

INTERNATIONAL CIVIL AVIATION ORGANIZATION



THE AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)

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

Dakar, Senegal, 4 to 8 September 2023

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**

TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF ABBREVIATIONS	iii
LIST OF APPENDICES	v
LIST OF DRAFT CONCLUSIONS/DECISIONS	0
PART I – INTRODUCTION	1
1. Place and duration	1
2. Attendance	1
3. Officers and Secretariat	1
4. Working languages	1
5. Opening of the meeting	1
6. Agenda	3
PART II: REPORT ON AGENDA ITEMS	4
AGENDA ITEM 1: ADOPTION OF THE AGENDA AND THE WORK PROGRAMME	4
<i>Review of the status of Conclusions and Decisions applicable to the Sub-group.</i>	4
<i>Status of implementation of Conclusions and Decisions of APIRG/25 Meeting applicable to the Sub-group.</i>	5
AGENDA ITEM 3: ACHIEVEMENTS IN AIRSPACE AND AERODROME OPERATIONS	5
<i>Status of implementation of applicable ASBU Elements</i>	5
<i>Reporting on planning and implementation by States and Stakeholders</i>	6
Other Air Navigation initiatives	14
AGENDA ITEM 4: REGIONAL AIR NAVIGATION PLAN	15
<i>Update of AFI eANP</i>	15
AGENDA ITEM 5: AIR NAVIGATION DEFICIENCIES	16
Management of Air Navigation Deficiencies	16
Reporting of Air Navigation Deficiencies	16
AGENDA ITEM 6: ACTIVITIES TO BE COORDINATED WITH THE RASG-AFI SSTS	16
Aerodrome Operations and Planning activities to be coordinated with RASG/AFI	16
Airspace activities to be coordinated with RASG-AFI	17
<i>UAS activities in WACAF States</i>	17
AGENDA ITEM 7: IMPLEMENTATION CHALLENGES OF THE SUB-GROUP	17
Implementation challenges in Aerodrome Operations and Planning (AOP)	17
Implementation challenges in Airspace Operations	18
AGENDA ITEM 8: PROPOSED RECOMMENDATIONS/ACTIONS TO BE TAKEN BY ICAO HQ	19
AGENDA ITEM 9: REVIEW OF THE TERMS OF REFERENCE (TOR) AND WORK PROGRAMME OF THE SUB-GROUP	20
Terms of Reference of the Sub-Group	20

Work programme of the Sub-Group	20
AGENDA ITEM 10: REVIEW OF THE DRAFT CONCLUSIONS/DECISIONS/ACTIONS OF THE SIXTH MEETING OF THE AIRSPACE AND AERODROME OPERATIONS SUB-GROUP (AAO/SG 6) 20	
AGENDA ITEM 11: ANY OTHER BUSINESS.....	20

LIST OF ABBREVIATIONS

AAMP	AFI ATM Master Plan
AAMP PMT	AFI ATM Master Plan – Project Management Team
AANDD	AFI Air Navigation Deficiencies Database
ANR	Air Navigation Report
AANRT	Annual Air Navigation Reporting Team
AAO/SG	APIRG Airspace and Aerodrome Operations Sub-group
A-CDM	Airport Collaborative Decision Making
AFCAC	African Civil Aviation Commission
AFI	Africa - Indian Ocean region
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
ATS	Air Traffic Service
ATSCS	ATS Competency Study
ATM	Air Traffic Management
AUC	African Union Commission
BBB	Basic Building Block
CAA	Civil Aviation Authority
CANSO	Civil Air Navigation Services Organisation
CCT	Contingency Coordination Team
CMC	Civil-Military Cooperation
CNS	Communication Navigation Surveillance
CONOPS	Concept of Operations
CP	Contingency Plan
CPDLC	Controller Pilot Datalink Communications
EAC	East African Community
FIRs	Flight Information Regions
FRA	Free Routing Airspace
GANP	Global Air Navigation Plan
GASP	Global Aviation Safety Plan
GRF	Global Format for Reporting of Runway Surface Conditions
IATA	International Air Transport Association

ICAO	International Civil Aviation Organization
IIM/SG	Infrastructure and Information Management Sub-group
LHD	Large Height Deviation
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

LIST OF APPENDICES

- Appendix 1** - List of participants
- Appendix 2** - List of reformulated, revised APIRG Conclusions and Decisions applicable to AAO/SG
- Appendix 3** - Status of implementation of APIRG/25 Conclusions and Decisions applicable to AAO/SG5
- Appendix 4** - Risk Assessment Tool 2023
- Appendix 5** - AFI PBN Routes Laboratory Report
- Appendix 6** - AAMP Revised PMT
- Appendix 7** - Terms of Reference of the Civil Military Cooperation PMT
- Appendix 8** - Mogadishu FIC/ACC relocation and upgrade report
- Appendix 9** - ARMA RVSM analysis Matrix
- Appendix 10** - Runway Safety PMT Report and Document
- Appendix 11** - A-CDM PMT Report and Document
- Appendix 12** - Training and Qualification PMT Report
- Appendix 13** - Status of Aerodrome Certification, GRF and RSTs
- Appendix 14** - Terms of Reference of AAO/SG
- Appendix 15** - 2023/2024 Work Programme of AAO/SG
- Appendix 16** - Summary of the draft Conclusions and Decisions of AAO/SG6
- Appendix 17** - Actions by the meeting of the AAO/SG6

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LIST OF DRAFT CONCLUSIONS/DECISIONS

DEFINITIONS

AAO/SG records its actions in the form of draft Conclusions 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 conducted by the specific Sub-group and its members or the Secretariat where such action is applicable.

