

INTERNATIONAL CIVIL AVIATION ORGANIZATION



THE AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)

**REPORT OF THE FIFTH MEETING OF THE
AIRSPACE AND AERODROME OPERATIONS SUB-GROUP
(AAO/SG5)**

Virtual Meeting, 23 to 26 August 2022

The views expressed in this Report should be taken as those of the APIRG AAO Sub-group and not of the Organization. This Report will, however, be submitted to the APCC and APIRG and any formal action taken will be published in due course as a Supplement to the Report.

**Approved by the Meeting and
published under the authority of the Secretary General**

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LIST OF ABBREVIATIONS

AAMP	AFI ATM Master Plan
AAMP PMT	AFI ATM Master Plan – Project Management Team
AANDD	AFI Air Navigation Deficiencies Database
AANRT	Annual Air Navigation Reporting Team
AAO/SG	APIRG Airspace and Aerodrome Sub-group
A-CDM	Airport Collaborative Decision Making
AFCAC	African Civil Aviation Commission
AFI	Africa and Indian Ocean
AFI ATM CP	AFI ATM Contingency Plan
AFI CONOPS	AFI Concept of Operations
AFI FRA	AFI Free Route Airspace
AFI FRA PMT	AFI Free Route Airspace Project Management Team
AFI SSR CMP	AFI Secondary Surveillance Radar Code Management Plan
AFI VACP	AFI Volcanic Ash Contingency Plan
AFRAA	African Airlines Association
AFTN	Aeronautical Fixed Telecommunication Network
AIM	Aeronautical Information Management
ANSP	Air Navigation Service Provider
AOP	Aerodromes Operations and Planning
APCC	APIRG Projects Coordination Committee
APIRG	AFI Planning and Implementation Group
ARC-TF	APIRG/RASG-AFI Coordination Task Force
ARMA	African Regional Monitoring Agency
ASCAAR	AFI Secondary Surveillance Radar Codes Allocation and Review
ASBU	Aviation System Block Upgrades
ASECNA	Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar
ATSCS	ATS Competency Study
ATM	Air Traffic Management
BBB	Basic Building Block
CAA	Civil Aviation Authority
CANSO	Civil Air Navigation Services Organisation
CNS	Communication Navigation Surveillance
CPDLC	Controller Pilot Datalink Communications
EAC	East African Community
FIRs	Flight Information Regions
GANP	Global Air Navigation Plan
GASP	Global Aviation Safety Plan
GRF	Global Reporting Format
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IIM SG	Infrastructure and Information Management Sub-group
MET	Aeronautical Meteorology
NCPI	National Coordinator for Planning and Implementation
NCLB	No Country Left Behind
PBN	Performance Based Navigation
PBCS	Performance Based Communication and Surveillance

RASC	RASG-AFI Steering Committee
RASG-AFI	AFI Regional Aviation Safety Group
RPAS	Remotely Piloted Aircraft Systems
RSOO	Regional Safety Oversight Organization
RVSM	Reduced Vertical Separation Minimum.
SAR	Search and Rescue
SARPs	Standards and Recommended Practices
SBAS	Satellite-based Augmentation System
SLOP	Strategic Lateral Offset Procedure
SSO-SST	State Safety Oversight System Support Team
SSP – SST	State Safety Programme Safety Support Team
SSTs	Safety Support Teams
TAG	Tactical Action Group
UN SDGs	United Nations Sustainable Development Goals

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LIST OF DRAFT CONCLUSIONS AND DECISIONS

DEFINITIONS

AAO/SG records its actions in the form of draft Conclusions/Decisions or Decisions as follows:

- a) **Draft Conclusions or draft Decisions:** Action by the Sub-group that requires the prior agreement of the APIRG before it can be implemented or otherwise. All such proposed actions shall be considered by the APIRG at its next meeting subsequent to the issue of the Sub-groups' report.
- b) **Decisions by the Sub-group:** Actions which do not necessarily require prior agreement of the APIRG and that may be carried out by the specific Sub-group and its members or the Secretariat where such action is applicable.

