



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Twenty Third Meeting of the Africa-Indian Ocean Planning and Implementation Regional Group (APIRG/23)

(Virtual, 24 - 26 November 2020)

Agenda Item 2: Performance Framework for Regional Air Navigation Planning and Implementation

2.1. Outcome of the Third meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO/SG/3)

(Presented by Secretariat)

SUMMARY

This paper presents the outcomes of the Third Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO/SG3), held virtually, from 3 to 5 August 2020.

Due to the prevailing COVID-19 circumstances, the Sub-Group extended the mandates of its Chairperson and Vice Chairperson until its next meeting. The Sub-Group reviewed the status of implementation of APIRG/22 Conclusions/Decisions applicable to the AAO/SG, identified those that continue to be valid as well as actions required by States, regional organizations and ICAO Regional Offices to further facilitate and support their effective implementation. The meeting also reviewed the status of implementation of specific Projects adopted by APIRG, discussed the Projects challenges and follow-up coordination actions by all parties. Finally, the meeting discussed the progress made in relation to the AFI Air Navigation Deficiencies Database and reviewed its Terms of Reference (TOR).

Action by the meeting is at paragraph 3

REFERENCE(S):

- Doc 7300, Convention on International Civil Aviation, 1944
- Doc 9750, Global Air Navigation Plan
- Doc 7474, Air Navigation Plan — Africa-Indian Ocean Region
- Doc 10115, Report of the Thirteenth Air Navigation Conference (2018)
- APIRG Reports
- AAO/SG2 Report
- AAO/SG ToR

Related ICAO Strategic Objective(s):

A – Safety, **B** – Air Navigation Capacity and Efficiency, **D** – Economic Development of Air Transport, and **E** – Environmental Protection.

1. INTRODUCTION

1.1. The Third Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO/SG3) was held virtually, from 3 to 5 August 2020. The meeting was attended by two hundred and forty-three (243) participants, from twenty-eight (28) AFI States and nine (9) Regional and International Organizations. Discussions were conducted in English and French languages with simultaneous interpretation. For ease of reference, copy AAO/SG3 report is provided at Appendix 1 to this working paper.

2. DISCUSSION

2.1 The following issues were given particular attention by the Airspace and Aerodrome Operations Sub-Group (AAO/SG).

2.2 Review of the APIRG Conclusions/Decisions applicable to the AAO/SG

2.2.1 The meeting reviewed the status of implementation of the APIRG/22 Conclusions and Decisions applicable to the AAO/SG. The meeting appreciated progress made in the implementation of some Conclusions and Decisions. In order for AAO/SG to report efficiently and in a timely manner, the meeting recognized the need for States to improve the flow of information provided to ICAO Regional Offices regarding the status of implementation.

2.3 Planning and implementation

2.3.1 The meeting recalled the APIRG/22 Conclusion 22/01 on the Effective implementation of AFI Regional ANS projects and noted the various challenges being experienced by the AAO/SG, specifically effective and efficient implementation of APIRG projects. The status of implementation of AAO/SG Projects is presented in the tabular form and attached as **Appendix 2** to this working paper.

2.3.2 In consideration of the fact that not much progress has been made in the implementation of the projects due to various reasons, the AAO/SG3 in reviewing the status of implementation, also considered the relevance of the projects in line with the GANP and current regional challenges and determined projects validity and possible merge adjustment, or cancellation. Similarly, the meeting requested to consider the availability of expertise in the region for all the projects, and if not, propose the way forward.

2.4 Airspace (safety, capacity and efficiency)

2.4.1 AFI ATM Master Plan

2.4.1.1. The meeting in reviewing APIRG/19, 20, 21 and 22 Conclusions relating to the Projects and ASBU module elements implementation noted that all activities listed to be taken were components of the Global ATM Operational Concept (Doc 9854), for which the development of a comprehensive Regional ATM Master Plan was required. It was found that development of the Master Plan, encapsulating the expected outcomes, and appropriately linked to national ATM Master Plans, would be a more prudent approach. In this regard, the meeting formulated the following Draft Decision:

Draft Decision 23/XX: Establishment of an AFI ATM Master Plan Project Management Team (AAMP PMT)

That, in order to foster the development of the AFI ATM Master plan required to provide the roadmap for the implementation of a seamless AFI ATM system,

- a) **An AFI ATM Master Plan Project Management Team (AAMP PMT) is established.**
- b) **The composition and tasks assigned to the Project Team are in Appendix 3**

to the meeting report and may include any other identified experts from the region.

