



ICAO

AAO-SG6 WP/3.D3

INTERNATIONAL CIVIL AVIATION ORGANIZATION

SIXTH MEETING OF THE APIRG AIRSPACE AND AERODROME OPERATIONS SUB-GROUP (AAO/SG6),

(Dakar, Senegal 21 - 25 August 2023)

Agenda Item 3: Achievements in Airspace and Aerodrome operations

WP 3.D3: 2023 AVIATION INFRASTRUCTURE GAP ANALYSIS

(Presented by AFCAC)

SUMMARY

AFCAC, AUC and ICAO jointly coordinated and convened the 1st Technical Working Group (TWG) meeting from 27th to 30th June 2023 in Casablanca, Morocco to launch the 2023 Aviation Infrastructure Gap Analysis in Africa that will be conducted for 12 months from June 2023. The overall objective of the workshop was to mobilize all concerned stakeholders to provide from the onset their technical expertise through the Technical Working Group. The workshop outputs were (i) Project Document; (ii) Rules of Procedures; (iii) implementation Strategy; and (iv) Draft Work Plan for the conduct of the Africa-wide Aviation Infrastructure Gap Analysis.

Action required: - support recommendations in paragraph 5 of this working paper.

REFERENCES:

- AFCAC Constitution
- AFCAC 10-Year Strategic Plan (2022-2032)
- Concept Note –Concept Note on Aviation Infrastructure Gap Analysis Technical Working Group Workshop
- AFCAC Experts Working Groups Terms of Reference

1. Introduction

1.1 The African Union (AU) launched the Single African Air Transport Market (SAATM) initiative in January 2018 and one of its key objectives was the development of a seamless African Airspace Architecture that would provide safe, efficient interoperable air navigation services throughout the continent. As part of this initiative, the AU in collaboration with AFCAC and ICAO intends to

undertake a continental aviation infrastructure gap analysis with the objective of establishing the gaps existing in the airports and air navigation infrastructure and services with a traffic projection of 25 years.

- 1.2 The ultimate goal is to develop a clear roadmap for achieving a Seamless Airspace and Air Navigation Systems Architecture to cope with the expected increase in traffic while addressing associated challenges in terms of aviation safety, airspace capacity and effectiveness of air transport operations in a seamless environment. Seamlessness of the Air Navigation Systems operations should be achieved through investment and implementation in interoperable and integrated air navigation infrastructure supported by modern technologies consistent with the ICAO Global Air Navigation Plan, Regional Plans for air traffic management, communications, navigation, surveillance, information management and avionics.
- 1.3 The Third ICAO World Aviation Forum (IWAF/3) held in Abuja, Nigeria in November 2017 adopted a Communique, Declaration and Framework for a Plan of Action for Development of Aviation Infrastructure in Africa which will be implemented with the African Union Programme for Infrastructure Development in Africa (PIDA) and included in its priority projects for the period 2020-2030, in cooperation with AfDB, AUC and African Union Development Agency (AUDA-NEPAD). Amongst others, the 2017 Abuja Ministerial Declaration and Framework for a Plan of Action for Development of Aviation Infrastructure in Africa highlighted the need for the conduct of an aviation infrastructure gap analysis for African States and a study on capacity building.
- 1.4 In 2019, ICAO conducted and concluded an aviation infrastructure gap analysis as a follow-up to the IWAF/3 decision on aviation infrastructure. Only 26 African member States responded to the infrastructure questionnaires circulated by ICAO. In addition, the outcomes were only validated for 5 years beginning 2019 until 2025.
- 1.5 Activity 1 and Activity 5 of the Pillar 4, Aviation Infrastructure Improvement under the JPAP/SAATM requested the AUC in collaboration with AFCAC and ICAO to undertake a Gap Analysis on Airspace Infrastructure Needs in the Continent. The AUC also received financial support from the World Bank to finance the Aviation Infrastructure Gap Analysis in Africa.
- 1.6 Results of the Aviation Infrastructure Gap Analysis are an important input to the successful development of the Seamless African Airspace Architecture. This plan is aimed at enhancing safety, capacity and efficiency in the provision of Air Navigation Services through harmonization of operations and procedures, implementation of Performance Based Navigation (PBN) routes, assignment and allocation of common secondary surveillance radar (SSR) codes and investment in interoperable and integrated CNS/ATM systems.

2. Discussion

- 2.1 In fulfilment of the foregoing, AFCAC, AUC and ICAO jointly coordinated and convened the 1st Technical Working Group (TWG) meeting to launch the 2023 Aviation Infrastructure Gap Analysis in Africa with a 25 year traffic demand forecast.
- 2.2 The Infrastructure Gap Analysis shall cover the entire African continent consisting of 55 African member States. It is necessary to identify and focus on key high level infrastructure related elements and determine the appropriate parameters to define the gaps in each of these.
The scope of work includes gathering specific data from member States relating to:

- (i) International aerodromes;

- (ii) Air navigation services (ATM, CNS, Meteorology, Search & Rescue, AIM);
- (iii) Airlines (aircraft fleet and equipage); and
- (iv) Traffic forecasts up to 25 years.

2.3 The AUC, AFCAC, ICAO, IATA, AFRAA, COMESA, BAGASOO, SASO, CASSOA, ATNS, ASECNA, SATNAV JPO, Member States representatives and experts from AFCAC ANS Expert Working Group participated in the 1st Technical Working Group. The TWG deliberated over the requirements for initiation of the project and as a result several documentations were developed and adopted by the end of the workshop to support and guide the Aviation Infrastructure Gap Analysis project.

3. Key Outcomes

As a result of the extensive consultations during the workshop, the outcomes of the TWG included the following: -

- Rules of Procedures for the TWG;
- Project Document for the Aviation Infrastructure Gap Analysis in Africa; and
- Report of the 1st TWG Meeting;
- Responsibility Matrix;
- Coordination Strategy;
- Project Gantt Chart.

4. Conclusion

Following the successful workshop discussions on the sharing of best practices and experiences by ICAO, AUC, AFCAC, Member States, International Organizations and RECs, the Workshop made the following recommendations: -

- a) AUC, AFCAC, ICAO, International Organizations and Member States to carry out sensitization and awareness including capacity building activities as necessary; and
- b) Urge all stakeholders to participate in the Aviation Infrastructure Gap Analysis by providing the relevant data through the established mechanism.

5. Action required

The Meeting is invited to: -

- a) Take note of the 2023 Aviation Infrastructure Gap Analysis initiative; and
- b) Encourage Member States, international organizations and all stakeholders to support the data gathering and analysis processes.

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