No.	AAO/SG5 Draft Conclusions and Decisions	
1.	Draft Conclusion 5/01	Adoption of the ASBU Elements applicable to airspace and aerodrome operations in the AFI Region
2.	Draft Conclusion 5/02	Data collection and reporting on ASBU implementation
3.	Draft Conclusion 5/03	Review and implementation of the AFI ATM Contingency Plan (AFI ATM CP)
4.	Draft Decision 5/04	Effectiveness of the AFI ATM Contingency Plan (AFI ATM CP)
5.	Draft Conclusion 5/05	Implementation of the AFI Free Route Airspace (AFI FRA)
6.	Draft Conclusion 5/06	Improved safety in the AFI RVSM Airspace
7.	Draft Decision 5/07	Nomination of State RVSM Subject Matter Focal Points
8.	Draft Conclusion 5/08	Report on the implementation of the AFI SSR CMP
9.	Draft Conclusion 5/9	Report of the ATS Competency Study
10.	Draft Decision 5/10	Civil/Military Cooperation
11.	Draft Conclusion 5/11	AFI ATM Summit 2023/2024
12.	Draft Conclusion 5/12	Development of the AFI eANP Volume III
13.	Draft Decision 5/13	Work Programme of the AAO/SG for 2022/2023

PART I – INTRODUCTION

1. Place and duration

1.1 The fifth Meeting of the APIRG Airspace and Aerodrome Operations Sub-group (AAO/SG5) was held virtually, from 23 to 26 August 2022.

Attendance

1.2 One hundred and forty-two (142) participants from AFI States and Regional/International Organizations attended the meeting. The list of participants is in **Appendix 1** of this Report.

Officers and Secretariat

1.3 Mr. Billy Diabasenga Kusuamina (Democratic Republic of Congo), Chairperson, and Mr. Nathan Kaluba (Zambia), Vice Chairperson, chaired the meeting.

1.4 Mr. Elisha Omuya, Regional Officer AGA, ICAO Eastern and Southern African Office (ESAF), served as the Secretary of the meeting. Ms. Keziah Ogutu, Regional Officer ATM/SAR (ESAF) and Ms. Prisca Nkolo, Regional Officer AGA, Western and Central African Office (WACAF), supported the work of the Secretariat.

Working languages

1.5 The discussions were conducted in English and French languages with simultaneous interpretation services. The documentation was made available on the ICAO website in both languages.

Opening of the meeting

1.6 Mr. Prosper Zo'o Minto'o, ICAO Regional Director, WACAF Office, and Secretary of the AFI Planning and Implementation Group (APIRG) delivered the opening remarks.

1.7 He expressed his appreciation to the various States and Organizations for facilitating the participation of their experts in the meeting. He thanked Mr. Billy Diabasenga Kusuamina and Mr. Nathan Kaluba, respectively Chairperson and Vice Chairperson of the Sub-group, for their leadership and the support provided to the Sub-group.

1.8 The Regional Director reminded the meeting of the various Conclusions and Decisions of APIRG applicable to the AAO/SG that call for actions, including coordination with the IIM Sub-group. He emphasized the identification of the ASBU elements applicable to the AFI Region as well as the development of the Volume III of the AFI eANP.

1.9 He highlighted the role of the States Focal points in each technical area (AOP, ATM/SAR) in contributing to the resolution of airspace and aerodrome operations issues. He encouraged States to continuously update the Regional Offices on deficiencies and challenges in implementing requirements.

1.10 The Regional Director further acknowledged the support received from the stakeholders on initiatives and other assistance activities in the areas of ATM/SAR and AOP through collaboration with the ICAO Regional Offices. He concluded by calling on the States' commitment to the activities of the Sub-group in order to address the challenges related to Airspace and Aerodrome Operations in the AFI Region.