2.4.2 *CONOPS for Free Routing Airspace Implementation in AFI*

2.4.2.1 The meeting recalled that APIRG/21 discussed on issues on improved operations through Enhanced En Route Trajectories under ASBU modules, and noted with appreciation that some AFI FIRs in the region were already implementing free routing trials.

2.4.2.2 It was observed that the region should build on the experience gained in other such initiatives e.g. Atlantic Ocean Random Routing Area (AORRA) and Arabian Sea Indian Ocean (ASIO) User Preferred Routing (UPR). It was also agreed that AAO/SG would facilitate implementation actions by States and ANSPs that were ready to commence free routing trials, and coordinate such trials between the applicable FIRs. Emphasis was laid on the importance of working together to ensure that large portions of airspace covering multiple FIRs implement FRA, in order to realize significant benefits for users.

2.4.2.3 Considering the ICAO SARPs, lessons learnt from the current implementation of DRO in the AFI region and lesson learnt from different regions around the World, the Secretariat and IATA proposed a draft Concept of Operations (CONOPS) for Free Routing Airspace (FRA) which can provide a framework for a safe and harmonized implementation for FRA in AFI States. The Draft AFI FRA concept of operations is contained in Appendix 5 to the meeting report. The meeting also discussed the need to extend the participation in the established East Africa FRA case study project to additional States. The meeting therefore formulated the following Conclusion and Decision to support FRA implementation.

Draft Conclusion 23/XX: Prioritization of Free Routing Airspace implementation

That, in order to support the recovery of aviation industry from the divesting financial impact of COVID 19, reduce aviation environmental footprint, and contribute to the attainment of ICAO strategic objectives, States are encouraged to prioritize Free Route Airspace (FRA) implementation.

2.4.3 *AFI RVSM Collision Risk Assessment 13 Report*

2.4.3.1 The meeting recalled ARMA's mandate and was updated on the total vertical collision risk against a TLS of 5×10^{-9} fatal accidents per flight hour and list of CRA Reports. Concern was expressed on the few provision of data by FIRs and the persistent deficiencies in the AFI Region, in particular those affecting the safety of aircraft operations. The meeting recalled the APIRG/22 & RASG-AFI/5 Conclusion 1/04 related to RVSM Airspace Monitoring, on the requirement for States to provide monthly data to ARMA. Noting that most national RVSM focal points require training on what type of data is required by ARMA, the meeting formulated the following Conclusion:

Draft Conclusion 23/XX: RVSM data returns and Large Height Deviations reporting

That in order to improve the level of States reporting to ARMA:

- a) States update ARMA with their national RVSM Managers details and establish a mechanism to ensure that RVSM monthly data returns and incident investigation reports of large height deviations (LHDs) are provided to ARMA in a timely manner
- b) ICAO and ARMA conduct an awareness workshop to the State's appointed

- national RVSM Focal Points, responsible for RVSM data returns to ARMA by end of 2020; and**
- c) **State carry out an in depth incident investigation to all reported large height deviations.**

2.4.4 *Status of Implementation of TAG/11 and TAG/12 recommendations*

The meeting was informed of the status of implementation of the recommendations by the TAG/11 and TAG/12 meetings held in Johannesburg, South Africa, on 8 March 2019 and 13 March 2020 respectively, where follow-up actions have been established according to information available at the Secretariat. The Sub-Group in recognizing the importance of the AIAG reports for the safety of the AFI region and in accordance with SP AFI/08 Recommendation 4/6, recommended that ICAO should coordinate the communication from AIAG to the concerned States. The Sub-Group therefore agreed on the following Conclusion:

Draft Conclusion 23/XX: Implementation of TAG and AIAG Recommendations

That in order to have a harmonised implementation of the TAG and AIAG recommendations and improve the target level of safety in the AFI airspace:

- a) **States concerned are urged to implement the AIAG/17 and AIAG/18 recommendations in the aim to reduce the high level of incidents and provide feedback to ICAO Regional Offices by 31 January 2021;**
- b) **ICAO Regional Offices coordinate the communication from AIAG to the identified States with deficiencies; and**
- c) **ICAO Regional Offices forward the TAG/11 and TAG/12 Reports to States and urge them to implement the applicable recommendations in a timely manner.**

2.4.5 *PBN Implementation*

The meeting recalled APIRG/22 Conclusion 22/07 on PBN implementation which urged States to review their PBN implementation plans to ensure that they are robust and detailed to effectively support implementation, are formally adopted at the appropriate level of the State/ANSP and are accordingly funded. The meeting was informed that some States submitted national PBN implementation plans to the ICAO Regional Offices, some of them being based on the old template. The meeting finally requested the Regional Offices and AFPP to conduct a survey on PBN flight procedure and CCO/CDO implementation in the AFI region. The meeting therefore agreed on the following Conclusion:

Draft Conclusion 23/XX: Implementation of PBN

That in order to improve the level of PBN implementation:

- a) **ICAO and AFPP conduct a National PBN Implementation Plan (NPIP) development virtual workshop aiming to assist States in developing/updating their NPIP by end of 2020.**
- b) **ICAO and AFPP conduct a survey on PBN flight procedure and CCO/CDO implementation in the AFI region by end of 2020.**
- c) **States that have not yet developed their National PBN Implementation Plan (NPIP) coordinate with the ICAO Regional Offices and AFPP for assistance.**
- d) **States that have already developed their NPIP review their NPIP as a matter of urgency in order to align them with the new ICAO NPIP format.**

2.4.6 *PBCS Monitoring*

The meeting recalled APIRG/22 Conclusion 22/12, which required ICAO to request South Africa, as a matter of urgency, to facilitate the inclusion of PBCS monitoring in the functions and responsibilities of the AFI Regional Monitoring Agency (ARMA). Considering all that is required for the implementation of PBCS in the region, the meeting noted the need to provide necessary expertise for both functional areas (RVSM and PBCS), as well as associated support to States and service providers as applicable. The Secretariat was tasked to coordinate the establishment of PBCS implementation team to finalize the draft AFI region PBCS plan, and develop an implementation roadmap in collaboration with IIM/SG. The meeting therefore formulated the following conclusion and Decision.

Draft Decision 23/XX Development of the AFI region PBCS plan and establishment of PBCS implementation team

That in order to have a coordinated approach to PBCS implementation:

- a) **A PBCS implementation Team is established;**
- b) **The Secretariat coordinates with the established PBCS implementation Team to finalize the draft AFI region PBCS plan, provide awareness, develop an implementation roadmap in collaboration with IIM/SG, States and stakeholders, and align with the AFI vision document, CONOPS and ATM Master Plan by 31 May 2021.**
- c) **ICAO Regional Offices in coordination with AFI Regional Monitoring Agency (ARMA) provides necessary expertise for both functional areas (RVSM and PBCS), as well associated support to States and service providers as applicable.**

2.4.7 ASCAAR

The meeting noted the progress made in the implementation of the AFI Secondary Surveillance Radar (SSR) Code Allocation and Assignment Review (ASCAAR) Project. The ICAO Regional Offices will circulate a Letter requesting States to appoint the ASCAAR project focal points as a matter of urgency to ensure project coordination and implementation in line with the APIRG 22 timelines.

2.4.8 SAR

The meeting was updated on the progress made in the implementation of the Search and Rescue Project under the AFI Plan. Lack of appointment by States of SAR Points of Contact (SPOC), was identified as the main cause of slow progress on implementation of key elements of ae SAR system. The meeting therefore formulated the following Conclusion:

Draft Conclusion 23/XX: Appointment of State SAR Points of Contacts:

That in order to expedite the implementation of key SAR elements and ensure an effective coordination of SAR in the region,

- a) **ICAO Regional Offices circulates a State Letter reminding States to nominate SAR Point of Contact (SPOC) and communicate the nominees to the ICAO Regional Offices as a matter of urgency;**
- b) **States establish National SAR Coordinating Committee and ensure implementation of the SAR improvements.**