No.	AAO/SG6 Draft Conclusions and Decisions	
1.	Draft Decision 6/01	Election of the Chairperson and Vice-Chairperson of the AAO Sub-group
2.	Draft Decision 6/02	Increased awareness on ASBU framework
3.	Draft Decision 6/03	Project Management Teams Coordinated workshops
4.	Draft Conclusion 6/04	Review of Project 9 - Civil Military Cooperation/ Flexible Use Airspace
5.	Draft Conclusion 6/05	Establishment of the Civil Military Cooperation/ Flexible Use Airspace project management Team
6.	Draft Decision 6/07	Sensitization Workshops on Instrument Flight Procedures
7.	Draft Decision 6/08	Work programme of the AAO Subgroup

PART I – INTRODUCTION

1. Place and duration

1.1 The sixth Meeting of the APIRG Airspace and Aerodrome Operations Sub-group (AAO/SG6) was held in-person at the ICAO’s Western and Central African (WACAF) Office in Dakar, Senegal, from 4 to 8 September 2023.

2. Attendance

2.1 Sixty-five (65) participants from fourteen (14) States and four (4) regional/international Organizations attended the meeting. The list of participants is in **Appendix 1** of this report.

3. Officers and Secretariat

3.1 Mr. Billy Diabasenga Kusuamina (Democratic Republic of Congo), Chairperson, chaired the meeting. He was assisted by Mr. Nathan Kaluba (Zambia), Vice Chairperson.

3.2 Mr. Elisha Omuya, Regional Officer AGA, ICAO Eastern and Southern African Office (ESAF), served as the Secretary of the meeting and was assisted by:

- Ms. Keziah Ogutu, Regional Officer ATM/SAR (ESAF)
- Ms. Prisca Nkolo, Regional Officer AGA (WACAF)
- Mr. Serge Guy Tchanda, Regional Officer ATM/SAR (WACAF)
- Mr. Colin Bryant, Regional Officer ATM/SAR (ESAF)

4. Working languages

4.1 The meeting was conducted in English and French languages with simultaneous interpretation services during the plenary sessions. The documentation was made available on the ICAO website in both languages.

5. Opening of the meeting

5.1 Remarks by the Chairperson of AAO Sub-group

The Chairperson of AAO Sub-group Mr. Billy Diabasenga thanked the participants and especially Senegal for the legendary hospitality. He highlighted the fact that the meeting was the first in-person after COVID-19. He mentioned the challenges faced by the region, regarding the lack of expertise as opposed to the considerable number of tasks to be completed by the Sub-group.

5.2 Opening remarks by the Regional Director of ICAO WACAF

5.2.1. 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.

5.2.2 He highlighted the context of the sixth AAO Sub-group meeting in relation to the eighth AFI week meeting held in Nairobi as well as the recent activation of contingencies plans in some States which impacted the international and regional air navigation.

5.2.3 The Regional Director 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 the Chairperson and Vice Chairperson of the Sub-group, for their leadership and the support provided to the Sub-group for the past two years.

5.2.4 He reminded the meeting of the various Conclusions and Decisions of APIRG applicable to the AAO/SG that call for actions, including a close coordination with the IIM Sub-group. He emphasized the need for States to report on the Status of implementation of ASBU elements, the management of Air Navigation Deficiencies and the updating of the Air Navigation Plan.

5.2.5 The Regional Director further acknowledged the support received from the stakeholders on initiatives and other assistance activities in the areas of airspace and aerodrome operations through collaboration with the ICAO Regional Offices. He concluded by calling on the States' commitment to the activities of the Sub-group to address issues related to airspace and aerodrome Operations in the ESAF and WACAF regions. as provided for in the mandate of the subgroup.

5.3 Information session by the ICAO WACAF DRD

5.3.1 On day two of the meeting, The ICAO WACAF Deputy Regional Director Mr. Nika Manzi provided participants with detailed information regarding the context, the role of AAO/SG as well as the expectations of the meeting.

5.3.2 Delegates were reminded on States role in providing update on the status of implementation of ASBU elements as well as the update of the eANP Volumes I, II and III.

6. Agenda

The meeting adopted the following agenda:

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|------------------------|---|
| Agenda item 1: | Adoption of the agenda and the work programme |
| Agenda Item 2: | Status of Conclusions and Decisions applicable to the Sub-group |
| Agenda Item 3: | Achievements in Airspace and Aerodrome Operations |
| Agenda Item 4: | Regional Air Navigation Plan |
| Agenda Item 5: | Air Navigation Deficiencies |
| Agenda Item 6: | Activities to be coordinated with the RASG-AFI SSTs |
| Agenda Item 7: | Implementation challenges of the Sub-group |
| Agenda Item 8: | Proposed recommendations/actions to be taken by ICAO HQ |
| Agenda Item 9: | Review of the Terms of Reference and Work Programme of the Sub-group |
| Agenda Item 10: | Any other business |
| Agenda Item 11: | Review of the Draft Conclusions and Decisions of the Sixth Meeting of the Airspace and Aerodrome Operations Sub-group (AAO/SG6) |

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.

1.2. In accordance with Part IV paragraph 6.2 and 6.3 of the APIRG Procedural Handbook, the meeting proceeded to the election of a new Chairperson and a new Vice-Chairperson of the AAO Sub-group. The following draft Decision was formulated in this respect:

Draft Decision 6/01	Election of the Chairperson and Vice-Chairperson of AAO Sub-group. That, to ensure continuity of activities of the AAO/SG, a) Mr. Nathan Kaluba, Director Aerodrome Safety Standards from the Republic of Zambia is elected as Chairperson of the AAO Sub-group; and b) Mr. Sanogo Adama, Head of ATM and SAR from the Republic of Côte d'Ivoire is elected as Vice-Chairperson of the AAO Sub-group.
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AGENDA ITEM 2: STATUS OF CONCLUSIONS AND DECISIONS APPLICABLE TO AAO/SG

Review of the status of Conclusions and Decisions applicable to the Sub-group.

