INTERNATIONAL CIVIL AVIATION ORGANIZATION

**Fourth Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group
(AAO SG/4), Virtual Meeting, 16 to 18 August 2021**
Presented by South Africa

Agenda Item 3	**Planning and Implementation**
Agenda Item 3.3:	**Other Air Navigation Initiatives**

**A PROPOSAL FOR POST-COVID 19 MECHANISMS SUPPORTING AIR TRAFFIC
SERVICE (ATS) PERSONNEL IN COPING WITH INCREASED AIR TRAFFIC
MOVEMENTS: SHIFT SUPERVISORS, ENHANCED FATIGUE MANAGEMENT AND
EFFECTIVE AIR TRAFFIC FLOW MANAGEMENT (ATFM) MEASURES.**

(Presented by South Africa)

SUMMARY
The ramping up of vaccination programmes for COVID 19 across the globe has seen many States opening their skies and allowing vaccinated passengers to travel without having to go through severe COVID 19 protocols (Vaccine Passports). This has seen some improved air traffic numbers, especially in Europe, which indicates that air travel is on the increase. Africa is also ramping up the vaccination, although slow, due to resources in other parts of the continent. Potentially this will see more vaccinated passengers travelling to the African continent, which will increase traffic numbers.   For the past, almost two years, Air Traffic Controllers (Air Traffic Managers) have had to deal with very low traffic numbers and some have seen very little control. Although recurrence training has been ongoing in many parts, structures must be put in place to ensure that the anticipated improvements in traffic numbers are safely and efficiently managed to support the airlines' recovery.   Introducing shift supervisors, enhancing fatigue management and prioritizing the implementation of ATFM is seen as some of the initiatives that will support the ATS personnel in safely and efficiently managing air traffic.   **Action required is as paragragh 3**

REFERENCE(S):
ICAO Doc 9971- Manual on Collaborative Air Traffic Flow Management (ATFM).   **ICAO Doc 9854 - Global Air Traffic Management Operational Concept.**   **CANSO Mombasa ATFM Roadmap.**

Related ICAO Strategic Objective(s):
A-Safety   B-Air Navigation Capacity and Efficiency   D-Environmental Protection

INTRODUCTION

1.1   The low number of traffic brought about by the COVID 19 pandemic has meant that ATS personnel has seen a very little number of traffic operating within their areas of responsibility which could have slowed down their situational awareness. This is evident when an ATS personnel has been on vacation leave, there's a need to conduct some kind of on the job training instruction (OJT) when they return before they are allowed to assume solo duties.

1.2   The extent of the traffic increases, post-COVID 19, cannot however be predictable and in some cases, it will not be possible to conduct OJT for all ATS personnel in preparation for the increase in traffic.

1.3   It is therefore recommended that appropriate plans are put in place to ensure seamless, safe and efficient service resumption. These plans should ensure the flow of information across all stakeholders during all phases of flights.

2. DISCUSSION

2.1   **Shift Supervisors**: Shift supervisors should be identified from experienced personnel to act as a link for information from all relevant sources (MET, ATFM and Air force/Military). Shift supervisors should also be able to assess traffic loadings and make necessary recommendations to open other sectors to alleviate the pressure on ATS personnel. They should also ensure compliance with Calculated Takeoff Times (CTOTs) from airline operators in line with the declared ATFM program. Ideally, supervisors should be appointed officially, but where this is not possible it is recommended that experienced personnel are tasked with this responsibility.

One advantage of implementing shift supervisors is that it will ensure that workload for ATS personnel is kept at the level of competence of the ATS personnel, in line with their readiness levels post the COVID 19 pandemic. This will also ensure that traffic flow is maintained in line with the agreed ATFM program.

2.2   **Fatigue Management**: Fatigue is described as a physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase or workload (mental and/or physical activity) that can impair operational and technical operator alertness and ability to safely control or perform safety rated duties.

The reality of the existence of COVID 19 in our operating centres can result in anxiety for the ATS personnel which could result in mental fatigue. Some ATS personnel come from families who are still struggling financially and emotionally due to the impact of COVID 19 and all these challenges need to be managed carefully to minimize mental fatigue. Already at certain units, it is said that staff are struggling with fatigue where they are short-staffed due to Covid infections and have to work extra days/hours in turn. Add to this, the exposure to a high number of traffic movements, if not planned properly can make the situation dire.

It is said that in the past 18 months, the majority of ATS related incidents have an element of fatigue as a contributing factor.

To minimize the impact of fatigue, the following suggestions may be considered:

i.) Gradual increase in time worked (not going from 2/3 shifts a week to 5/6 shifts at once)

ii.) The role of supervisors or line managers is critical in monitoring the return to duty and the escalation in traffic – typically, where ATFM has not been implemented, should be managed pre-tactically in planning and tactically on the day using strategic breaks based on traffic peaks and valleys - giving breaks to people as soon as the spike on traffic dissipates.

iii.) Making sure everyone gets the opportunity to work periods of higher traffic/ have extra pair of eyes and ears rostered where possible to monitor traffic (also a preparation tool).

iv.) Briefing staff on what to look out for in their own and peer fatigue/knowledge about or refreshers on fatigue risks that can be individually or system-induced.

2.3   **Air Traffic Flow Management (ATFM)**: ICAO Doc 9971- Manual on Collaborative Air Traffic Flow Management (ATFM) describes Air traffic flow management (ATFM) as an enabler of air

traffic management (ATM) efficiency and effectiveness. It contributes to the safety, efficiency, cost-effectiveness and environmental sustainability of an ATM system. It is also a major enabler of global interoperability in the air transport industry. This document should be read in conjunction with ICAO Annex 11 which states that 'air traffic flow management (ATFM) shall be implemented for airspace where air traffic demand at times exceeds or is expected to exceed, the declared capacity of the air traffic control services concerned'. In addition, ICAO Doc 9854 - Global Air Traffic Management Operational Concept describe the need for a Collaborative Decision Making (CDM) process to ensure that the needs and expectations of the ATM community are considered when an operational decision is taken.

CANSO Africa also produced the CANSO Mombasa ATFM Roadmap as an important mechanism for managing air traffic growth efficiently and effectively. It is based on the basic principle of proactive engagement of industry partners and maintenance of shared processes and procedures.

Implementing air traffic flow management will ensure that information sharing is prioritised for any decision taken and that the needs and expectations of ATM community members are recognized. It will also ensure that demand does not exceed the declared capacity (temporal) in line with the competencies of ATS personnel.

3. ACTION BY THE MEETING

3.1   The meeting is invited to:

a) To note the information contained in this WP.

b) Urge states to establish shift supervisors, in line with their needs whether temporal or permanent

c) Urge states to enhance and/or establish fatigue management mechanisms for ATS Personnel.

d) Urge states to foster the implementation of ATFM processes and utilise the CANSO Mombasa ATFM Roadmap which has been endorsed by APIRG and adopted by CANSO members, to ensure synergy in the implementation processes.

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