



| ICAO

**REPORT OF THE TWENTY-THIRD MEETING OF THE AFI PLANNING AND
IMPLEMENTATION REGIONAL GROUP (APIRG/23)**

&

**THE SIXTH MEETING OF THE REGIONAL AVIATION
SAFETY GROUP FOR AFI REGION
(RASG-AFI/6)**

(Virtual, 23 November - 2 December 2020)

PREPARED BY THE SECRETARIAT

THE DESIGNATIONS AND THE PRESENTATION OF MATERIAL IN THIS PUBLICATION DO NOT IMPLY THE EXPRESSION OF ANY OPINION WHATSOEVER ON THE PART OF ICAO CONCERNING THE LEGAL STATUS OF ANY COUNTRY, TERRITORY, CITY OR AREA OF ITS AUTHORITIES, OR CONCERNING THE DELIMITATION OF ITS FRONTIERS OR BOUNDARIES.

TABLE OF CONTENTS

LIST OF APPENDICES	5
LIST OF CONCLUSIONS AND DECISIONS	6
PART I: INTRODUCTION	9
<i>Place and duration</i>	10
<i>Attendance</i>	10
<i>Officers and Secretariat</i>	10
<i>Working Languages</i>	10
<i>Opening of the meeting</i>	11
<i>Closing of the meeting</i>	12
PART II: APIRG/23 AND RASG-AFI/6 FIRST JOINT SESSION	13
AGENDA ITEM 0: REVIEW AND ADOPTION OF THE DRAFT AGENDA AND WORK PROGRAMME	14
AGENDA ITEM 1: IMPLEMENTATION OF COUNCIL-APPROVED TERMS OF REFERENCE FOR PIRGs AND RASGs	14
<i>Review of the action taken by the ANC and the Council on the report of APIRG/22 and RASG-AFI/5 meetings</i>	14
<i>Format of APIRG/RASG-AFI meetings</i>	14
<i>Consequential amendments to the APIRG and RASG-AFI Procedural Handbooks</i>	15
AGENDA ITEM 2: COVID-19 IMPACT ON AVIATION SECTOR: THE APIRG/RASG-AFI CONTEXT	16
AGENDA ITEM 3: APIRG AND RASG-AFI COORDINATION	18
PART III: TWENTY-THIRD MEETING OF THE AFRICA-INDIAN OCEAN PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG/23)	22
AGENDA ITEM 0: ADOPTION OF THE AGENDA AND WORK PROGRAMME & ELECTION OF THE BUREAU	23
AGENDA ITEM 1: FOLLOW-UP ON APIRG/22 MEETING CONCLUSIONS AND DECISIONS AND APCC/5 CONCLUSIONS AND DECISIONS	23
<i>Review of the action taken by the APCC/5 on APIRG/22 Conclusions and Decisions</i>	23
<i>Review of the status of implementation of APIRG/22 Conclusions and Decisions</i>	23
<i>Review of outcomes of APCC/5 meeting</i>	24
AGENDA ITEM 2: PERFORMANCE FRAMEWORK FOR REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION	24
AGENDA ITEM 4: OTHER AIR NAVIGATION ISSUES	51
AGENDA ITEM 5: APIRG AIR NAVIGATION REPORT 2019/2020	57

AGENDA ITEM 6:	REVIEW AND UPDATE OF THE TERMS OF REFERENCE, FUTURE WORK PROGRAMME OF THE APIRG AND ITS AUXILIARY BODIES	58
AGENDA ITEM 7:	ANY OTHER BUSINESS	59

**PART IV: SIXTH MEETING OF THE REGIONAL AVIATION SAFETY GROUP
FOR AFI REGION (RASG-AFI/6) 60**

AGENDA ITEM 0:	REVIEW AND ADOPTION OF THE DRAFT AGENDA AND MEETING WORK PROGRAMME	61
AGENDA ITEM 1:	FOLLOW-UP ON RASG-AFI/5 AND RASC/5 MEETINGS CONCLUSIONS AND DECISIONS	61

	<i>RASG-AFI/5 Meeting Conclusions and Decisions</i>	61
	<i>RASC/5 Meeting Conclusions and Decisions</i>	62
	<i>Review of proposed amendments to the RASG-AFI Procedural Handbook</i>	62
	<i>RASG-AFI Projects and Critical Activities</i>	62
	<i>Release of the 6th Edition of the RASG-AFI Annual Safety Report</i>	62
	<i>Review of the status of implementation of the revised Abuja Safety and Air Navigation Targets</i>	63
	<i>AFI Regional Aviation Safety Plan (AFI-RASP)—Strategy for the Development and Implementation of the AFI-RASP</i>	64

AGENDA ITEM 2:	REPORTS ON RASG-AFI ACTIVITIES	65
AGENDA ITEM 3:	ICAO “NO COUNTRY LEFT BEHIND (NCLB)” INITIATIVE	70
AGENDA ITEM 3.2:	UPDATE ON THE SAFETY INITIATIVES BY STATES, REGIONAL ORGANIZATIONS, INDUSTRY AND PARTNERS, ESPECIALLY UNDER THE CONTEXT OF COVID-19.	71
AGENDA ITEM 4:	REVIEW OF THE FUTURE WORK PROGRAMME OF THE RASG-AFI AND ITS AUXILIARY BODIES	75
AGENDA ITEM 5:	REVIEW AND UPDATE OF THE RASG-AFI PROCEDURAL HANDBOOK AND TERMS OF REFERENCE	76
AGENDA ITEM 6:	ANY OTHER BUSINESS (AOB)	77

