International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Ninth Meeting (ATM SG/9)
(Sharm El Sheikh, Egypt, 14 – 16 November 2023)

Agenda Item 4:   **Planning and Implementation issues related to ATM/SAR**

PROPOSAL FOR COLLABORATION BETWEEN MIDDLE REPRESENTATIVES TO ENHANCE
BUSINESS CONTINUITY MANAGEMENT IN AIR TRAFFIC MANAGEMENT (ATM)

(Presented by Egypt/NANSC)

SUMMARY
In light of the projected post-COVID-19 resurgence of aviation and the consequent increase in flight volumes, there is a pressing need for robust global civil aviation air traffic management (ATM) systems. Given the critical role of business continuity management (BCM) in augmenting contingency response in civil aviation, this paper proposes inviting representatives from the Middle East (MID) to Egypt to explore its BCM and emergency takeover practices.
Action by the meeting is at paragraph 3.

REFERENCE(S)
- ICAO ANNEX 17: SECURITY - SAFEGUARDING INTERNATIONAL CIVIL AVIATION - EUROPEAN AVIATION SAFETY AGENCY (EASA) PART-OR.A.110: BUSINESS CONTINUITY MANAGEMENT - BUSINESS CONTINUITY MANAGEMENT IN THE AIR TRANSPORT SECTOR, BY ZDENEK DVORAK AND ZDENEK STEPANEK (IEEE CONFERENCE PUBLICATION, 2021)

1.   **INTRODUCTION**

1.1   The global civil aviation industry demands unwavering continuity in flight operations, air traffic control, and aeronautical information services (AIS). Acknowledging aviation's pivotal role in national economies, disruptions can lead to significant socioeconomic impacts. The responsibility to ensure operational continuity rests on foundational structures such as airports and air traffic control, underscoring the importance of business continuity management (BCM) in both cases of contingency and normal procedures.

1.2   Business continuity (BC) is the organization's capability to maintain predetermined service levels following disruptive events. During threats to flight safety, the air traffic management (ATM) department plays a critical role in sustaining uninterrupted air traffic services.

1.3   During emergency conditions in neighbouring states, the role of other countries becomes pivotal in mitigating the impact on air traffic and accommodating the expected increase due

to these events. Maintaining air safety conditions while managing air traffic with high efficiency is paramount.

2. DISCUSSION

2.1   The Business continuity management (BCM) should prioritize preventive over corrective measures. A holistic BCM strategy, developed prior to emergencies, ensures actionable plans during disruptions or emergencies, facilitating a structured return to business as usual (BAU).

2.2   Business continuity management (BCM) requires a systematic approach, including emergency categorization, contingency plan development, monitoring, emergency response, and rapid training and familiarization. Despite its broad scope and implementation challenges, BCM processes are reproducible.

2.3   NANSC, in close collaboration with the Egyptian Civil Aviation Authority (ECAA), has demonstrated its proficiency in Business Continuity Management (BCM) through a comprehensive theoretical framework and practical application, employing real-life scenarios, like the contingency procedures quick implemented under cooperation with ICAO MID as follows:

Khartoum FIR Closure:

a) Facilitate air traffic flow from/to Khartoum FIR during its closure, all air traffic proceeding to/from Khartoum FIR have been immediately rerouted through Cairo and Jeddah FIRs, in a highly efficient and coordinated manner by both ACCs.

b) Cairo, Jeddah, Khartoum, ICAO MID team and all other affected stakeholders through CCT meetings coordinated to develop a rerouting plan. This plan takes into account the following factors:

- The type and volume of air traffic affected by the closure of Khartoum FIR

- The airspace capacity of Cairo and Jeddah FIRs

- The availability of air traffic control resources

- The safety of air traffic

c) Cairo and Jeddah ACCs communicated the rerouting plan to all affected airlines and pilots. This is done through NOTAMs, AFTNs, and direct communication.

d) Cairo and Jeddah ACCs coordinated closely with each other to ensure that the rerouting is done in a safe and efficient manner. This includes communicating with each other about the position of all aircraft and any potential conflicts.

The rerouting of air traffic during the closure of Khartoum FIR was a complex and challenging task. However, it is essential to ensure the safety of all air traffic. By working together closely, Cairo and Jeddah ACCs are able to facilitate air traffic flow in a highly efficient and coordinated manner.

Recent situation in Northern East Border of Egypt:

a) On October 2023, the Tel Aviv FIR closed due to unforeseen circumstances. This resulted in a significant increase in air traffic in the Cairo FIR.

b) The Cairo FIR air traffic controllers handled this increase in traffic with great efficiency and professionalism. They accepted in-flight flight plans from aircraft that would have otherwise flown through the Nicosia FIR and rerouted them around the closure.

c) To facilitate traffic flow, the Cairo FIR air traffic controllers used a variety of techniques, including:

- **Sectorization**: The FIR was divided into smaller sectors, each with its own dedicated air traffic controller. This allowed the controllers to focus on their assigned airspace and traffic.

- **Sequencing**: The controllers sequenced aircraft so that they arrived at their destinations in a safe and efficient manner.

- **Coordination**: The controllers coordinated closely with each other and with Amman (Via ULINA) and Jeddah/Riyadh FIRs (Via KITOT) to ensure that traffic was flowing smoothly throughout the region.

d) As a result of the Cairo FIR air traffic controllers' efficient and professional handling of the situation, there were no major disruptions to air traffic. All aircraft were able to reach their destinations safely and on time.

3. ACTION BY THE MEETING

3.1   The meeting is invited to:

a) note the information contained in this paper;

b) discuss any relevant matters as appropriate; and

c) agree to consider BCM during contingency plan implementation and recovery plan too.

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