2. Agenda

The meeting adopted the following agenda:

- Agenda Item 1:** Adoption of the agenda and the work programme
- Agenda Item 2:** Status of the implementation of Conclusions and Decisions of the AAO/SG4 Meeting and the APIRG/24 Meeting applicable to the Sub-group
- Agenda Item 3:** Achievements in Airspace and Aerodrome Operations
- 3.1. Status of implementation of applicable ASBU elements
 - 3.2. Reporting on planning and implementation by States and Stakeholders
 - 3.3 Update of the AFI eANP
 - 3.4. Other Air Navigation initiatives
- Agenda Item 4:** Air Navigation Deficiencies
- Agenda Item 5:** Activities to be coordinated with the RASG-AFI SSTs
- Agenda Item 6:** Implementation challenges of the Sub-group
- Agenda Item 7:** Proposed recommendations/actions to be taken by ICAO HQ
- Agenda Item 8:** Review of the Terms of Reference and Work Programme of the Sub-group
- Agenda Item 9:** Review of the Draft Conclusions/Decisions of the Fifth Meeting of the Airspace and Aerodrome Operations Sub-group (AAO/SG5)
- Agenda Item 10:** Any other business

PART II: REPORT ON AGENDA ITEMS

Agenda Item 1: Adoption of the agenda and the work programme

1.1 The meeting reviewed and adopted the proposed agenda and the work programme as presented by the Secretariat.

Agenda Item 2: Status of the implementation of Conclusions and Decisions of the AAO/SG4 Meeting and the APIRG/24 Meeting applicable to the Sub-group

2.1 Conclusions/Decisions of the AAO/SG4 meeting

2.1.2 The Secretariat reminded the participants that the AAO/SG4 meeting recorded ten (10) draft Conclusions and eleven (11) draft Decisions. Out of these, the APCC meeting endorsed nine (9) draft Conclusions and seven (7) draft Decisions which were submitted to the APIRG/24 meeting.

2.2 Conclusions/Decisions of the APIRG/24 meeting applicable to AAO/SG

2.2.1 The Secretariat informed the meeting that the APIRG/24 meeting endorsed nine (9) Conclusions and seven (7) Decisions applicable to AAO/SG.

2.2.2 The meeting reviewed the status of the implementation of these conclusions and decisions and noted that out of sixteen (16) Conclusions and Decisions, seven (7) were completed, seven (7) were in progress, and two (2) had not started.

2.2.3 The status of implementation of APIRG Conclusions and Decisions applicable to AAO/SG is included in **Appendix 2** to this report.

Agenda Item 3: Achievements in Airspace and Aerodrome Operations

3.1. Status of implementation of applicable ASBU Elements

3.1.1 This agenda was discussed during the plenary session. The meeting discussed the identification of ASBU elements applicable to the AFI region in airspace and aerodrome operations. The meeting also discussed the collection of data on the implementation of ASBU elements and the status of implementation of ASBU elements in the AFI region.

3.1.2 The meeting further discussed some of the commonalities in airspace and aerodrome operations especially aspects related to implementation of ACDM. The meeting noted that it was necessary that the Information Sharing takes priority even as integration with ATM network systems follows. Technical matters were addressed during the specific breakout sessions.

Identification of ASBU elements applicable to AFI Region

3.1.3 The meeting recalled the APIRG/24 Decision 24/30 on alignment of the Regional Air Navigation Plan with the 6th Edition of the GANP, requiring the Secretariat to:

- a) coordinate with the AAO and IIM Sub Groups Projects teams to identify the ASBU elements applicable to the AFI region by 31 July 2022 ; and
- b) coordinate the development of the Volume III of the AFI eANP .

3.1.4 The Secretariat presented the approach adopted in determining the ASBU elements applicable to the AFI Region and the results of the assessment conducted in fulfilling this assignment. The Secretariat clarified the various concepts of the ASBU framework in the sixth edition of the GANP, with a focus on the concept of the ASBU element. The ASBU element represents a performance improvement that is needed to improve the performance of the air navigation system under specified operational conditions.

3.1.5 The meeting noted that the first version of the AFI Regional air navigation system implementation plan was module-oriented. However, for alignment with the sixth edition of the GANP, the focus should now be on the applicability of the ASBU elements. The meeting noted the performance-based approach the Secretariat used in assessing the applicability of ASBU elements. The meeting agreed that ASBU elements that are essential and related to Standards and Recommended Practices (SARPs) must apply systematically to the Region.