**PART V: APIRG/23 AND RASG-AFI/6
SECOND JOINT SESSION 78**

AGENDA ITEM 1:	REVIEW AND ADOPTION OF THE CONCLUSIONS AND DECISIONS OF THE APIRG/23 AND RASG-AFI/6 MEETINGS	79
AGENDA ITEM 2:	ANY OTHER BUSINESS (AOB)	79
AGENDA ITEM 3:	VENUE AND DATE OF THE NEXT APIRG & RASG-AFI MEETINGS	79
AGENDA ITEM 4:	CLOSING CEREMONY	79

LIST OF APPENDICES

Appendix 1A: List of participants

APIRG23 & RASG-AFI6 (Joint Sessions)

Appendix 1B: Agenda and Work Programme
Appendix 1C: APIRG & RASG-AFI Common Areas
Appendix 1D: Closing Remarks by the President of the Air Navigation Commission

RASG-AFI6

Appendix 3A: Agenda and Work Programme for RASG-AFI/6:
Appendix 3B: Work Programme for 2021 of RASG-AFI and its Contributory Bodies:

APIRG/23

Appendix 2A: Agenda and Work Programme
Appendix 2B: Status of Implementation of APIRG Conclusions and Decisions
Appendix 2C: Status of Implementation of AAO SG Projects
Appendix 2D: Draft AFI Free routing Operations Concept
Appendix 2E: States that responded to AFI SAR Gap Analysis
Appendix 2F: Initial AOP Projects and implementation
Appendix 2G: Proposed AOP Projects and implementation
Appendix 2H: AFI IWXXM Implementation Guidelines
Appendix 2I: AAO SG AANDD Management Process
Appendix 2J: AANDD Minimum Reporting areas
Appendix 2K: ARMA F2 RVSM and PCBS
Appendix 2L: SAT Handbook
Appendix 2M: ARMA F3 RVSM and PCBS
Appendix 2N: Comprehensive Information for Development of AFI Air Navigation Report for 2019-2020
Appendix 2P: Future work programmes APIRG
Appendix 3A: RASG -AFI 6 Agenda and Work Programme
Appendix 3B: RASG-AFI Work Programme 2021 of the RASG-AFI and its Contributory Bodies

LIST OF CONCLUSIONS AND DECISIONS

DEFINITIONS

RASG-AFI and APIRG record their actions in the form of Conclusions and Decisions as follows:

- a) **Conclusions** deal with matters which, in accordance with the Groups' terms of reference, merit directly the attention of States, or on which further action is required to be initiated by the Secretary in accordance with established procedures.
- b) **Decisions** relate to the internal working arrangements of the Groups and their subsidiary bodies.

APIRG/23 & RASG-AFI/6

<i>APIRG/23 & RASG/6 Decision 2/01: Reference</i>	<i>Implementation of Council Terms of for PIRGs and RASGs</i>
<i>APIRG/23 & RASG-AFI/6 Decision 2/02: (AFI)</i>	<i>Definition of the Africa-Indian Ocean Region</i>
<i>APIRG/23 & RASG/AFI/6 Conclusion 2/03: APIRG/23 & RASG-AFI/6 Conclusion 2/04:</i>	<i>COVID-19 Impact on the Aviation sector Development, Harmonization and Implementation of Regional Health Protocol Related to COVID-19 Pandemic</i>
<i>APIRG/23 & RASG-AFI/6 Conclusion 2/05:</i>	<i>Improving NOTAM Quality</i>
<i>APIRG/23 & RASG-AFI/6 Decision 2/06:</i>	<i>Coordination of Annual Reporting</i>
<i>APIRG/23 & RASG-AFI/6 Conclusion 2/07:</i>	<i>Implementation of the Abuja Safety and ANS targets</i>

APIRG/23

<i>APIRG/23 Decision 23/01:</i>	<i>Establishment of an AFI ATM Master Plan Project Management Team (AAMP PMT)</i>
<i>APIRG/23 Conclusion 23/02:</i>	<i>Prioritization of Free Routing Airspace implementation</i>
<i>APIRG/23 Conclusion 23/03:</i>	<i>RVSM data returns and Large Height Deviations reporting</i>
<i>APIRG/23 Conclusion 23/04:</i>	<i>Implementation of TAG and AIAG Recommendation</i>
<i>APIRG/23 Conclusion 23/05:</i>	<i>Implementation of PBN</i>
<i>APIRG/23 Decision 23/06:</i>	<i>Development of the AFI region PBCS plan and establishment of PBCS implementation team</i>
<i>APIRG/23 Conclusion 23/07:</i>	<i>Appointment of State SAR Points of Contact and submission of National SAR Plans</i>
<i>APIRG/23 Conclusion 23/08:</i>	<i>Improved civil/military coordination:</i>
<i>APIRG/23 Conclusion 23/09:</i>	<i>Process and Procedures for Overflight Clearances</i>
<i>APIRG/23 Conclusion 23/10:</i>	<i>Implementation of Aerodrome Operations Projects and ASBU Modules</i>
<i>APIRG/23 Decision 23/11:</i>	<i>Implementation of Aerodrome Operations Projects and ASBU Modules</i>
<i>APIRG/23 Conclusion 23/12:</i>	<i>CART Recommendations relevant to AAO/SG Activities</i>