2.1 The meeting was informed that the Secretariat conducted a comprehensive review of all the Conclusions and Decisions applicable to AAO/SG from AAO/SG1 to AAO/SG5 and noted several duplications and redundancies amongst the Conclusions and Decisions as well as outdated ones.

2.2 The Secretariat reported that sixty-six (66) Conclusions and Decisions were considered no longer applicable while eighty-eight (88) were deemed still valid. The Secretariat highlighted the need for the meeting to review those Conclusions and Decisions to confirm their applicability and relevance; and eliminate duplications and redundancies.

2.3 The meeting also recognised that although some Conclusions and Decisions related to projects were completed, it was relevant to maintain a continuous monitoring through defined key performance Indicators (KPIs).

2.4 Two small working groups from Airspace and Aerodrome Operations were formed to work on the following tasks:

a) review the APIRG Conclusions/Decisions applicable to the AAO/SG from AAO/SG1 to AAO/SG5, identify those that continue to be valid as well as actions to further facilitate their implementation; and those that are no longer applicable (actions completed, covered by others, overtaken by events or otherwise redundant); and

b) review the wording of Conclusions and Decisions which continue to be valid/relevant and take action to align their formulation with the guidelines provided by the Air Navigation Commission (ANC).

2.5 The list of reviewed, revised and reformulated Conclusions and Decisions is in **Appendix 2** to this report. The meeting agreed that the Conclusions and Decisions in Appendix 2 will be incorporated into the action plans for the AAOSG.

Status of implementation of Conclusions and Decisions of APIRG/25 Meeting applicable to the Sub-group.

2.6 The Secretariat reminded the meeting that the AAO/SG5 meeting recorded ten (10) draft Conclusions and four (4) draft Decisions which were submitted for the consideration of APIRG/25 meeting, through the APIRG Projects Coordination Committee, and endorsed.

2.7 The Secretariat reported that out of eight (8) Conclusions and three (3) Decisions of the previous meeting adopted by APIRG/25, six (6) Conclusions and two (2) Decisions (73%) were fully implemented, one (1) Conclusion and one (1) Decision (18%) were partially implemented, while one (1) Conclusion (9%) had not been implemented.

2.8 The meeting noted that although most of the Conclusions and Decisions were actioned and therefore completed, progress had been undertaken on some Conclusions and Decisions not yet completed. The meeting called on State and Organizations to continuously provide information on the Status of implementation of the Conclusions and Decisions for comprehensive reporting to the AAO-SG.

2.9 The status of implementation of Conclusions and Decisions of APIRG/25 applicable to AAO Sub-group is in **Appendix 3** to this report.

AGENDA ITEM 3: ACHIEVEMENTS IN AIRSPACE AND AERODROME OPERATIONS

Status of implementation of applicable ASBU Elements

3.1 The Secretariat presented the ASBU fundamentals, aiming to raise the

States' awareness on the ASBU architecture. The meeting was reminded that implementation of ASBU elements should always be tailored to the size and complexity of the activities of the targeted Organization. It was emphasised that a sound business case should support the decision for consideration of ASBU elements to be implemented.

3.2 The meeting was updated on the status of implementation of ASBU elements in the region based on the information collected by the Regional Offices. The meeting noted that States had not provided reports on the status of establishment and implementation of their national ASBU plans as required by APIRG/25 Conclusion 25/11. The meeting therefore requested the participants to review the status and provide updates for their respective States.

3.3 The meeting further discussed issues that were hindering the effective feedback from States. The need for increased awareness for States regarding ASBU framework was noted. The meeting called for a better approach to collect information from States and requested the Secretariat to conduct a benchmarking exercise on data collection best practices from other regions.

3.4 The meeting noted the need for increased ASBU awareness in ESAF and WACAF regions. AFCAC offered to support the Secretariat for the conduct of more ASBU workshops to raise awareness to States on the ASBU. The workshops are meant to support States with information on implementation of ASBU elements. The following draft Decision was therefore formulated:

Draft Decision 6/02	Increased awareness on ASBU framework That, to enhance the Status of implementation of the ASBU elements; the Secretariat to conduct at least two ASBU workshops by 31 st October 2024.
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Reporting on planning and implementation by States and Stakeholders

AFCAC initiative : Aviation infrastructure gap analysis

3.5 The meeting was informed of the outcomes of the Technical Working Group (TWG) meeting conducted in June 2023 by AFCAC in coordination with ICAO and the AUC.

3.6 The objective of the TWG meeting was to validate guidance tools to support the aviation infrastructure gap analysis study that will include a 25-year traffic forecast. The aim of the study is to identify the status of aviation infrastructure in African States for the establishment of a seamless airspace master plan architecture for Africa. The outputs of the TWG were noted by the meeting.

3.7 The meeting commended AFCAC for the initiative and the project on a

seamless airspace master plan for Africa. It was noted that a similar project was ongoing by APIRG through the AAO Sub-group AFI ATM Master Plan project. The meeting therefore called on AFCAC to join the existing Project Team to optimize resources and harmonize objectives.