3.1.6 The meeting discussed the applicability criteria and the status of implementation of ASBU elements related to airspace and aerodrome operations during the breakout sessions. The meeting therefore proposed that the identified ASBU elements be applicable to the Region.

The following draft conclusion was therefore formulated:

Draft Conclusion 5/01: Adoption of the ASBU Elements applicable to airspace and aerodrome operations in the AFI Region

That, in order to align the AFI Regional air navigation plan to the sixth edition of the GANP, the ASBU elements, as identified in Appendices 3 and 4 to this report, are applicable to airspace and aerodrome operations in the AFI region.

ASBU data collection tool and status of implementation of applicable ASBU elements

3.1.7 The Secretariat reminded the meeting of the challenges raised during APIRG/24 regarding data collection from States. To address these challenges, the Secretariat explored alternatives to surveys for collecting data from States.

3.1.8 The meeting noted that the Secretariat had developed an Excel-based data collection template. The template is in **Appendix 5** to this report.

3.1.9 Furthermore, the Secretariat informed the meeting that an online platform aiming to facilitate data collection and automate the generation of dashboards on ASBU implementation is under development. The user interface of this platform would leverage the experience of the manual template.

3.1.10 The meeting urged States to use the Excel-based data collection template for reporting the status of implementation of ASBU Elements to the ICAO Regional Offices through their National Coordinators for Planning and Implementation (NCPI) until the online platform is finalized. To that effect, the following draft conclusion was formulated.

Draft Conclusion 5/02: Data collection and reporting on ASBU implementation

That in order to update the status of implementation of ASBU elements through continuous reporting and data-driven analysis in the Region:

- a) **States to use the data collection template, as presented in Appendix 5 of this report, and report to ICAO Regional Offices quarterly on the status of implementation of ASBU elements until the online platform is completed.**
- b) **States to migrate to the online platform for data collection and reporting when the platform is completed.**

3.2 Reporting on planning and implementation by States and Stakeholders

Airspace (Safety, Capacity, and Efficiency)

ATM Master Plan

3.2.1 The Secretariat updated the meeting on the progress made by the AFI ATM Master Plan Project Management Team (AAMP PMT) towards the development of the AFI ATM Vision 2045, the Future AFI Concept of Operations (AFI CONOPS), and the AFI ATM Master Plan (AAMP).

3.2.2 The development of the three documents continued to be challenging as members of the project team disposed limited resources to complete the task. However, the meeting noted marked progress following the PMT virtual workshop to refine the vision document. The draft AFI ATM vision 2045 is completed, and States are encouraged to provide feedback on the document by end of 31 December 2022. The first edition of AFI ATM Master Plan and the future CONOPS are work in progress.

3.2.3 The meeting noted the revised membership of the PMT, provided in **Appendix 6** to this report, and agreed on the importance of holding a physical meeting to complete the remaining documents by 31 October 2022.

Review of the AFI ATM Contingency Plan (AFI ATM CP)

3.2.4 The meeting recalled the APIRG/22 Conclusion 22/14, which adopted the First Edition of the AFI ATM Contingency Plan (AFI ATM CP) and endorsed the establishment of an AFI Regional Contingency Coordination Team (CCT).

3.2.5 The meeting noted the reviewed membership of the Team. The meeting further noted that in the recent past, there had been conflict with the terminology of the CCT between the AFI Region and the other ICAO Regions and requested the CP PMT to review the various terminologies and align with other ICAO Regions.

3.2.6 The meeting also noted that the update of State/FIR ATM Contingency Plan Focal Points and Contact Details was not completed and requested the Secretariat to coordinate with States that are yet to do so, to provide the relevant update.

3.2.7 The meeting further noted that, in order to ensure the robustness and efficiency of the AFI ATM CP, a tabletop exercise should be carried out on the Plan by the end of March 2023.

3.2.8 In order to maintain a coordinated approach to review the Plan, the meeting agreed on a physical meeting of the AFI ATM CP Focal Points to be held in the second quarter of 2023.