2.4.9 *Civil/Military Cooperation and Coordination*

The meeting recalled APIRG/22 & RASG-AFI/5 Conclusion 1/03, which urged AFI States to make concerted efforts to implement enhanced effective civil / military coordination and cooperation in the

pursuit of improving both safety and efficiency in the region. Noting the importance of fostering improved efficiency in airspace management through civil/military coordination, the meeting formulated the following conclusion:

Draft Conclusion 23/XX: Improved civil/military coordination:

That in order to improve civil/military coordination:

- a) ICAO conducts a Civil/Military cooperation workshop by 30 April 2021.
- b) ICAO circulates a State letter requesting States to establish Civil / Military Cooperation Committees, develop Civil/Military Manual and Standard Operating Procedures and a Memoranda of Cooperation (MOC) by end of 2020.

2.4.10 *Overflight Clearance Permission*

2.4.10.1 The meeting was reminded of the provisions of Article I section 1 of the Chicago Convention which requires each contracting State to grant other contracting States the privilege to fly across its territory and; landing for non-traffic purposes. It was recommended to States to develop a standardized and simple format to be used as an application tool to be forwarded to an automatic self-generating permit approval number.

2.4.10.2 South Africa reiterated that the processes for granting OVFC varied from one country to another, dependant on many prevailing circumstances including security considerations, and involved different national agencies and authorities. In order to foster improvement in the approval process of over flight clearances, the meeting agreed on the following draft Conclusion;

Draft Conclusion 23/XX: Process and Procedures for Overflight Clearances

That, in order to foster improvement in the approval process of over flight clearances and in view of the COVID-19 pandemic restart and recovery,

- a) States are encouraged to review their authorization procedures for overflight clearance (OVFC) for civil aircraft with a view to granting speedy approval to scheduled and non-scheduled flights.
- b) States are encouraged to publish a (globally) simplified and standardized process taking advantage of automation in order to expedite OVFC approval process and issuance of overflight clearance/permits
- c) States are encouraged to include provisions for overflight clearance (OVFC) and non-traffics stops in the Bilateral Agreements (BASA) and Multilateral Agreements to include such exceptions as may be suitable for their airline's operations.

2.5 Aerodrome Operations – (Safety, Capacity and Efficiency)

2.5.1 *Status of implementation of Aerodrome Operations Projects and ASBU Modules*

2.5.1.1 The meeting was updated on the status of implementation of Projects and ASBU modules related to aerodrome operations as well as challenges faced in the implementation. The meeting noted that few responses had been received so far from States and feedback on Projects Teams activities remained low. The meeting therefore agreed to review the Project Team composition.

2.5.1.2 The meeting recognized that the aerodrome certification project design and

implementation includes both oversight and SARPs implementation aspects (covered by AAO/SG activities). Therefore, the meeting considered merging the Projects 2, 3, 4, 5, 7 and 9 under the aerodrome certification project (see Appendices 3 and 4 of the working paper). This will avail more resources and improve the efficiency of the Projects implementation. The meeting therefore formulated the following Conclusion and Decision:

Draft Conclusion 23/XX: Implementation of Aerodrome Operations Projects and ASBU Modules

That in order to improve the Projects implementation efficiency and avoid duplication of efforts, and based on linkages between Projects, Projects 2, 3, 4, 5 and 7 are merged with the aerodrome certification Project as per Appendices 3 and 4 to this working paper.

Draft Decision 23/XX: Implementation of Aerodrome Operations Projects and ASBU Modules

That to foster the implementation of the Projects

- a) **The Project Teams have been revised as per the Appendix 4 to this working paper.**
- b) **Project Teams are tasked to coordinate the development/or revision of project documents and implementation strategies in collaboration with the Secretariat before end of 2020;**
- c) **Project Teams report quarterly on the progress made in the implementation of the projects to the AAO-SG; and**
- d) **The Secretariat to circulate a follow-up State Letter to concerned States and organizations, requesting the formal nomination of the Project Teams members and reminding them to provide adequate support to the Project Teams activities**

2.5.2 *Amendments to ICAO Annex 14 Volumes I and II and PANS-Aerodromes*

The meeting was informed that the Amendment 15 to Annex 14, Volume 1 (Aerodrome Design and operations); amendment 9 to Annex 14, Volume II (Heliports) and amendment 3 to the Procedures for Air Navigation Services (PANS) - Aerodromes (Doc 9981), were adopted by the Council at its 219th Session, with 20 July 2020 as the effective date and 5 November 2020 as the applicable date. The meeting identified the need for States to take appropriate actions.