AIRSPACE (SAFETY, CAPACITY AND EFFICIENCY)

Free Route Airspace Project Management Team (FRA PMT) Activities Report

3.8 The Free Route Airspace Project Management Team (FRA PMT) presented the achievements in the implementation of Free Route Airspace (FRA) in the AFI region. It was highlighted that the AFI FRA implementation project aims to support airspace users reduce their fuel consumption and CO2 emissions and meet the industry objective of achieving carbon neutrality by 2050.

3.9 The FRA PMT reminded the meeting of the establishment of three (3) FRA clusters, namely Western-Central Africa, Eastern Africa and Southern Africa and of the operations within the clusters.

3.10 The meeting noted that the fourth FRA PMT Meeting (AFI FRA PMT/4) hosted by Mauritius from 24 to 28 October 2022 reviewed the AFI FRA Roadmap.

3.11 The meeting noted the results of the AFI FRA Risk Assessment workshop conducted from 27 February to 2 March 2023.

3.12 The FRA PMT informed the meeting of the status of implementation of FRA, the ongoing FRA planning in the Eastern cluster as well as the ASECNA and Ghana readiness for FRA implementation.

3.13 The FRA PMT highlighted the need to refine the current AFI ATS routes network and the need to connect the FRA from the upper to the lower airspace. The meeting agreed on the need to address these issues to ensure the effective implementation of FRA in the AFI region. The risk assessment tool used by the PMT is attached to this report in **Appendix 4**.

3.14 The meeting noted the strong link that existed between FRA, Performance Based Navigation (PBN) and Civil-Military Cooperation (CMC) Projects activities as well as effectiveness of in-person meetings based on lesson learnt. The meeting therefore formulated the following Decision:

Draft Decision 6/03	Project Management Teams Coordinated Workshops That, given the common link between PBN, FRA and Civil-Military Cooperation activities, the PMTs coordinate the conduct of at least two joint workshops/ meetings to optimize resources and improve coordination of activities.
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The AFI PBN Route Laboratory

3.15 The Secretariat informed the meeting of the PBN Route Laboratory workshop held in Nairobi, Kenya, from 22 to 26 May 2023 which aimed at assessing the status of implementation of PBN routes as well as the implementation of Flight Plannable Direct routes. The participants of the Laboratory were also refreshed on the PBN concept and new amendments in Doc 9613.

3.16 The Laboratory highlighted the low level of implementation of CCO/CDO in AFI States and agreed on the request of new PBN routes in ESAF and WACAF airspace. It was also highlighted that FRA and PBN routes were not exclusive to each other and could be used in combination.

3.17 The need for the reconstitution of the PBN PMT was also discussed during the workshop. The meeting therefore requested the Secretariat to coordinate the reconstitution of the PBN PMT by inviting States and organizations to express their interest in participating in the project. The AFI PBN Routes laboratory Report is attached as **Appendix 5** to this report.

AAMP PMT Activities Report

3.18 The AFI ATM Master Plan Project Management Team (AAMP PMT) reminded the meeting of the endorsement by APIRG of the AAO/SG 4 Decision 4/02 recommending the extension of the mandate of the PMT to enable the reconstitution of the PMT, noting that the new versions of the GANP might require improvements and or amendments to the ATM Master plan.

3.19 The AAMP PMT provided the meeting with information on the project progress status. It was mainly noted that the drafting of the AFI ATM Master Plan was completed in June 2023 after the conduct of two AAMP PMT meetings in Nairobi in October 2022 and June 2023. However, there was a need to review the AFI ATM Vision 2045 for alignment with the latest Edition of the GANP.

3.20 The Meeting was informed of an identified gap in the development of regional strategic documents, that the PMT constitution is mainly of AOP and ATM expertise and lacking representation from CNS, AIM and especially MET areas. The meeting tasked the AAO/SG Chairperson together with the AAMP PMT coordinator to liaise with the IIM/SG Chairperson and project leads to coordinate the review of the AAMP documents before finalisation.

3.21 The meeting emphasised that there was need to establish a team of experts from all the domains who would carry out the continuous maintenance of the AFI ATM strategy documents i.e. the Master Plan, AFI ATM Vision 2045 and the future Concept of Operations (CONOPS).

Civil Military Cooperation in ATM (CMC) Activities Report

3.22 The Meeting was informed of the Civil-Military Cooperation in Air Traffic Management (CMC) activities carried out in 2022/2023. Three workshops were conducted in 2023 including two virtual and one in-person in Lusaka, Zambia from 7 to 11 August 2023. The Lusaka workshop was attended by 95 participants including 15 States, 4 International organizations and 3 international airlines operating in the AFI region.

3.23 The Meeting noted some challenges identified from the Lusaka workshop including inter alia improvement in establishing civil military high-level policy board, the establishment of primary legislation, regulatory aspects, information sharing, signing of Memorandum of Understanding/Memorandum of Agreements (MOUs/MOAs), and general improvement of cooperation.

3.24 The meeting agreed on the importance of inviting military authorities to APIRG meetings amongst others to improve collaboration and cooperation. It was also agreed that the CMC activities will be better conducted through an established PMT, with specific Terms of Reference.

