

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Seventh Meeting of the APIRG Airspace and Aerodrome Operation Subgroup (AAO/SG7)

(Nairobi, 12-16 August 2024)

Agenda Item 3: Achievements in Airspace and Aerodrome Operations

3B5: Air Traffic Control and Airport Capacity assessment in support of ATFM implementation in the AFI region.

(Presented by Secretariat)

SUMMARY

This paper presents the outcomes of the workshop conducted by the ICAO Regional Offices in coordination with CANSO and the Nigeria Airspace Management Agency (NAMA) in Abuja, Nigeria from 8 to 12 July 2024, on the implementation of the air traffic control (ATC) and airport capacity assessment in the AFI region, and proposes the establishment of a project team to develop the regional framework for the implementation of ATFM in the region.

Actions by the Meeting is in paragraph 3

REFERENCES

- Annex 11 to the Convention on International Civil Aviation
- AFI Regional Air Navigation Plan (ANP)
- Report of AAO/SG6
- Report of APIRG/26
- APIRG Procedural Handbook

Strategic Objectives A - Safety, B - Air Navigation Capacity and Efficiency, D - Economic Development of Air Transport, and E - Environmental Protection.

1 INTRODUCTION

1.1 In accordance with Annex 11 (Air traffic services) to t, he Convention on International Civil Aviation Air traffic flow management (ATFM) is a service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent

possible and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

- 1.2 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, on the basis of regional air navigation agreements or, if appropriate, through multilateral agreements. Such agreements should make provision for common procedures and common methods of capacity determination.
- 1.3 You may recall that to ensure the effective implementation of Air Traffic Flow Management (ATFM) in the AFI region, the twenty sixth Meeting of the AFI Planning and Implementation Regional Group (APIRG/26), under Conclusion 26/23 thereof, requested ICAO in coordination with CANSO, IATA and ANSPs and airport operators, to conduct at least two workshops on the methodology and best practices for the determination of ATC capacity.
- 1.4 ICAO in coordination with CANSO and the Nigeria Airspace Management Agency (NAMA) therefore conducted a workshop in Abuja, Nigeria from 8 to 12 July 2024 with the participation of one-hundred and thirty-nine (139) delegates from ESAF and WACAF States and organizations.

2 DISCUSSIONS

- 2.1. The status of implementation of ATC capacity assessment and review and ATFM in the AFI region is respectively at 40% and 8%. The low level of implementation is due to the lack of expertise in States. The workshop aimed to build capacities on methodologies used to assess the ATC and airport capacity.
- 2.2. The workshop included presentations on ICAO SARPs, various methodologies, assessment tools, panel discussions and group work in breakout sessions during which participants were tasked to assess the capacity of some fictitious ATM resources, using selected methodologies applied in South America and by the Federal Aviation Administration (FAA). Groups work included regulatory framework, airport, UTA and TMA groups.
- 2.3. The outcomes of the workshop included identified challenges and recommendations aiming at facilitating the establishment of a regional framework for the step-by-step implementation of the air traffic flow management. The workshop also identified the need for the development of guidance material to support the oversight and operational aspects of capacity assessment. Accordingly, participants emphasized the need for the establishment of a Team to support States in implementing capacity assessment and prepare for the ATFM project. Considering the medium to long-term objectives of implementing ATFM in the AFI region, it is a proactive approach to establish an ATFM project team to prepare the framework to be further reflected in the AFI Regional Air Navigation Plan (ICAO Doc 7474) and Regional Supplementary Procedures (ICAO SUPPs, Doc 70390) as appropriate, and to provide the support needed by AFI States in the implementation of ATFM at national levels. The comprehensive outcomes of the workshop as well as TORs for AFTM project team are respectively at appendices 1 and 2.

ACTION BY THE MEETING

- 3.1. The meeting is invited to:
 - a) Note the information provided in this working paper;
 - b) Consider the following proposed draft conclusion.

Draft Decision XX: Establishment of an Air Traffic Flow Management implementation project team.

That to support the implementation of Air traffic Flow Management in the region, an ATFM Project Team is established to support the implementation of ATFM in the AFI Region, with the Terms of Reference provided at Appendix B to this working paper.