2.5.3 *Global Format for Reporting of Runway Surface Conditions (GRF)*

The meeting recalled Conclusion 22/41 on the Implementation of the Runway surface conditions (GRF) of the APIRG/22 meeting, urging States to set up national and local plans with dedicated Teams for the implementation, and report on the implementation of the GRF to the ICAO regional Offices. The meeting noted that despite several initiatives (workshops, training, etc.) conducted by ICAO and other Partners, the level of implementation and stakeholder's involvement/commitment remains low in the States. Few States in addition reported the status of implementation of the GRF provisions to the ICAO Regional Offices. The Sub-Group therefore urged States to implement the APIRG's Conclusion 22/41.

2.5.4 *COVID 19 - ICAO CART Recommendations related to the AAO/SG Activities*

The meeting was updated on the ICAO Council Aviation Recovery Task Force (CART) report recommendations related to the AAO/SG activities to support the restart and recovery of the air transport industry. The meeting discussed safety measures and other guidelines and tools of the matter

of interest of the Sub-Group activities including the Public Health Corridor (PHC) Implementation Initiative, the Global Implementation Roadmap (GIR), the Implementation Packages (iPACKs); and COVID-19 Response and Recovery Implementation Centre (CRRIC). The meeting then agreed on the following conclusion.

Draft Conclusion 23/XX: **CART Recommendations related to AAO/SG Activities**

That, to support the Restart and Recovery of the air transport industry:

- a) States are urged to ensure appropriate implementation of the CART recommendations related to Airspace and Aerodrome Operations;**
- b) States monitor, document, and report their progress through the CRRIC; and review NOTAMS to ensure their updates along the resumption of air operations.**

2.6 Air Navigation Infrastructure Gap Analysis

The meeting was updated on the 2019 Aviation Infrastructure for Africa Gap Analysis, which was conducted by the AFI Plan Secretariat in response to ICAO Council Decision (C-DEC 24/7) on the implementation of the IWAF/3 Declaration and Framework for a Plan of Action for Development of Aviation Infrastructure in Africa. The Gap Analysis exercise using detailed State survey covering Airports, Air Navigation Services, and Aircraft fleet capacity and equipage was conducted accordingly, and its outcome validated through a workshop held in Abuja, from 19 to 21 March 2019.

For the purpose of the exercise, information was gathered through a detailed States survey, and complemented with material from the ICAO database and other sources. The questionnaire used for the survey and the outcomes of the Workshop as well as the methodology used for the Gap analysis, were discussed by the meeting. The meeting therefore formulated the following Conclusion and Decision.

Draft Conclusion 23/XX: **Endorsement of the survey questionnaire for the conduct of Air Navigation Infrastructure Gap Analysis**

That to harmonize the conduct of the Aviation Infrastructure Gap Analysis, the survey questionnaire pertaining to Airspace and Aerodrome Operations for the conduct of Aviation Infrastructure Gap Analysis is endorsed.

Draft Conclusion 23/XX: **Data collection for Air Navigation Gap analysis**

That to speed the implementation of the outcomes of the 2019 Aviation Infrastructure for Africa Gap Analysis Workshop,

- a) The ICAO Regional Offices circulates letters to States for data collection for the 25-years gap analysis horizon exercise; and**
- b) States are urged to respond to the questionnaire upon reception of States letters.**

2.7 The AFI Air Navigation Plan

The meeting was updated on the AFI Air Navigation Plan and related amendment processes. States were encouraged to review and amend when necessary the information contained in the Volumes I and II of the AFI ANP, in accordance with the established procedures for amendment (PfAs) of the AFI ANP; and provide timely inputs to ICAO ESAF and WACAF Regional Offices on Volume III, once the PfA is circulated. The meeting was finally updated on the Sixth Edition of the GANP with the updated ASBU framework and the initial version of the Basic Building Blocks (BBBs) framework.