3.25 The meeting recalled that there was an existing Project 9 under the Airspace Sub-group and called for the reconstruction of the project with amended terms of reference to allow for the inclusion of the implementation phase. The meeting therefore formulated the following Decision and Conclusion:

<p>Draft Decision 6/04</p>	<p>Review of Project 9 - Civil Military Cooperation/ Flexible Use Airspace That, to effectively support and guide the implementation of Civil Military Cooperation/ Flexible Use Airspace in the AFI region, the Terms of Reference of Project 9 in Appendix xx to this report is amended and the Project Management Team be reconstituted by 31 December 2023.</p>
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Draft Conclusion 6/05	<p>Establishment of the Civil Military Cooperation/ Flexible Use Airspace project management Team</p> <p>That, to effectively support and guide the implementation of Civil Military Cooperation/ Flexible Use Airspace in the AFI region, States are urged to nominate experts to the Civil Military Cooperation Flexible Use Airspace Project Management Team.</p>
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AFI RVSM Deficiencies

3.26 The meeting was briefed on status of the AFI RVSM airspace by the AFI Regional Monitoring Agency (ARMA). It was noted that ATS incidents in RVSM airspace between the borders of the AFI and MID regions remain a concern. The meeting noted the increase of ATS incidents especially following the closure of the Khartoum FIR and the Niger airspace due to civil unrest forcing air traffic to avoid the two airspace and resulting in traffic overload in the Red Sea region. Of concern was the increase of Large Height Deviation reports in the Asmara FIR which is as a result of coordination failures between Asmara ACC and the MID FIRs namely Sanaa and Jeddah ACCs. It was noted that there is urgent need to update the operational procedures between Asmara and the neighboring FIRs to address the deficiencies noted so far.3.27 The issue of insufficient RSVM data collection was noted. The Meeting encouraged States to continue providing feedback to ARMA to enable the effective assessment of the Total Vertical Target Level of Safety. The ARMA RVSM Analysis report is attached as **Appendix 8** to this report.

3.28 The Meeting was also informed of the upcoming webinars on Large Height Deviations (LHD) on 7 November 2023 as well as Performance Based Communication and Surveillance (PBCS) on a date to be notified. States were encouraged to facilitate the participation of their experts in these webinars.

Mogadishu FIC/ACC Relocation and Upgrade

3.29 The Secretariat provided a status report on the relocation of the Mogadishu Flight Information Centre (FIC) from Nairobi to Mogadishu and the subsequent upgrade of the airspace classification in the Mogadishu Flight Information Region (FIR).

3.30 The Meeting noted that all requirements identified in the safety study were fulfilled and the Mogadishu ATS Unit was successfully upgraded from FIC to Area Control Centre (ACC) with the upgrade of the airspace from Class G to Class A effective on 26 January 2023, marking the successfully relocation of the services back to the city of Mogadishu. The Mogadishu FIC/ACC relocation and upgrade report is attached as **Appendix 9** to this report.

AFI ATM Contingency Plan Project Management Team (AFI CP PMT) activities report

3.31 The AFI ATM Contingency Plan Project Management Team (AFI CP PMT) provided a report of the yearly activities to the meeting. The Team reported on recent developments in the region related to contingency situations, namely the activation of the contingency plan for the airspace of Sudan, Gabon and Niger which caused significant air traffic disruptions in and around the AFI and adjacent FIRs.

3.32 The AFI CP PMT reported some inconsistencies in the AFI ATM Contingency Plan that necessitate a review of the document. Elements noted for review included the name change of the project management team to avoid the current confusion with the Contingency Coordination Team (CCT) which would be activated during a contingency situation, the Terms of Reference to reflect the fact that it is a core group that carries out a continuous maintenance work of the Plan, the enhancement of the team with proposed new experts, the inconsistencies and inaccuracies in the application of the Plan and accessibility of published contingency routes as well as NOTAMs, the issue of overflight permissions granted during contingency situation, the need for harmonization of the AFI Plan and other regional plans with special emphasis on the South Atlantic (SAT) region contingency plan as a start.

3.33 The Meeting noted the upcoming virtual meeting of the AFI ATM CP Consultative forum in October 2023 to enable the review of the AFI CP plan, the review of the AFI States CP and MOU templates and the development of regional alignment strategies.

3.34 The lessons learnt from the activation of the Contingency Coordination Teams (CCTs) to handle the contingency situations in the year indicated that the title of AFI ATM Contingency Plan Coordination Team (AFI ATM CCT) as captured in the AFI ATM CP required to be amended to avoid the confusion with the CCTs usually activated during contingencies. Also noted was the discrepancies in some of the national contingency plans which required review to align the contingency routes and associated flight level allocation scheme to avoid conflict when the routes are activated. The meeting also urged States to develop the national contingency plan that incorporates the ATM Contingency plans and Airport Emergency Plans.

3.35 The meeting noted with concern that only South Africa and ASECNA had provide the link for the contingency plans to ICAO for publication on ICAO website. The meeting reminded States that the responsibility of providing the link to their National ATM Contingency Plan lies with the State and should be provided irrespective of if the ANSPs has done so or not.

AERODROME OPERATIONS (SAFETY, CAPACITY AND EFFICIENCY)

Runway Safety Project Team Report

3.36 The Runway Safety Project Team informed the meeting that the Project

Document had been developed and submitted to the Secretariat for onward transmission to the APIRG Projects Coordination Committee (APCC) for consideration for approval. The meeting was informed that the Project team had proposed some activities that would enhance the Runway Safety Programmes at Airports including activities for consideration to increase the number of active Runway Safety teams in the Region.

3.37 The project team members in addition informed the meeting that some Project team members had participated in some Runway Safety Go Team Activities. The activities included support in establishment of Runway Safety Teams at Melchoir Ndadaye International Airport/Burundi, Entebbe International Airport /Uganda and Juba International Airport /South Sudan.

3.38 The meeting was also informed that the project team members participated in the Runway Safety induction workshop conducted jointly by ICAO, IATA and CASSOA in Kampala, Uganda for ESAF States, with 108 participants from 17 States and 8 International Organizations.

