



International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Tenth Meeting (ATM SG/10)

(Jeddah, Saudi Arabia, 20 – 23 October 2024)

Agenda Item 3: Planning and Implementation issues related to ATM/SAR

HARMONIZATION OF REGIONAL AND NATIONAL ATM CONTINGENCY PLANS AND LETTERS OF AGREEMENTS

(Presented by Saudi Arabia)

SUMMARY

This paper presents the need for a robust ATM contingency management as essential for maintaining a safe and efficient orderly flow of international air traffic in the event of disruptions (or possible disruption) of Air Traffic Services (ATS) and related supporting services.

Proactive planning for potential disruptions can minimize the impact of contingency events and ensure the continued resilience of the aviation infrastructure and assist in preserving the availability of ATS. In addition to ensure the efficiency of the ATM contingency management through periodically exercise(s).

Action by the meeting is at paragraph 3.

REFERENCE

ICAO Doc 4444 – PANS Air Traffic Management.

ICAO Annex 11 - Air Traffic Services.

MID Doc 003 - MID Region ATM Contingency Plan.

1. INTRODUCTION

1.1 Saudi Arabia developed Air Traffic Management (ATM) Contingency Management Document including all critical components of ensuring the safety and security of the aviation industry in Jeddah FIR, it provides safe continuation of international air traffic through the Jeddah FIR during periods when Air Traffic Services (ATS) or supporting services may be disrupted or unavailable in crisis manner.

1.2 ATM Contingency Management document defines contingency response procedures and arrangements at the national and regional level, whilst recognizing the local operational contingency planning arrangements. Moreover, contingencies of the same type can differ depending on various factors such as degree of warning, duration, and scope of impact, in addition to ensure that while contingencies can seldom be predicted exactly, they can be anticipated and prepared for, in accordance with the provisions of ICAO Annex 11 - Air Traffic Services, Chapter 2, 2.32 and its Attachment C, MID region contingency framework, and local regulation in GACAR Part 171.

2. DISCUSSION

2.1 Saudi Arabia implemented a comprehensive and efficient ATM Contingency Management at national, regional, and local levels.

2.2 Saudi Arabia implemented a well-structured local ATS Units contingency plans including all related aspects to avoid total disruption to the provision of ATS at local level and to avoid activating the ATM Contingency Management at national and regional levels.

2.3 ATM contingency planning in case of partial or total disruption to the provision of ATS will take a place to achieve the following objectives:

- a) Fulfilling national and international obligations.
- b) Comply with safety, capacity, efficiency, security and environmental sustainability requirements.
- c) Ensure a sustainable ATS operation.
- d) Ensure timely, harmonized, and appropriate responses to all contingency events.

2.4 ATM Contingency Operational Concept.

Saudi Arabia implemented the following ATM Contingency Operational Concept to ensure a standardized concept implemented during contingency situation(s), the following concept will be applied in coordination with related stakeholders to ensure continuity of safe aircraft operations and minimize the impact of unusual events on the provision of ATS. The ATM Contingency Operational Concept is summarized in the following categories:

- a) Category One: is applicable when ATS facility is **partially** unavailable to provide ATS in cases of foreseeable events caused by unexpected interruptions such as degradation of CNS / ATM systems, partial communications failure, partial loss of frequencies, loss of one control working position, loss of one RADAR and / or partial power failure. This category will be **managed** through activating ATS Unit contingency plan.
- b) Category Two: is applicable when the ATS facility is **totally** unavailable to provide ATS in cases of foreseeable events which can be managed through a local alternative backup facility. The causes of the unexpected interruptions could be fire, total power failure, total communications failure, total loss of frequencies, severe damage of building, unlawful interference, bomb threat, security reason. This category will be **managed** through activating ATS Unit contingency plan.
- c) Category Three: is applicable when Jeddah ACC **or** Riyadh ACC are **totally** unavailable to provide ATS in cases of foreseeable events caused by unexpected interruptions which can be managed by the unaffected ACC. The causes of the unexpected interruptions could be such as airport unavailable, natural disaster (*flood, earthquake*), security reasons, public health emergencies. This category will be **managed** through activating ATS Unit contingency plan.
- d) Category Four: is applicable when complete loss of **both** Jeddah and Riyadh ACCs. This category can be managed as follows:
 - Category 4 – A (*Airspace safe, No ATS*) is applicable when a total service disruption in **both** ACCs serving international flights within Jeddah FIR. This

category will be **managed** through activating ATM contingency plan.

- Category 4 – B (*Airspace Not Available*) can be **managed** by considering activating the MID Region ATM Contingency Plan.

2.5 Operational And Technical Requirements.

The following requirements should be fulfilled to ensure the consist of ATS provision:

2.5.1 Operational Requirements.

- a) Ensure timely, efficient, and appropriate responses to all contingency events that may cause partial or total disruption to the ATS provision.
- b) Ensure alignment with related internal departments.
- c) Ensure alignment with related military entities.
- d) Ensure the contingency plan and alternative facility (*if available*) awareness is included in ATS Unit's annual refresher training.
- e) Ensure appropriate transportation service agreements for ATCOs relocation when required by the ATS Unit contingency plan.

2.5.2 Technical Requirements.

- a) Ensure the alternative (*backup*) facility is separated from the main facility in a separate building.
- b) Ensure redundancy and independence of all safety-significant systems or equipment which could adversely affect the safety or efficiency of flight operations and/or the provision of ATS.
- c) Ensure the alternative (*backup*) facility is ready to provide the attended service in the attended AoR.
- d) Ensure the alternative (*backup*) facility systems database is up-to-date and identical to the main facility and to ensure the backup systems are included in any main system update mission.

2.6 Exercises At Local Level.

- a) Tabletop exercises (*simulation*) should be conducted at least ONCE each ONE (1) Year.
- b) Full scale exercises should be conducted at least ONCE each TWO (2) Years.

2.7 Based on the above, the meeting is invited to review and agree on the following Draft Conclusion:

DRAFT CONCLUSION 10/X: NATIONAL ATM CONTINGENCY PLAN/ARRANGEMENT

That the ICAO MID Office assists MID States in the development of their National ATM Contingency Plans in a harmonized manner by organizing tailored workshops for each State upon request.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) discuss any relevant matters as appropriate; and
- b) review and agree of the Draft Conclusion at para 2.7 above.

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