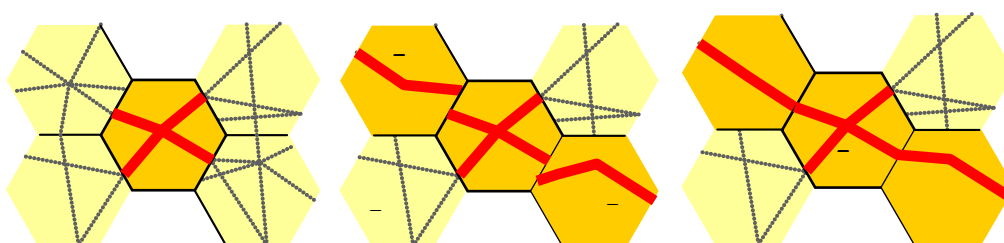
#### **Conclusion 22/9 – Regional ATM Contingency Plan Task Force**

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.**

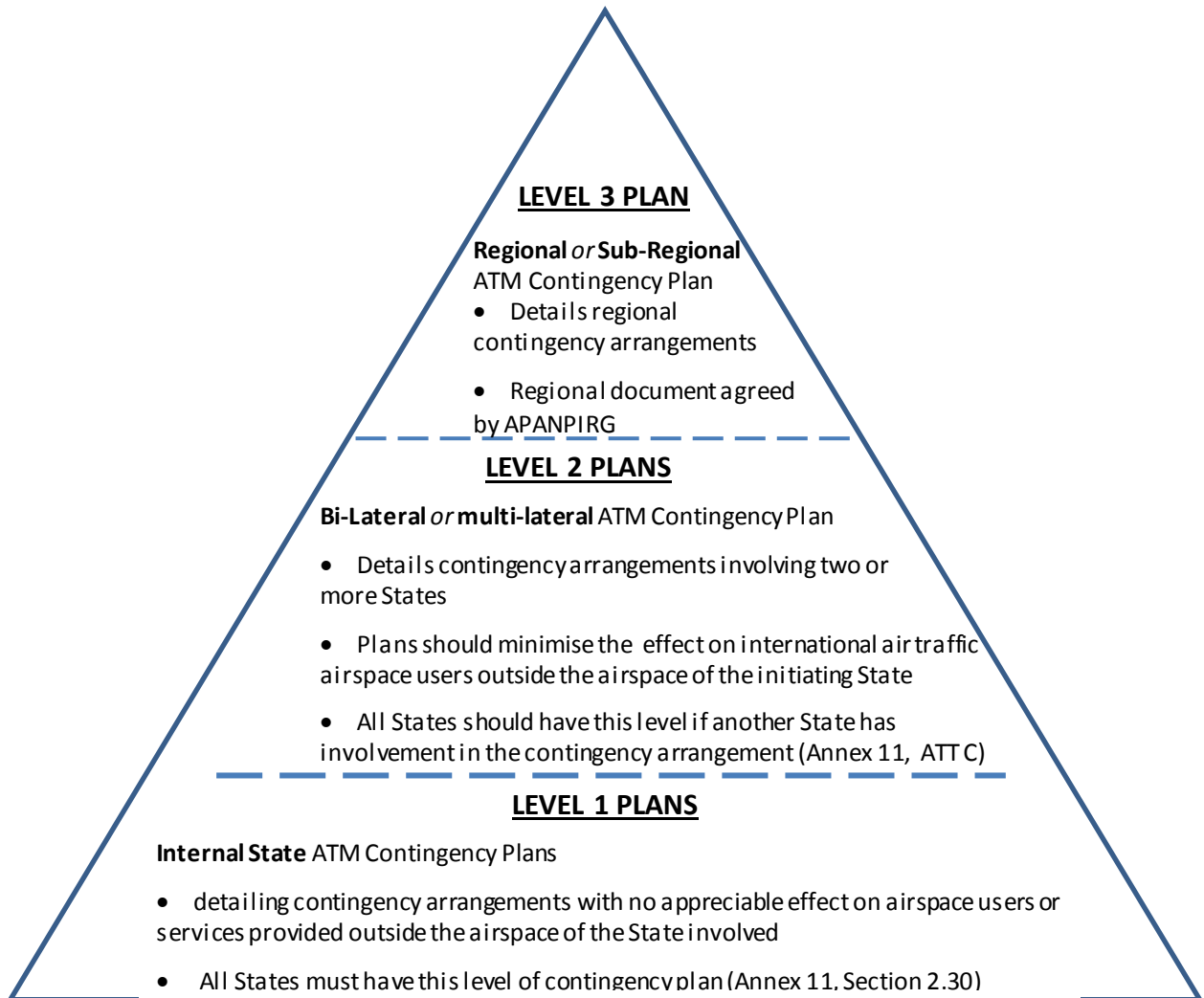
RACP/TF/1 A proposed framework for the Regional ATM Contingency Plan was provided:

- a) A hierarchy of contingency plans:
  - i. **Level 1**, for domestic plans having little or no effect on external air navigation service providers;
  - ii. **Level 2**, for coordinated 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.

6.1 The meeting discussed this hierarchical approach at length, noting 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 2:** Contingency Plan Harmonisation (single FIR, fragmented dual and harmonised dual activation showing ATS contingency routes in red).



**Figure 1: Hierarchy of Contingency Plans**

## KEY CONCEPTS

### Contingency operations are a *degraded* mode of operation

#### Reduction or withdrawal of services (Category A events)

- Reduced Capacity
- Reduced services
  - No separations service?
  - No flight information service?
  - No SAR Alerting service?
- Aircraft access metered and managed by contingency measures

#### Airspace Rendered unsafe (Category B events)

- Reduced Capacity

#### Airspace not available (Category C events)

- zero capacity

## Harmonization

#### Harmonization of procedures

- Level 2 Contingency Arrangements (LoA, MoU, etc.).
- Regionally agreed practices and procedures

#### Contingency Route and FLAS harmonization

- Contingency Routes /FLAS in FIR X are understood/agreed by FIR Y
  - FIR Y will have to manage aircraft onto the contingency routes for entry into the contingency airspace
  - Airspace Users know how to plan
- Contingency Routes/FLAS Aligned
  - inter-FIR/State harmonized contingency operations
  - why?