3.39 The Runway Safety Project Team Report is included as **Appendix 10** to this report.

A-CDM Project Team Report

3.40 The project team presented to the meeting the progress made in drafting the Project document which had been submitted to the Secretariat for consideration. The meeting was also informed of the proposed criteria for implementation of Airport-Collaborative Decision Making (A-CDM) in the region for consideration. The criteria include key actions and steps for the effective implementation of A-CDM by considering traffic density at airports to determine the airports that should implement ACDM.

3.41 The meeting noted that there were aspects that were not included in the project document and requested the Project team to include them before submission to Secretariat for consideration by APCC. The report of the ACDM Project team is in **Appendix 11** to this report.

Aerodrome Certification Project Team Report

3.42 The Aerodrome Certification Project Team informed the meeting that the team had revised the project document to fast-track the certification of international Aerodromes in the region.

3.43 The team further informed the meeting that the project team had identified the following challenges affecting the certification of international Airports namely regulatory compliance, inadequate infrastructure and resources, inadequate qualified

personnel and financial constraints.

3.44 In addition to the above information, the project team informed the meeting that some of the Project team members had participated in the AFI Plan Aerodrome Certification assistance missions to Botswana/Gaborone, Sierra Leone/Freetown, Congo/Brazzaville as well as workshops in Djibouti and Cameroon. Botswana, Congo and Sierra Leone had certified the Sir Sereste Airport, Brazzaville Airport and Freetown Airport respectively. Djibouti was working on the action plan agreed upon following the first mission.

3.45 In order to enhance States' capacities in aerodrome certification, the project team called on the ICAO Regional Offices and Regional Safety Oversight Organizations (RSOOs) to enhance their support to capacity-building programs and technical assistance activities. The meeting further urged RSOOs to promote regional cooperation and harmonization of aerodrome certification processes, including the exchange of best practices and experiences.

Training and Qualification Project Team Report.

3.46 The training and qualification team presented the results of the gap analysis conducted to identify training needs within ESAF and WACAF regions. The project team developed questionnaires that were distributed to States in May 2022 and the collection of data was extended until July 2023. As of July 2023, 30 States (62.5%) and 5 Training Organizations provided feedback to the questionnaires.

3.47 The meeting noted priorities identified by the team and mandated the project team to include these priorities in the project document and finalize it. The Training and Qualification Project Team Report is provided as **Appendix 12** to this report.

Membership of aerodrome operations (AOP) Project Teams

3.48 The meeting noted that the list of AOP project team members was not up to date as it includes retired State representatives or inactive members. Also, some active members were not included in the list. The meeting recommended to update the list. The Secretariat was tasked to follow up with the States and Organizations through reminder letters on the need to update the list.

GRF implementation initiative in Burkina Faso

3.49 Burkina Faso reported designing ground-contact and non-contact systems to perform runway inspections and assessments for the implementation of the Global Format of Reporting of Runway Surface Conditions (GRF)

3.50 The Burkina Faso system involve electronic devices, an unmanned aerial vehicle (UAV) or unmanned ground vehicle (UGV) that measures the expanse and the depth of the water on a runway and automatically generates the runway condition report (RCR). Data obtained is sent to ATC and AIM offices.

3.51 The project is still in the experimental stage. From the results obtained, the State reported that using the systems may reduce the need for human presence on the runway and improve the data collection time. The meeting appreciated the innovative project research and encouraged the State initiative to continue to share the experience and lessons learned from the results.

Wildlife hazard management challenges at the regional level

3.52 Uganda presented the outcomes of the Wildlife Hazard Management workshop that took place on 26-27 July 2022. Uganda's presentation highlighted wildlife hazard management challenges as follows: very few States in ESAF and WACAF report on wildlife strikes, the lack of qualified personnel, the unavailability of trainers on wildlife hazard management. The meeting was also informed that from the few reports available, there was an increase in the number of 'Unknowns' as provided for on the reporting form. The meeting called on the need to further investigate and analyse the 'Unknown' cases by carrying out research through genetic analysis of the samples collected to affectively provide guidance on addressing Wildlife strikes from the 'unknowns'.

3.53 The meeting agreed that a team of experts on wildlife hazard management be formed under the Aerodrome Certification Project Team. The experts are expected to develop specific terms of reference to investigate the issue, the impact on aviation activities and report to the subgroup.

Other Air Navigation initiatives

CANSO initiatives

3.54 CANSO provided information on the on-going implementation initiatives in the region regarding the Collaborative Decision Making (CDM), A-CDM as well as the Mombasa Air traffic Flow Management (ATFM) Roadmap. The meeting was also informed of a CANSO ATFM Data Exchange Network for Cooperative Excellence (CADENCE) which was established for sharing of information among participating entities. The tool is currently in use in the South America region.

3.55 CANSO called on States to embrace the CANSO Mombasa Roadmap and fast-track the implementation of CDM to enable a collaborative air traffic flow management.

3.56 In response to the discussion, ASECNA informed the meeting of the on-going ATFM initiative in its airspaces which were at an advanced stage.

3.57 The Secretariat highlighted the importance of the implementation of ATFM in the management of ATM contingency plans.

SASO initiatives

3.58 The meeting was informed of the initiatives and activities carried out by the Southern African Safety Oversight Agency (SASO). The activities include training of ANS inspectors, assistance missions as well as harmonization of regulations and guidance materials.

3.59 SASO which is based in Eswatini offered to host any training organized by ICAO and facilitate the attendance to the training by SASO member States.

3.60 The meeting applauded the offer of SASO to support the activities of the Sub-group and urged other regional and international organizations to consider hosting meetings and trainings as well.