<i>APIRG/23 Conclusion 23/13:</i>	<i>Endorsement of the survey questionnaire for the conduct of Air Navigation Infrastructure Gap Analysis</i>
<i>APIRG/23 Conclusion 23/15:</i>	<i>Establishment of mechanism for air navigation reports</i>
<i>APIRG/23 Conclusion 23/16:</i>	<i>Nomination to AAO/SG Core Membership</i>
<i>APIRG/23 Conclusion 23/17:</i>	<i>Participation in the activities of APIRG IIM SG Projects Teams</i>
<i>APIRG/23 Conclusion 23/18:</i>	<i>Effective and efficient coordination of the IIM Projects activities</i>
<i>APIRG/23 Conclusion 23/19:</i>	<i>Cooperation and harmonization in planning implementing, operation and monitoring AFI IWXXM Implementation Guideline and development of capabilities of handling OPMET data in digital format</i>
<i>APIRG/23 Conclusion 23/21:</i>	<i>Coordination of Regional AAO and IIM Projects</i>
<i>APIRG/23 Conclusion 23/22:</i>	<i>IIM Projects Package for Funding</i>
<i>APIRG/23 Conclusion 23/23:</i>	<i>Coordination and guidance on the implementation of AIM Go-Team activities in AFI States</i>
<i>APIRG/23 Decision 23/24:</i>	<i>Development of IIM Projects Master Plan</i>
<i>APIRG/23 Conclusion 23/25:</i>	<i>Cyber Safety and Resilience of the Air Navigation Systems</i>
<i>APIRG/23 Conclusion 23/26:</i>	<i>Preparation of ITU WRC-23</i>
<i>APIRG/23 Conclusion 23/28:</i>	<i>Development of Volcanic Ash Contingency Plans and conduct of Volcanic Ash exercises in the AFI Region</i>
<i>APIRG/23 Conclusion 23/29:</i>	<i>Establishment of a Regional Space Weather Project</i>
<i>APIRG/23 Conclusion 23/30:</i>	<i>Development of action plans for the implementation of Space Weather requirements</i>
<i>APIRG/23 Conclusion 23/31:</i>	<i>Africa and Indian Ocean Aeronautical Information Management Action Group (AFI AIM AG)</i>
<i>APIRG/23 Conclusion 23/32:</i>	<i>Endorsement of AANDD Management process and minimum Reporting Areas and nomination of Focal Points</i>
<i>APIRG/23 Conclusion 23/33:</i>	<i>Nomination of RVSM focal points and submission of data to ARMA</i>
<i>APIRG/23 Conclusion 23/34:</i>	<i>Implementation of SLOP as discount for CRA/15</i>
<i>APIRG/23 Conclusion 23/35:</i>	<i>Adoption of new ARMA forms F2 and F3</i>
<i>APIRG/23 Decision 23/36:</i>	<i>Reduction of Trans-Regional Large Height Deviations</i>
<i>APIRG/23 Conclusion 23/37:</i>	<i>Harmonization and improvement of air traffic services the entire Atlantic</i>
<i>APIRG 23 Decision 23/38:</i>	<i>RHWAC/MWOs collaboration experimentation and development of the Regional Hazardous Weather Advisory Center (RHWAC)</i>
<i>APIRG/23 Conclusion 23/39:</i>	<i>Publication of the APIRG Air Navigation Report – 2019/2020</i>
<i>APIRG/23 Decision 23/40:</i>	<i>APIRG Procedural Handbook Sixth Edition December 2020</i>

RASG-AFI/6

<i>RASG-AFI/6 Decision 6/01:</i>	<i>Follow-up on RASG-AFI/5 Conclusions and Decisions</i>
<i>RASG-AFI/6 Conclusion 6/02:</i>	<i>Commitment of required resources to address issues raised in the Conclusions drawn by the RASG-AFI meetings.</i>
<i>RASG-AFI/6 Decision 6/03:</i>	<i>Familiarisation with the provisions of the revised RASG-AFI Procedural Handbook</i>
<i>RASG-AFI/6 Conclusion 6/04:</i>	<i>RASG-AFI Projects and Critical Activities.</i>
<i>RASG-AFI/6 Conclusion 6/05:</i>	<i>Revision of the Abuja Safety Targets</i>
<i>RASG-AFI/6 Conclusion 6/06:</i>	<i>Establishment of the Performance Dashboard</i>
<i>RASG-AFI/6 Conclusion 6/07:</i>	<i>Assistance to States in the implementation of the Abuja Targets</i>
<i>RASG-AFI/6 Decision 6/08:</i>	<i>Development and implementation of Regional Aviation Safety Plan (AFI-RASP)</i>
<i>RASG-AFI/6 Conclusion 6/09:</i>	<i>Development and implementation of National Aviation Safety Plans (NASPs)</i>
<i>RASG-AFI/6 Decision 6/10:</i>	<i>Safety Support Team – Significant Safety Concerns (SST-SSC)</i>
<i>RASG-AFI/6 Conclusion 6/11:</i>	<i>Safety Support Team - Fundamentals of Safety Oversight (SST-FSO)</i>
<i>RASG-AFI/6 Conclusion 6/12:</i>	<i>Safety Support Team - Emerging Safety Issues (SST-ESI, Loss of Control In-flight (LOC-I))</i>
<i>RASG-AFI/6 Decision 6/13:</i>	<i>Safety Support Team – Aircraft Accident and Incident Investigation (SST-AIG)</i>
<i>RASG-AFI/6 Conclusion 6/14:</i>	<i>State Safety Programme (SSP) and Safety Management System (SMS) Implementation</i>
<i>RASG-AFI/6 Conclusion 6/15:</i>	<i>Support to ICAO NCLB Initiative</i>
<i>RASG-AFI/6 Conclusion 6/16:</i>	<i>Development of remote safety oversight mechanism</i>
<i>RASG-AFI/6 Decision 6/17:</i>	<i>Support to the SSP Peer Review Mechanism</i>
<i>RASG-AFI/6 Conclusion 6/18:</i>	<i>Cooperation amongst States in the AFI SSP Peer Review Mechanism</i>
<i>RASG-AFI/6 Decision 6/19:</i>	<i>Review and endorsement of the RASG-AFI Work Programme for 2021</i>
<i>RASG-AFI/6 – Decision 6/20:</i>	<i>Review and update of the RASG-AFI Procedural Handbook and the Terms of Reference of RASG-AFI.</i>