3.2.9 The meeting reminded States on the requirement to publish National ATM CPs in their AIPs and relevant websites and, afterward, link them to the contingency plan webpage of the accredited ICAO Regional Office. The meeting, therefore urged States to provide the accredited Regional offices with the link to the national ATM CP website.

3.2.10 The meeting also reviewed the draft Third Edition of the AFI ATM Contingency Plan. The meeting therefore formulated the following Conclusion and Decision:

Draft Conclusion 5/03: Review and implementation of the AFI ATM Contingency Plan (AFI ATM CP)

That, to facilitate the implementation of the AFI ATM CP, the revised membership and the Third edition of the AFI ATM Contingency Plan in Appendices 8 and 9 to this report are endorsed.

Draft Decision 5/04: Effectiveness of the AFI ATM Contingency Plan (AFI ATM CP)

That, to test the effectiveness of the AFI ATM CP, a tabletop exercise should be conducted by the AFI Contingency Coordination Team (CCT) by 31 March 2023.

AFI Free Route Airspace (AFI FRA)

3.2.11 The Secretariat presented the progress made towards implementation of the AFI Free Routing Airspace (AFI FRA) in accordance with the APIRG/22 Conclusion 22/36 and ATM master plan, which is in line with the B1-FRTO ASBU module.

3.2.12 The meeting noted that despite the negative impacts of COVID-19 on the aviation sector, some States had implemented plannable direct routes in order to assist with operational recovery.

3.2.13 The meeting discussed the proposed AFI FRA CONOPS 2nd edition, which introduces the standardized FRA publication template.

3.2.14 The meeting was informed that in order to have a harmonized implementation in the AFI Region, three clusters, namely Western & Central Africa, Southern Africa and Eastern Africa, were formed. The three clusters will hold virtual meetings to review the gaps identified, develop safety assessments at the regional level and agree on the action plans.

3.2.15 The meeting agreed that the clusters would report on the outcomes of the scheduled virtual meetings during a face-to-face meeting scheduled in Mauritius, from 24 to 28 October 2022, the main objective being to review the level of preparedness at the regional level and agree on the implementation date as guided by the proposed roadmap.

The meeting therefore formulated the following draft Conclusion:

Draft Conclusion 5/05: Implementation of the AFI Free Route Airspace (AFI FRA)

That to standardize FRA Implementation in the AFI Region:

- a) **The AFI FRA CONOPS 2nd edition, which introduces the standardized FRA publication template as in Appendix 10 to this report, is endorsed.**
- b) **States that have implemented FRA are encouraged to share lessons learned.**

ARMA RVSM and Operational Safety

3.2.16 The meeting recalled ARMA's request to establish a link within the ICAO website to publish essential information, including on RVSM and PBCS. The meeting urged States to interact with the new website for the continued provision of RVSM data to ARMA.

3.2.17 The meeting called on States to continue the implementation of SLOP and urged those that are yet to do so to expedite the process in order to allow for the benefits to be released by the Region in calculating the Collision Risk Assessment (CRA).

3.2.18 The meeting was further informed of the new emerging trends affecting the safety in the AFI RVSM airspace, noting especially the allocation and use of FL420 to aircrafts operating outside the RVSM airspace. This new trend was identified as an emerging issue due to the lack of awareness of the risk involved.

The meeting therefore formulated the following Conclusions:

Draft Conclusion 5/06: Improved safety in the AFI RVSM Airspace.

That to enhance continued RVSM System safety within the AFI Region:

- a) **States to conduct awareness to ATC and Pilots on the risk of allocating FL420;**
- b) **States to report the use of FL420 by pilots and ATC to ARMA as part of RVSM data; and**
- c) **ARMA to conduct annual workshops for the RVSM National Project Managers (NPM)**

Draft Conclusion 5/07: Nomination of State RVSM Subject Matter Focal Points

That, to improve coordination with ARMA, the Secretariat to coordinate with States for submission of the RVSM National Project Manager (NPM) and alternate subject matter Focal Points by December 2022

ASCAAR

3.2.19 The meeting was informed that following the creation of the four Performance Areas (PA), marked progress was made in the implementation of the project. Each PA is coordinated by identified coordinators of project teams to champion activities.