2.8 The AFI Air Navigation Reporting Forms

The meeting appreciated the work done by the Secretariat in updating the AFI Air Navigation Report Forms (ANRFs). However, it was noted that, the reporting by AFI States of implementation progress called for under the APIRG Conclusion 20/05 was still limited and that the level of responses on surveys conducted by the ICAO Regional Offices to collect information on the ASBU implementation was still very low. In order to provide assistance to States in filling the ANRF, the meeting agreed on the following Conclusion.

Draft Conclusion 23/XX: Establishment of mechanism for air navigation reports

That in order to provide assistance to States in filling the ANRF:

- a) **ICAO Regional Offices organize a workshop to sensitize States on filling of ANRF be organized by 31 March 2021**
- b) **States establish a mechanism for the collection of data to ensure annual reporting to the ICAO Regional Offices of air navigation upgrades, improvements and modernization, in particular information on status of implementation of ASBU modules.**

2.9 AFI Air Navigation Deficiency Database

The meeting recalled the APIRG/22 Conclusion 22/32 urging ICAO to expedite the operationalization of the AFI Air Navigation Deficiency Database. The meeting reviewed the AANDD management process developed by the Secretariat (Appendix 5 to the meeting report), aiming to coordinate the collection and management of deficiencies as well as the revised list of minimum reporting areas pertaining to the AAO/SG, which include the AOP part as well as new evolutions, as per Appendix 6 to this working paper.

The meeting was updated on the ongoing works aiming to improve the database. In preparation of the States Focal Points training, the meeting was informed that a State Letter, requesting the nomination or confirmation of Focal points who will be granted with access credentials for interaction with the AANDD, was sent with few responses. The meeting therefore formulated on the following Conclusion.

Draft Conclusion 23/XX: Endorsement of AANDD Management process and minimum Reporting Areas and nomination of AANDD Focal Points

That in order to support the implementation of the Uniform Methodology for the identification, assessment and reporting of deficiencies,

- a) **The AFI Air Navigation Deficiencies Database management process as well as the revised minimum reporting areas pertaining to Airspace and Aerodrome Operations are endorsed;**
- b) **States and Organizations that have not yet done so, are urged to nominate as a matter of urgency Focal Points for interaction with the AANDD**

2.10 AAO/SG contribution to the APIRG Annual Report

The meeting discussed the AAO/SG contribution to the APIRG Annual Report (ANR) and recalled the need for States to report efficiently and in a timely manner, by improving the level of information provided to ICAO Regional Offices with regard to the implementation. In addition to information provided by States, International organizations, including those of airspace users, airports and ANSPs, should support the Secretariat by sharing information. A survey questionnaire was presented to the meeting and submitted to States to provide inputs for the publication of the first AFI ANR. In addition,

the meeting established a small working Team comprising Ghana, DRC, Kenya, Nigeria, Rwanda, South Africa, Uganda, ASECNA, CANSO and IATA; to work with the Secretariat towards the ANR publication.

2.11 Terms of reference (ToR), composition and future work programme of the AAO/SG

2.11.1 The Sub-Group reviewed its terms of reference (ToR) and agreed after deliberations on the matter, that there was no justification for changes or modifications, and accordingly endorsed the ToR. The Sub Group in addition updated its Work Programme until its next session.

2.11.2 The meeting was updated on the participation of States and Organizations to the Sub-Groups activities. Indeed, few States and Organizations that have been identified to provide core expertise as per the APIRG Conclusion 21/06, have done so up to now; while several new States showed at the same time their interest to contribute to the Sub-Group activities. The meeting therefore formulated the following draft conclusion and decision.

Draft Conclusion 23/XX: Nomination to AAO/SG Core Membership

That in order to maximize active participation of States in the APIRG projects, States willing to contribute to the Sub-Group activities as core members, should send letters of nomination with the CVs of the nominees to the ICAO Regional Offices.

3 ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Note the information provided in the AAO/SG3 meeting report
- b) Take action on the proposed draft conclusions and decisions.

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