PART I: INTRODUCTION

Place and duration

1.1 The Twenty-third Meeting of the AFI Planning and Implementation Group (APIRG/23) and Sixth Meeting of the AFI Regional Aviation Safety Group (RASG - AFI/6) were held virtually from 23 November to 2 December 2020. Two joint sessions were convened on 23 November and 2 December 2020.

Attendance

1.2 The meetings were attended by more than 400 participants from AFI States, regional/ international Organizations and Industry. The list of participants is provided in **Appendix 1A** to this report.

Officers and Secretariat

1.3 The Joint session of the APIRG/23&RASG-AFI/6 meetings was co-chaired by Mr Magueye Maramé Ndao, Chairperson of the APIRG and Capt. Gilbert Kibe, Chairperson of the RASG-AFI respectively.

1.4 Mr. Barry Kashambo, Regional Director, ICAO Eastern and Southern African Office, Nairobi, served as Secretary to the meeting. He was assisted by Mr. Prosper Zo'o Minto'o, Regional Director, ICAO Western and Central African Office, Dakar; with the participation of Messrs. Herman Pretorius and Hervé Forestier from the Air Navigation Bureau, ICAO Headquarters. The following Officers from ICAO ESAF and WACAF Regional Offices assisted the meetings:

Mr. Arthemon Ndikumana	DRD, ESAF Office, Nairobi
Mr. Nika Meheza Manzi	DRD, WACAF Office, Dakar
Mr. Ousman Kemo Manjang	RO/AIR, WACAF Office, Dakar
Mr. François-Xavier Salambanga	RO/CNS, WACAF Office, Dakar
Mr. Milton Tumusiime	RO/FS, ESAF Office, Nairobi
Mr. Papa Issa Mbengue	RO/OPS, ESAF Office, Nairobi
Mr. Kebba Lamin Jammeh	RO/FS, WACAF Office, Dakar
Mr. Albert Aidoo Taylor	RO/ATM, WACAF Office, Dakar
Mr. Elisha Omuya	RO/AGA, ESAF Office, Nairobi
Ms. Keziah Ogutu	RO/ATM, ESAF Office, Nairobi
Mr. Zewdu Aregawi	RO/SI, ESAF Office, Nairobi
Ms. Sonia Freitas	RO/SI, WACAF Office, Dakar
Ms. Chinga Mazhetese	RO/MET/ENV, ESAF Office, Nairobi
Mr. Harvey Lekamisy	RO/CNS, ESAF Office, Nairobi
Mr. Eyob Estifanos	RO/AFI PLAN, ESAF Office, Nairobi
Mr. Rene Tavaréz	RO/FS, WACAF Office, Dakar

Working Languages

1.5 The meetings' discussions were conducted in English and French with simultaneous interpretation services and documentation was made available in both languages.

Opening of the meeting

1.6 The opening of the joint session of the APIRG/23 and RASG-AFI/6 took place on Monday, 23 November 2020. The meeting was attended by over 400 participants from AFI member States, the ICAO Council and the Air Navigation Commission (ANC), international and regional Organizations, industry and other partners & stakeholders.

1.7 During the joint opening session, statements were delivered by Mr. Barry Kashambo, ICAO Regional, Director ESAF office and Secretary of APIRG, Mr. Papa Atoumane FALL on behalf of the AFCAC Secretary General, Capt. Gilbert M. Kibe, Director General, Kenyan Civil Aviation Authority and Chairperson of RASG-AFI and Mr. Maguèye Marame Ndao, Director General, National Civil Aviation and Meteorological Authority of Senegal (ANACIM) and Chairperson of APIRG. In their remarks, all Speakers expressed their gratitude to participants attending the meeting as well as the Secretariat, ICAO ESAF and WACAF Regional Offices for successfully coordinating these important meetings virtually.

1.8 Mr. Barry Kashambo, in his opening statement highlighted that, despite the effects of COVID-19 pandemic, innovations have emerged that allow conduct of meetings remotely and anticipated positive outcomes. He further intimated that the effective implementation of the provisions of the Civil Aviation Recovery Task Force (CART) report and take-off guidance material and other alleviation measures, will propel the aviation industry to a smooth restart, recovery and building of a resilient aviation sector, while tapping into the enormous opportunities before us to gain the available efficiencies and cost effectiveness.