AGENDA ITEM 4: REGIONAL AIR NAVIGATION PLAN

Update of AFI eANP

4.1 The meeting highlighted the process of amendment of the Air Navigation Plan (ANP) Volume I and II. The delegates were reminded that all changes in ANP Volume I and II were to be made through the proposal for amendments (PfA) process. The meeting noted that some information provided in the ANP volume I and II was not current. The meeting tasked the State's delegates to confirm information contained in Volume I and Volume II, especially regarding data on Flight Information Regions (FIRs), Search and Rescue Regions (SRRs) as well as services and facilities available at international airports.

4.2 The meeting recalled the APIRG/24 Decision 24/30 which called for the identification of applicable ASBU Elements and the finalization of AFI eANP Volume III. The Secretariat informed the meeting that the Secretariat circulated the draft Volume III of the AFI eANP for feedback through a State letter dated 20 January 2023. However, only three States namely Senegal, Tanzania and Togo provided feedback. Some participants informed the meeting that they had not received information or letters calling for participation in webinars organized by the ICAO Regional Offices on this subject.

4.3 The meeting was informed of the upcoming workshop on the update of the AFI ANP Volume I, II and III in October 2023. The meeting called on States to review and update information in the draft ANP Volumes I, II and III before the workshop.

4.4 The meeting urged States to ensure that State letters are made available to the relevant technical personnel.

AGENDA ITEM 5: AIR NAVIGATION DEFICIENCIES

Management of Air Navigation Deficiencies

5.1 The meeting was informed that on 17th May 2023, the AANDD platform was officially launched through a webinar organized by the Secretariat. The webinar familiarized the participants with information on the use of the AANDD platform for the identification, notification, assessment, and resolution of air navigation deficiencies.

The meeting noted that the AANDD tool was fully operational and urged States and Organizations to utilize the tool for the management of Air Navigation deficiencies.

Reporting of Air Navigation Deficiencies

5.2 The Secretariat provided awareness information to the participants on the reporting and management process of Air Navigation Deficiencies.

5.3 The meeting noted that few States were reporting deficiencies and reminded them to nominate focal points and ensure their effective involvement in the reporting process through the Air Navigation Deficiency Database (AANDD).

5.4 States reported challenges in accessing the AANDD platform to report some issues in areas that are not reflected in the AANDD. The meeting requested States to provide details of the concerns to the Secretariat for consideration.

AGENDA ITEM 6: ACTIVITIES TO BE COORDINATED WITH THE RASG-AFI SSTS

Aerodrome Operations and Planning activities to be coordinated with RASG/AFI

6.1 The meeting noted that there is no new item that needed coordination with RASG-AFI under the AOP but encouraged continuous coordination to increase the status of certification of aerodromes as well as runway safety and GRF implementation.

6.2 The meeting was provided with an update on the Status of aerodrome certification, establishment of Runway Safety Teams at international aerodromes and GRF

implementation in ESAF and WACAF as provided in **Appendix 13** to this report.

Airspace activities to be coordinated with RASG-AFI

6.3 *RVSM Airspace safety.* The meeting noted that the issue of Large High Deviation (LHD) remains a concern in AFI. The recent closure of State borders in Gabon, Niger, and Sudan exacerbated the safety issues in AFI airspace due to traffic deviations from planned trajectories raising the reports of non-adherence to separation standards and airspace approval procedures in accordance to Annex 11 requirements. The meeting called for increased sensitization of Airspace users to adhere to separation Standards even during such demanding circumstances.

6.4 *Performance Based Communication and Surveillance (PBCS).* The meeting noted that the requirements of APIRG:/23 Decision 23/06 to establish a PBCS implementation team had not been affected. The meeting also noted that PBCS implementation required aircraft approvals which falls under the responsibility of RASG AFI. The meeting therefore called upon RASG AFI to expedite an awareness programme on PBCS to the States to enable effective implementation in the region.

UAS activities in WACAF States

6.6 The Secretariat provided the meeting with a background on Unmanned Aircraft System (UAS) activities in the WACAF region, as well as issues related to the operations of UAS in the AFI region in general.

6.8 The meeting noted that several States do not have RPAS regulations and that the UAS operations in the region remained unregulated. The meeting thus called upon RASG AFI to support States in expediting the development of national regulations.

AGENDA ITEM 7: IMPLEMENTATION CHALLENGES OF THE SUB-GROUP

Implementation challenges in Aerodrome Operations and Planning (AOP)

7.1 The Aerodrome Operations and Planning (AOP) breakout session meeting discussed some of the implementation challenges especially related to the project's definition and drafting. The meeting requested the Secretariat to conduct a virtual webinar on the subject.

7.2 The meeting further noted that some project team members had separated from the Civil Aviation Authorities or Air Navigation Service Providers without being replaced. This had put a lot of burden on the few experts who had to carry out the project

activities. Considering this, the meeting urged States and Organizations to nominate more experts/focal points to support the initiative and replace where needed.

Implementation challenges in Airspace Operations

7.3 During the breakout sessions the Airspace Operations meeting discussed implementation challenges related to projects as well as operational ATM and SAR activities.

7.4 The meeting highlighted the lack of information on some concepts such as AFI PBCS plan and national regulatory framework template, as well as how to determine ATS Capacity. In addition, Kenya presented a discussion paper on low level of State’s responses to ICAO correspondence. The meeting noted that a significant number of State letters do not always reach the targeted State’s focal points and thus the low response level and urged the Secretariat to enhance efforts in sensitizing the States at the highest levels to address this deficiency.