3.2.20 A detailed report on the successful implementation and way forward was presented to the meeting and discussed. The meeting noted that the project had come to fruition and could successfully be concluded.

The meeting, therefore, formulated the following Conclusion:

Draft Conclusion 5/08: Report on the implementation of the AFI SSR CMP

That, to conclude the implementation of the AFI SSR Code Management Plan (AFI SSR CMP), the implementation report of the ASCAAR Project in Appendix 11 to this report is endorsed.

ATS Competency Study

3.2.21. The meeting recalled that APRIG/24 recommended a continuation of the ATS Competency study with the inclusion of any changes to competency needs that may have emerged due to the COVID-19 pandemic.

The results of the Study were presented to the meeting with recommendations as follows:

- i.) States to identify differences in training programmes and develop a mechanism to harmonize training and abridging programmes;
- ii.) States to develop a plan for accelerating training on emerging issues in the AFI Region through industry stakeholders. Key training topics among emerging issues are: CISM, HF, Threat, and error management; and
- iii.) States to incorporate abridging programs, OJT, recurrent and continued proficiency evaluation as per ICAO Doc 10056 in their training programmes.

3.2.22. The meeting further noted that the project had come to fruition and could be concluded. The meeting, therefore, formulated the following draft conclusion:

Draft Conclusion 5/09: Report on the ATS Competency Study

That, to conclude the Study on ATS Competency in the AFI region:

- a) **The report in Appendix 12 is endorsed, and the project concluded; and**
- b) **States to implement the recommendations of the Study.**

Civil/Military Cooperation and Coordination

3.2.23. The meeting recalled that the cooperation between the civil and military agencies is an integral component in fostering civil aviation growth. The meeting further noted the importance of civil/military cooperation in the implementation of free routing in the Region.

3.2.24. The meeting noted the experience of the Democratic Republic of Congo (DRC) with the implementation of civil-military cooperation in civil aviation. The State summarized its experience in two main periods, namely the historical era of cooperation before the formalized MOC and the period after the signing of the MOC. That experience enabled the State to implement best practices as recommended by ICAO.

3.2.25. Based on the experience that was shared and after discussions, the meeting formulated the following Draft Decision.

Draft Decision 5/10: Civil/Military Cooperation

That, to continue the promotion of civil military cooperation, the Secretariat to organize two workshops/seminars by the end of 2023.

AFI ATM Summit

3.2.26. The meeting recalled that the AAO/SG and IIM/SG project management approach had consolidated several initiatives that embrace a Collaborative Decision-Making process (CDM). The CDM process focuses on a common approach to system and infrastructure investment through various strategies including surveillance, navigation, and communication (CNS) strategies. The meeting also recalled the APIRG 22 Conclusion 22/35(c); on the seamless Air Traffic Management calling on ICAO Regional Offices to consider hosting the AFI Air Navigation Summit on seamless ATM System for the AFI Region.

3.2.27 The Secretariat emphasized the importance of aligning the AFI Master Plans, the National plans, the Regional Plans, and the continent-wide Plans with the strategy and implementation plans of APIRG and the engravement in the Air Navigation Plan (AFI ANP) .

3.2.28 The meeting called on all stakeholders to work in collaboration with APIRG and its contributory bodies to achieve harmonized, interoperable and seamless ATM systems and operations.

3.2.29 After several deliberations and discussions, the meeting agreed on the following draft conclusion and Decision.

Draft Conclusion 5/11: AFI ATM Summit 2024

That, to implement a harmonized, interoperable and seamless Air Traffic Management (ATM) systems that support ‘Africa Single Sky’ ICAO to coordinate the hosting of the AFI ATM Summit by end of 2024.

Aerodrome Operations (Safety, Capacity and Efficiency)

GRF Implementation and Monitoring

3.2.30 The meeting recalled APIRG/24 Conclusion 24/16, which called on States to continuously update ICAO Regional Offices on the status of implementation of GRF, including the challenges encountered for effective implementation.

3.2.31 The Secretariat presented the status of implementation of the Global Reporting Format for runway surface conditions (GRF) 59% for AFI States.