1.9 Mr. Kashambo further highlighted that the ICAO Council and the Assembly proposed evolution of PIRGs and RASGs with timelines towards an integrated approach to address organizational challenges, infrastructure, operational risks and performance measurement. It is in light of these proposals that the format of APIRG and RASG-AFI meetings has been structured with joint opening and closing sessions and intermediary specific meetings. The new format will create the needed synergies to ensure capacity and infrastructure optimization, efficiency, and enhanced operational safety in the air transport sector in the AFI region.

1.10 In addition, the Regional Director provided information that the Third Airspace and Aerodrome Operations Sub-Group, Third Infrastructure and Information Management Sub-Group, Sixth RASC and the Fifth APCC meetings, were all successfully held virtually prior to this meeting. The various relevant Conclusions and Decisions formulated during the meetings will be presented to the respective Groups for consideration.

1.11 The Representative of AFCAC Secretary General, Mr. Papa Atoumane FALL in his remark highlighted the adverse effects of the COVID-19 Pandemic on African aviation. In this regard, AFCAC in collaboration with the African Union Commission (AUC), ICAO Regional Offices and industry partners, developed the High-Level Task Force Report and related recommendations and measures to assist civil aviation authorities and service providers to enable the restart and recovery of the industry.

1.12 He further emphasized that the Group meetings are happening at a time when collaborative teamwork is essential to rebuild the aviation Industry in the Continent. In this context AFCAC reiterates its commitment to collaborate with all members of the Groups to identify any challenges faced by the Groups in achieving their set objectives, targets and to identify any conflicts and/or inefficiencies with proposed strategies to address them, for the endorsement by AUC.

1.13 In his remarks, Capt. Gilbert M. Kibbe, Director General Kenyan Civil Aviation Authority, and Chairperson of RASG AFI expressed appreciation to the convening of the joint meeting despite the COVID-19 Pandemic, in accordance with the ICAO Council decision and approved Terms of Reference. He underscored the necessity for the meeting to assess the implementation performance of the AFI Region in respect with the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP). He further highlighted the need for collaboration between the two groups (RASG-AFI and APIRG) in order to create synergy towards ensuring capacity and infrastructure optimization, efficiency, and enhanced operational safety.

1.14 In his opening remarks, the Chairperson of the meeting (Joint Session), Mr. Maguèye Marame Ndao, Director General of the National Civil Aviation and Meteorological Authority of Senegal (ANACIM), and Chairperson of APIRG, indicated that despite the COVID-19 Pandemic related challenges, it was important to convene the meeting virtually to enable continuous planning and evaluation of the aviation development in the AFI region. He informed the meeting that the safety and air navigation capacity in the region has been improving over the years through implementation of various initiatives. However, the AFI region still needs to enhance coherent planning and implementation through the two Groups (APIRG and RASG-AFI) to improve the level of safety and air navigation capacity. Finally, Mr. Ndao highlighted the key issues to be covered during the Joint meeting before officially declaring the meeting opened.

Closing of the meeting

1.15 Mr. Nabil Naoumi, the President of the Air Navigation Commission participated and addressed the joint closing session of APIRG/23 and RASG-AFI/6 meetings. The address was well received and appreciated by the meeting. His address is provided as **Appendix 1D** to this report.

PART II:
APIRG/23 AND RASG-AFI/6 FIRST
JOINT SESSION

AGENDA ITEM 0: REVIEW AND ADOPTION OF THE DRAFT AGENDA AND WORK PROGRAMME

The meeting reviewed and adopted the provisional agenda and work programme as presented by the Secretariat. The Agenda is presented as attached in **Appendix 1B** to this Report.

AGENDA ITEM 1: IMPLEMENTATION OF COUNCIL-APPROVED TERMS OF REFERENCE FOR PIRGs AND RASGs

Review of the action taken by the ANC and the Council on the report of APIRG/22 and RASG-AFI/5 meetings

1.1 The meeting was presented with the outcome of the review by the Air Navigation Commission (ANC) and ICAO Council of the consolidated annual report on Planning and Implementation Regional Groups (PIRGs) and Regional Aviation Safety Groups (RASGs), covering the period from April 2019 to March 2020, especially the Report of the Twenty-second Meeting of APIRG (APIRG/22) and the Fifth Meeting of the RASG-AFI (RASG-AFI/5).

1.2 The meeting noted the actions required to be taken by the Council and the PIRGs and RASGs, to address the identified common global challenges faced by the regions. It was noted that the Council identified four notable items to be addressed by APIRG and RASG-AFI. These include monitoring the implementation of air traffic services (ATS) message handling system (AMHS); the identification of the underlying problems related to a lack of competent inspectors in AFI States; the high rate of missing operational messages (Flight plans, OPMETs, NOTAMs), and the fact that States are not submitting RVSM data to the RMA Office on a monthly basis. It was recalled that the APIRG and RASG-AFI have already initiated actions to further address the challenges identified.

Format of APIRG/RASG-AFI meetings

1.3 The meeting was presented with the outcome of the work conducted by APIRG/RASG-AFI Coordination Task Force (ARC-TF) and in particular the APIRG/22 & RASG-AFI/5 Decision on the transition to an integrated approach to PIRGs and RASGs.