7.6 The meeting noted and appreciated that the various validation workshops and meetings held virtually had attracted several participants from the States and Organizations. The meeting was also informed that some projects activities required in-person meetings to develop, validate documentation and discuss future activities. The current provisions of the APIRG Handbook do not provide for in-person meetings. The meeting therefore called on the Secretariat to consider the review of the Handbook to be all inclusive in order to promote the implementation of all the project’s activities.

7.7 The meeting noted that Significant Safety Concerns (SSCs), especially in PANS-OPS, were increasing in the region. It was highlighted that the causes of such increase were related to the lack of awareness for Instrument Flight Procedures promulgation and approval process. The meeting urged the Secretariat to coordinate sensitization workshops in 2024 to mitigate the trend. The meeting therefore agreed on the following Decision:

Draft Decision 6/06	Sensitization Workshops on Instrument Flight Procedures. That to mitigate the risk of SSCs related to PANS-OPS in the region, the secretariat conducts two sensitization workshops aimed at increasing awareness on design and approval processes for Instrument Flight Procedures by States and Organizations.
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7.8 The meeting also noted that under the airspace group there was no Project team to address training and qualification of experts in the ATM and SAR areas to help with the implementation of airspace projects. The meeting called upon the Secretariat to further analyze the matter and propose terms of reference and rationale for the establishment of a project team during its next meeting.

7.9 The status of signed Search and Rescue (SAR) agreements between States was reported to be the lowest in all SAR implementation elements in the AFI region. The meeting recalled that SAR agreements could only be effective if they were signed or approved at the highest State level. Some lessons learned were provided with the example of the East African Community (EAC) where member States decided to sign joint SAR agreement applicable within their Regional Economic Community (REC). The meeting encouraged States and regional organizations to support joint SAR agreements to optimize the available resources and harmonize SAR procedures and services.

AGENDA ITEM 8: PROPOSED RECOMMENDATIONS/ACTIONS TO BE TAKEN BY ICAO HQ

8.1 The meeting deliberated on the agenda item and noted the need for sensitization at the States' highest level on Civil/Military Cooperation in ATM. The meeting also noted the lack of adequate expertise in the region to address this deficiency. The meeting called on ICAO HQs to support the region by identification of experts from other regions who can support in terms of training and sharing of best practices on Civil/Military Cooperation matters under the NCLB initiative.

8.2 The meeting noted with concern the low level of participation of States' experts from the ESAF and WACAF regions in ICAO panels and called on the States to nominate suitably qualified experts to participate in ICAO panels and working groups when required.

8.3 The Secretariat also provided the meeting with information related to the latest amendments of ICAO Annexes 14 and 11, as well as PANS Aerodromes and PANS-ATM. States and Organizations were encouraged to keep abreast of changes in ICAO documentations and amend their national regulations accordingly. The meeting appreciated the updates and requested encouraged the Secretariat to continuously provide such updates to the Subgroup meetings to help the States keep abreast with the emerging issues in aviation.

AGENDA ITEM 9: REVIEW OF THE TERMS OF REFERENCE (TOR) AND WORK PROGRAMME OF THE SUB-GROUP

Terms of Reference of the Sub-Group

9.1 The meeting proposed that any proposals to amendment to the Terms of Reference of the subgroup to be incorporated in a working paper to be presented in the next Sub-group meeting.

Work programme of the Sub-Group

9.4 The Secretariat presented a proposal for the future work programme of the AAO/SG which highlighted the main activities to be conducted such as coordination with project teams, review the Project's progress as well as preparations activities of the AAO/SG7 scheduled for mid-2024. The meeting agreed on the proposed AAO/SG work programme as provided in **Appendix 15** . The following draft decision was formulated.

Draft Decision 6/07	Work Programme of the AAO/SG That, to achieve the Sub-group's objectives, the work programme of the AAO/SG is endorsed as attached in Appendix 20 to this report.
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AGENDA ITEM 10: REVIEW OF THE DRAFT CONCLUSIONS/DECISIONS/ACTIONS OF THE SIXTH MEETING OF THE AIRSPACE AND AERODROME OPERATIONS SUB-GROUP (AAO/SG 6)

10.1 The meeting reviewed and adopted the draft Conclusions and Decisions as well as actions to be undertaken by the Airspace and Aerodrome Operations Subgroup. A summary of the draft Conclusions, Decisions and the list of actions by the meeting are provided in **Appendix 16** and **17** to this report.

AGENDA ITEM 11: ANY OTHER BUSINESS

There was no agenda to be discussed under this subject.

Closing ceremony

11.3 The Chairperson of the Sub-group provided a summary of the discussions of the meeting as well as the main outcomes.

11.4 The meeting was officially closed by the Regional Director of the ICAO WACAF Office. In his closing remarks, Mr. Zo'o Minto Prosper, called for a minute of silence in the memory of the late Mr. Elhadji Ayaha Ahmed, former Director General of the CAA of Niger who passed away on 7 September 2023.

11.5 He 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 have updated versions of Volume I, II and III of the AFI eANP and to continuously report on the implementation with regards to ASBU elements.

11.6 He welcomed the offer made by the SASO to host regional meetings and promised the support of ICAO to partner in such events.

11.7 He thanked the outgoing Chairperson Mr. Billy Diabasenga, for his invaluable contribution to the activities of the AAO/SG and congratulated the incoming Chairperson Mr. Nathan Kaluba, from Zambia and the Vice-Chairperson Mr. Adama Sanogo, from Côte d'Ivoire. He also thanked the participants for their contributions and for the quality of the outcomes from the discussions that are meant to address regional air navigation issues. He wished all the participants journey mercies back home.

11.8 The Regional Director officially declared the 6th AAO Sub-group meeting closed.

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