3.2.32 The meeting noted that, although the applicability date of the GRF was set to 4 November 2021, several States had not implemented the requirement and had not provided updates to the Regional Offices on their status of implementation.

3.2.33 Nigeria and Ivory Coast shared with the meeting their methodology and experience in implementing GRF. The meeting noted that the training costs had hampered implementation progress, especially given that training courses were unavailable for training the trainers. The meeting also noted that poor coordination among relevant State stakeholders was slowing down the implementation of GRF in some States.

3.2.34 The meeting urged States to increase awareness of all entities involved, especially flight operations personnel from the CAA and the Industry. The meeting urged States to address any challenges hindering progress of GRF implementation and ensure full implementation.

Aerodrome Certification status in the AFI region.

3.2.35 The meeting recalled APIRG/22 Conclusion 22/18, which called on States to ensure the implementation of their aerodrome certification action plans, including timely resolution of deficiencies found at airports. The meeting also recalled that the APIRG /22 meeting encouraged States to share their experiences and host workshops and trainings on aerodromes operations and certification matters.

3.2.36 The meeting was informed that aerodrome certification status is at 33.1% for in the AFI region.

3.2.37 The meeting expressed concerns about the persistent low pace of certification of aerodromes. The main challenges raised were the inadequate training and qualification of aerodrome experts, the cost of the certification activities, and organizational issues.

3.2.38 Cameroon and Zambia presented the certification process of Yaoundé and Simon Kapwepwe airports, respectively. The meeting noted and appreciated the increased exchange and sharing of best practices amongst States.

Aerodrome certification project team

3.2.39 The meeting discussed the challenges faced by the aerodrome project team. The team raised the unavailability of experts as the main issue.

3.2.40 The meeting encouraged States to designate experts to support the work of the project team.

Training and qualification project team

3.2.41 The meeting discussed the Project team's report for Training and Qualification of Aerodrome Operational Personnel and Inspectors.

3.2.42 The meeting observed that 37.5 percent of the States and three Training Organizations had responded to the Survey questionnaire sent by the Project team. The meeting noted the need for more information from the States to develop a comprehensive gap analysis.

3.2.43 The meeting agreed to extend the response time from the States until 31 October 2022. the project team report is included in this report as **Appendix 13**.

Update of the AFI eANP

Update of the AFI eANP Volume III

3.2.44 The Secretariat informed the meeting of the ongoing development of Volume III of the AFI eANP. The meeting was informed that the development is in compliance with the latest edition of the GANP taking into account the applicable elements of the ASBU elements identified for the Region.

The meeting formulated the following Conclusion accordingly:

Draft Conclusion 5/12: Development of the AFI eANP Volume III

That in order to conclude the development of Volume III of the AFI eANP,

- a) **The Secretariat, in coordination with the IIM Subgroup Project Teams, to finalize the draft AFI eANP Volume III and circulate it for review by States by 30 November 2022;**
- b) **States to review the draft Volume III of the AFI eANP and provide the Secretariat with their feedback by 30 December 2022.**

Other Air Navigation initiatives

Supporting Operational Measures for Green Air Traffic Management

3.2.45 The meeting was presented with information on a new initiative by CANSO on Green ATM to support ICAO's objective on Environmental Protection. The meeting noted that the initiative was based on saving through effective ATM related to ASBU Module FRTO. The meeting further noted that although the initiative was still in its formative stage it is important for the States to be provided with the information at the APIRG/25 meeting.

Agenda Item 4: Air Navigation Deficiencies

Update on the implementation of the AFI ANDD Tool

4.1 The Secretariat informed the meeting that a training for AANDD Focal Points from States and Organizations was held on 23 and 24 November 2021, with around 100 participants from 15 ESAF States, 9 WACAF States, ANSPs and International Organizations.

4.2 The meeting noted that the workshop provided participants with a good understanding of air navigation deficiencies and clarified the differences with USOAP findings. The workshop clarified the deficiencies management process and familiarized participants with the AANDD tool.

4.3 The Secretariat further informed the meeting that the AANDD platform was on trial and encouraged the Focal Points to continue interacting with the platform for familiarization purposes.