1.4 The ARC-TF preliminary analysis of the effectiveness and efficiency of the meeting format applied for APIRG/22 and RASG-AFI/5 meetings in 2019, with joint and parallel sessions, as compared to the previous back-to-back approach, identified the following challenges:

- a) Conference facilities: Need for two or three conference rooms to accommodate APIRG and RASG-AFI joint and parallel sessions;
- b) Participation: Inability for some States and Organizations with a limited number of delegates to participate in two parallel meetings;
- c) Secretariat support: Lack of flexibility for members of the Secretariat to fully participate and support the two meetings; and
- d) Venue: WACAF and ESAF Regional Offices inability to comply with the requirement to host PIRG/RASG meetings at their premises in view of the associated cost implications and logistical constraints.

1.5 Accordingly, the ARC-TF further assessed the new meeting format whilst taking due account of the AFI Region's peculiarity and context. In this regard, the following meeting format was presented as the preferred option and sequence for an effective conduct of future APIRG/RASG-AFI meetings:

- a) Joint APIRG & RASG-AFI opening session,
- b) APIRG meeting back-to-back with RASG-AFI meeting, and
- c) Joint APIRG & RASG-AFI closing session.

1.6 Furthermore, the meeting acknowledged the tremendous benefits in the use of virtual meeting platforms in terms of flexibility, increased States' participation and cost-effectiveness which were brought to light by the COVID-19 pandemic. The meeting therefore agreed on the following decision.

APIRG/23 & RASG/6 Decision 2/01: Implementation of Council Terms of Reference for PIRGs and RASGs

That to ensure the flexibility, increased States' participation and cost-effectiveness of the meetings, APIRG and RASG-AFI:

- a) **adopt the new format and sequence of conducting the APIRG & RASG-AFI meetings as follows: Joint APIRG & RASG-AFI opening session, APIRG meeting back-to-back with RASG-AFI meeting, and Joint APIRG & RASG-AFI closing session; and**
- b) **adopt the conduct of virtual meetings, to the extent possible, in addition to physical meetings, whenever feasible and practical.**

Consequential amendments to the APIRG and RASG-AFI Procedural Handbooks

1.7 The meeting recalled that, in 2019, the ICAO Council approved new generic Terms of Reference for the PIRGs and RASGs, in order to clarify the roles of stakeholders and promote partnership among them, harmonize the methods of work and improve regional reporting through more frequent meetings. It was agreed that the option to further expand the generic terms of reference to suit the regions' needs will ensure flexibility of the work and lay the foundation for a more efficient meeting model and reporting.

1.8 Following their review of the terms of reference (ToR) of the PIRGs and RASGs as approved by the ICAO Council to improve the performance and expected results of the Groups, the APIRG/22 and the RASG-AFI/5 meetings in July/August 2019, requested the Secretariat to make consequential changes to the APIRG and RASG-AFI Procedural Handbooks (APIRG/22 & RASG-AFI/5 Decision 01/03 refers).

1.9 Accordingly, the Secretariat presented the consequential changes to be made to the APIRG and RASG-AFI Procedural Handbooks, which were submitted to, and reviewed by the RASC/5 and the APCC/5 meetings, and subsequently endorsed by the third meeting of the APIRG/RASG-AFI Coordination Task Force (ARC-TF/3). The APIRG/23 and RASG-AFI/6 joint meeting endorsed the proposed changes reflecting the ICAO Council's revised generic terms of reference for PIRGs and RASGs, and therefore requested the Secretariat to finalize and publish the revised APIRG and RASG-AFI Procedural Handbooks accordingly, to be effective from 1 January 2021.

1.10 The meeting recalled that, in accordance with the Directives to Regional Air Navigation Meetings and Rules of procedure for their conduct (ICAO Doc 8144), the Africa-Indian Ocean (AFI) Region is currently defined as the area embracing Africa and associated Oceanic areas and land masses between 25 degrees West and 75 degrees East and South to the South Pole.

1.11 After noting that the subject definition of AFI is not aligned with the actual geographical area of APIRG and RASG-AFI, the meeting identified the need for the ICAO Council to revise the definition of the AFI Region in view of the recent developments. The meeting therefore formulated the following conclusion:

APIRG/23 & RASG/6 Decision 2/02: Definition of the Africa-Indian Ocean (AFI) Region

That, to align the definition with the actual geographical area of APIRG and RASG-AFI, the ICAO Council revise the definition of the Africa-Indian Ocean (AFI) Region, in order to:

- a) **reflect the alignment of the areas of applicability of the AFI Air Navigation Plan (Doc 7474) with the Regional Supplementary Procedures (Doc 7030); and**
- b) **clarify the scope of on-going regional programmes / initiatives such as AFI ARMA, AFI Plan, AFI SECFAL Plan, AFI- CIS, AFI-CES, or other arrangements such as the AFI Group, which were established earlier for the AFI Region.**

AGENDA ITEM 2: COVID-19 IMPACT ON AVIATION SECTOR: THE APIRG/RASG-AFI CONTEXT

2.1 The meeting was provided with the information and updates on the impact of COVID-19 on the aviation sector and some of the measures that ICAO has taken to support States and the industry at large. The impact of the COVID-19 having immensely devastated the aviation industry, it is therefore essential that measures be taken to ensure that the restart and recovery process is done in a sustainable and harmonized way.

2.2 As part of its initiatives aimed at assisting States, ICAO has developed a web-based COVID-19 Recovery Platform to collate the forecasts, guidance, tools, and resources that are needed by national regulators and other stakeholders to respond to the COVID-19 pandemic. It is an entry point through which other information, guidance and updates developed by ICAO and other stakeholders is hosted.