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APPENDIX 1









WORKSHOP ON THE METHODOLOGY FOR THE DETERMINATION OF AIRPORT AND AIR TRAFFIC CONTROL SECTOR CAPACITY

(Abuja, Nigeria, from 8 to 12 July 2024)

OUTCOMES

1. Challenges identified

- Lack of alignment between the operational initiatives and the strategic planning
- Insufficient support of the regulator to the industry initiatives
- Lack of expertise in capacity determination at both the regulatory and operational levels
- Lack of regional framework for ATFM implementation
- Inappropriate prioritization of projects at State's level
- Lack of information sharing

2. Recommendations

- Submit the proposal for the establishment of a regional ATM Capacity Support Team to develop the regional capacity assessment manual, support States in the process of capacity assessment of their ATM resources and draft the TORs for the future AFI ATFM Project Team
- Establish a regional framework for the step-by-step implementation of ATFM in AFI.
- Increase awareness initiatives through workshops, sharing of experience, regional and subregional cooperation
- Adopt a cluster approach in the regional ATFM project
- Leverage on existing initiatives in the region such as the CANSO Mombasa ATFM Roadmap.
- Increase of the capacity building in ATM resource capacity assessment through specialized training on ATFM of ATS personnel both at regulatory and operational level.
- Establish a platform for the exchange of information and experience pertaining to initiatives taken at national level in ATC Sector and airport assessment.

INTERNATIONAL CIVIL AVIATION ORGANIZATION



TERMS OF REFERENCE FOR THE AIR TRAFFIC FLOW MANAGEMENT PROJECT MANAGEMENT TEAM (ATFM PMT)

Edition August 2024

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1. ACRONYMS

| ACDM | Airport Collaborative Decision Making |
|-------|--|
| AFI | Africa-Indian Ocean |
| APIRG | Africa-Indian Ocean (AFI) Planning and Implementation Regional Group |
| ASBU | Aviation System Block Upgrade |
| ATFM | Air Traffic Flow Management |
| CDM | Collaborative Decision Making |
| GANP | Global Air Navigation Plan |
| PMT | Project management Team |

TERMS OF REFERENCE OF THE AIR TRAFFIC FLOW MANAGEMENT PROJECT MANAGEMENT TEAM (ATFM PMT)

1. Mandate

The Air Traffic Flow Management Project Management Team (ATFM PMT) is established by APIRG to develop draft guidance material and recommendations in support of the implementation of ATFM and to serve as technical platform in AFI States.

The work of the PMT will lead to regional, collaborative and harmonious implementation of ATFM in the AFI region. The ATFM PMT will operate within the framework of the ICAO GANP, Annex 11 provisions and other relevant ICAO SARPS and report into the AAO/SG concerning progress, challenges, and any other order of business.

2. Key functions

To carry out its function, the ATFM PMT shall as mandated:

- Promote in countries if required, the establishment of ATFM implementation team
- Pursue advocacy for political buy-in and commitment at the highest practical levels.
- Promote Change Management initiatives if/when required.
- Promote Information Sharing as deemed appropriate.
- Develop regional guidance material pertaining to capacity assessment of ATM resources.
- Support the development of the framework to foster the implementation of ATFM in the AFI region.
- Collect and distribute appropriate Guidance Material to promote the ATFM implementation including ATM resource capacity assessment and review, CDM/ACDM, ATFM services and infrastructure.
- Promote ATFM awareness through support of workshops, seminars, trainings and meetings.

3. Tasks

The ATFM PMT shall carry out the following tasks to fulfil its mandate:

- To facilitate countries that have not done so to domesticate the methodology recommended for the calculation of the ATC and airport capacity.
- Assist States develop guidance material including ATC capacity assessment and declaration guide, inspectorate forms and other useful material.
- Conduct regional gap analysis against existing baselines in terms of level of implementation of capacity assessment and ATFM in the region.
- Gather information on similar initiatives from other regions regarding ATFM implementation
- Develop the tools and guidance material in support of ATFM implementation in AFI.
- Develop the information sharing framework to foster the coordinated and seamless implementation of ATFM.

4. Working methods

The ATFM PMT shall convene physically at least once a year. It shall make use of available means of digital communication, including teleconferencing, to prepare and progress its work of the team.

5. Composition

The ATFM PMT shall be a multidisciplinary team made of experts from AGA, ATM, AIM, CNS and MET. The subject matter experts will be sourced from AFI states and organizations. Additional subject matter experts may be summoned by the ATFM PMT when required to give specific input as the need arises.

6. Duration

The duration of the ATFM PMT should be as per APIRG procedural Handbook or as guided by APIRG decision.

7. Quality assurance

The ATFM PMT will be supervised by the secretariat to ensure that it is complying with its mandate and required changes/modifications to said team will be channeled through the AAO/SG for ratification at APIRG