Reporting of Air Navigation Deficiencies

4.4 The Secretariat reminded the meeting that in accordance with the APIRG procedural handbook, APIRG's Subsidiary bodies are to regularly review identified deficiencies in their respective fields and develop recommendations for remedial actions.

4.5 The meeting noted that, although there are observed deficiencies in the AFI region, States and Industry do not report them as required.

4.6 The meeting insisted on the need to report any Air Navigation Deficiencies identified as provided for in the APIRG procedural handbook.

4.7 The meeting noted the low percentage of Focal Points nominated and trained and encouraged States that have not done so to designate Focal points and inform ICAO Regional Offices accordingly.

Agenda Item 5: Activities to be coordinated with the RASG-AFI SSTs

5.1 The meeting noted the need to support the work of RASG-AFI SSTs by exchanging information and data between RASG -AFI and APIRG Subsidiary groups such as AAO-SG. In particular, runway safety was identified as a critical area that the AAO/SG need to coordinate with RASG-AFI.

5.2 The meeting was also briefed on the performance of the AFI Reduced Vertical Separation Minimum (RVSM) airspace and noted the need for coordination with RASG-AFI in the area of RVSM approvals to ensure operation

Agenda Item 6: Implementation challenges of the Sub-group

6.1 The meeting noted the challenges encountered by the Sub-group in achieving its objectives. Such challenges include the lack of participation and commitment of States' experts, the unavailability of data from States and Industry, and the lack of reporting to the Secretariat.

6.2 The meeting recognized that these challenges constitute an obstacle to accurately estimate the progress of implementation of the different requirements by States and Industry, and provide adequate induction to the experts.

6.3 The meeting proposed that the Secretariat considers using electronic surveys rather than paper-based surveys to collect data. The meeting also suggested that, in order to avoid duplication, the Secretariat should consolidate the various surveys and questionnaires before transmission to States and Industry.

Agenda Item 7: Proposed recommendations/actions to be taken by ICAO HQ

7.1 The meeting discussed this agenda item and after several deliberations, the meeting agreed that by then there was no significant actions that the meeting would recommend for action by HQ.

7.2 In the meantime, the Secretariat updated the meeting on several amendments that had taken place in airspace and aerodrome operations-related annexes. The meeting noted that the amendments had been notified to the States through State letters for effective implementation.

7.3 The meeting therefore urged States to ensure timely amendment and implementation of the new provisions.

Agenda Item 8: Review of the Terms of Reference and Work Programme of the Sub-group

8.1 The meeting reviewed the Terms of Reference (ToR) of the AAO/SG to identify areas for improvement. Following deliberations on the matter, the meeting agreed that there was no justification for modifications to its ToR, as provided in **Appendix 14** to this report.

8.2 The meeting proposed the future work programme of the AAO SG which included the activities and meetings. The proposed work programme was included in the Report. The work programme was updated as per **Appendix 15** to this report and agreed on the following draft decision.

Draft Decision 5/13: Work Programme of the AAO/SG for 2022/2023

That, to achieve the AAO/SG's assigned objectives, the work programme of the AAO/SG is endorsed as attached in Appendix 15.

Agenda Item 9: Review of the Draft Conclusions/Decisions of the Fifth meeting of the Airspace and Aerodrome Operations Subgroup (AAO/SG5)

9.1 The meeting reviewed and adopted the draft Conclusions and Decisions of the AAO/SG5 Meeting. A summary of the draft Conclusions/Decisions is provided in **Appendix 16** to this report.

Agenda Item 10: Any other business

10.1 There being no other business discussed under this agenda item, Mr. Arthemon Ndikumana, Deputy Regional Director, ICAO Eastern and Southern Africa Office (ESAF), officially closed the meeting.

10.2 In his closing remarks, Mr. Arthemon Ndikumana, on behalf of ICAO, expressed his gratitude to the participating States and Organizations and thanked them for their continued support to ICAO initiatives and activities. He emphasized the need to contribute to the development of Volume III of the AFI eANP and to continuously report implementation status.

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