2.3 The efforts and outcomes of the ICAO Council Aviation Recovery Task Force (CART) to address COVID-19 related challenges and to provide global guidance for a safe, secure and sustainable restart and recovery of the aviation sector were highlighted. In particular, the resulting guidance contained in the CART Report and the annexed guidance document *-Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis (TOGD)-* was discussed.

2.4 The meeting was informed of the availability of the various support provided by ICAO. This includes Implementation Packages (i-Packs), which are a bundle of standardized guidance material, training, tools and expert support that aim to facilitate and guide the implementation of ICAO. In addition, COVID-19 specific courses and free webinars to assist Civil Aviation Authorities (CAAs) in understanding their roles, especially in supporting the mitigations to reduce the spread of COVID-19.

2.5 The meeting while acknowledging progress made in the implementation of the CART and the Africa Union High-Level Task Force (HLTF) recommendations, encouraged States and all the stakeholders to enhance the pace of implementation for a sustainable restart and recovery of the aviation industry in the Region. The meeting therefore agreed on the following decision.

High-Level Task Force (HLTF)

APIRG/23 & RASG-AFI/6 Conclusion 2/03: COVID-19 Impact on the Aviation sector

That, to ensure a sustainable restart and recovery of the aviation industry in the Region:

- a) States and other Stakeholders, including international and regional organizations, and service providers implement recommendations and measures contained in the CART Report and annexed guidance document *Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis* and the African Union Commission (AUC) High-Level Task Force (HLTF) Report;**
- b) States and other Stakeholders promote safety awareness and the sharing and exchange of COVID-19 related safety information with:**
 - i. the aviation community to foster the maintenance and improvement of safety; and**
 - ii. ICAO through the established platforms and websites including but not limited to the COVID-19 Contingency Related Differences (CCRD) and the ICAO Secure Portal COVID-19 Response and Recovery Implementation Centre (CRRIC).**

Implementing Collaborative Safety Risk Management during the COVID- 19 Pandemic

2.6 The meeting was informed of the harmonized safety risk management measures implemented by the East African Community (EAC) Partner States as an approach to mitigating effects emanating from the COVID-19 pandemic. The meeting was further informed that the Civil Aviation Safety and Security Oversight Agency (CASSOA) has been encouraging the EAC partner States to implement the ICAO Council Aviation Task Force (CART) Report with emphasis on the need to uphold safety management principles to support risk-based decision-making in management and monitoring of approvals, authorization and certification and licensing for continuous flexible safe operations without compromising on compliance with ICAO SARPs.

2.7 The meeting noted that CASSOA through the EAC partner States adopted a collaborative approach in development and harmonization of guidance material adopted from the ICAO Doc 10144 to support restart and recovery of the aviation industry among the EAC partner States. Some of the best practices adopted include the validation of personnel licensing systems for the purpose of improving mobility of licensed aviation personnel

Development and Implementation of Regional Health Protocol related to COVID-19

2.8 The meeting was informed of the actions and developments deployed by EAC CASSOA towards coordination, harmonization and implementation of health protocol following the COVID-19 outbreak. CASSOA, as an RSOO, recognized the urgency to coordinate regional approach through involvement of partner States and stakeholders, including governments, regulators, airports, airlines, air navigation service providers among others so as to achieve synergy on aspects related to public health protocols aimed at reducing health risks to air travelers, aviation workers, and the general public.

2.9 In this effort, CASSOA facilitated the development of harmonized COVID-19 Aviation Health Safety Protocol -Operational Guidelines for The Management of Air Passengers and Aviation Personnel in relation to the COVID-19 Pandemic. The meeting considered and appreciated the initiatives that have been undertaken by CASSOA and encouraged States and RSOOs to spearhead and coordinate regional harmonized health measures related to COVID-19 pandemic based on guidance issued by ICAO, WHO and CDC-Africa.

2.10 The meeting noted the need to ensure a robust monitoring and evaluation mechanism to the protocols and formulated the following conclusion:

APIRG/23 & RASG-AFI/6 Conclusion 2/04: Development, Harmonization and Implementation of Regional Health Protocol Related to COVID-19 Pandemic

That, to ensure a robust monitoring and evaluation mechanism to the protocols, States and RSOOs spearhead the coordination of harmonized health measures related to COVID-19 pandemic and ensure establishment of periodic monitoring and evaluation mechanisms for purposes of continuous assessment on the level of implementation of the protocol at regional and national levels under the CAPSCA framework.

AGENDA ITEM 3: APIRG AND RASG-AFI COORDINATION

Review of the terms of reference of the ARC Task Force (ARC-TF)

1.1 The meeting noted that the third APIRG and RASG-AFI Coordination Task Force (ARC-TF) meeting held virtually on 05 November 2020, reviewed the outcomes of the RASC/05 and APCC/5 meetings, and the implementation of the APIRG/22 and RASG-AFI/05 recommendations on the ARC-TF. The meeting was further informed that the ARC-TF/3 discussed and considered the information provided on common areas of interest where coordination is required between APIRG and RASG.

1.2 In relation to the need to have an all-inclusive task force, the ARC-TF meeting proposed expansion of the current ARC-TF membership from APIRG, RASG-AFI, AFCAC and Industry as follows:

- a) APIRG (Chairperson and First and Second Chairperson of APIRG, Chairperson and Vice-Chairperson of AAO/SG; and Chairperson and Vice-Chairperson of IIM/SG);
- b) RASG-AFI (First Vice-Chairperson of RASG-AFI; and Champion States of Safety Support Teams (SSTs);
- c) AFCAC;
- d) Industry: ACI, AFRAA, AIRBUS, ASECNA, BOEING, CANSO, IATA, etc.

1.3 The meeting agreed that in order to address the issue of expansion and to enhance the effectiveness of the ARC-TF activities, the Chairperson of RASG-AFI should be a member of the Task force and APIRG and RASG Chairpersons will alternate in serving as Chairperson of the ARC- TF. It was further agreed in principle that the routine be extended to rotational and alternate chairing of the subsequent joint APIRG/RASG meetings. In addition, it was recommended that the amendments should be reflected in the APIRG and RASG-AFI TORs and procedural handbooks.

APIRG/RASG-AFI/AFI Plan- Common areas and activities

1.4 The review of the allocation of tasks and the areas of common interest between APIRG and RASG-AFI is part of the ARC-TF terms of reference and work Programme, aimed at facilitating consistency and efficiency, and ensuring eradication of duplication and conflict between the activities of APIRG and RASG-AFI. The Third Meeting of the APIRG/RASG-AFI Coordination Task Force (ARC-TF/3), held virtually on 5 November 2020, reviewed the allocation of tasks and the areas of common interest between APIRG and RASG-AFI as per the APIRG/22 & RASG-AFI/5 Decision 1/06 related to the allocation of tasks and coordination between APIRG and RASG-AFI.

1.5 The Meeting therefore discussed and endorsed the updated common areas (**see Appendix 1C**), which takes into consideration the new editions of the GANP and GASP as well as the COVID-19 environment reflected in the CART recommendations and related guidance materials.

NOTAM – (quality problem is becoming a safety concern)

1.6 The Secretariat underscored to the meeting the serious safety concern that the NOTAM quality poses to the users and aviation safety. Highlighting that the current status of NOTAM indicates many NOTAMs do not meet the required standards, the meeting was requested to appeal to States to adhere to international standards when originating NOTAMs.

1.7 The meeting was also briefed on the plans taken by ICAO to address this shortcoming in NOTAM quality, starting with a global campaign to eliminate old NOTAMs (NOTAMs older than 95 days) which will be launched in 2021 with a series of awareness webinars.

1.8 The meeting took note of the Tools currently under development to be used to gauge the quality of NOTAMs; presently the NOTAMeter helps to identify old NOTAMs. The meeting therefore agreed on the following conclusion.

APIRG/23 & RASG-AFI/6 Conclusion 2/05: Improving NOTAM Quality

That, in order to improve the quality of NOTAMs in the AFI region, States and ANSPs:

- a) develop mechanisms at national level to address the quality of NOTAMs as a matter of urgency;**
- b) participate in providing information to help improve the NOTAMeter; and.**
- c) fully participate in the ICAO Global campaign aimed at improving the quality of NOTAMs.**

Coordination of Annual Reporting

1.9 The meeting recalled the requirement for a consolidated annual report on the progress and outcomes of all the PIRG and RASG activities, as well as progress made in the regional implementation of GANP and GASP covering the previous year to be presented to the Air Navigation Commission (ANC) and Council. In this regard, the APIRG and RASG-AFI reports to Council on an annual basis through the consolidated report on PIRGs and RASGs, and the groups meeting reports using a standardized format to the governing bodies of ICAO in order to identify regional and emerging challenges.

1.10 The meeting noted that RASG-AFI has been consistent in publishing, through its Annual Safety Report Team (ASRT), an Annual Safety Report on progress made in the implementation of GASP goals and targets and regional safety priorities. The ASRT was established by the RASG-AFI Steering Committee (RASC) in 2014 comprising representatives from IATA, ICAO, AFCAC, BOEING and AIRBUS, and assigned the task of producing annual safety reports on the RASG-AFI Region. The meeting agreed to include RSOOs in the ASRT membership.

1.11 Similarly, the APIRG has established an Annual Air Navigation Reporting Team (AANRT) tasked with developing the APIRG Annual Air Navigation Report based on available information, including the Air Navigation Deficiency Database, global/regional reports, survey results, studies, gap analyses, traffic forecast data, etc. The core membership of the AANRT includes AFCAC, ASECNA, ATNS, AIRBUS, IATA, and CANSO, supported by the Chairperson, Vice- Chairpersons, the Secretariat of the APIRG, and representatives from States and relevant stakeholders, such air navigation service providers, airspace users, aircraft manufacturers, professional organizations, monitoring agencies, international/regional organizations, etc.

1.12 The meeting encouraged APIRG and RASG-AFI to closely coordinate their activities related to regional reporting on the implementation of GANP and GASP provisions and regional priorities in the identified common areas, leveraging the experience gained by RASG-AFI through its ASRT. Furthermore, in order to avoid duplication of efforts by optimizing the available resources, while ensuring consistency of the information and data collected and published on APIRG/RASG-AFI common areas. The meeting formulated the following decision:

APIRG/23 & RASG-AFI/6 Decision 2/06: Coordination of Annual Reporting

That, to have closely coordination of their activities related to regional reporting, APIRG/RASG-AFI Coordination Task Force develop proposals for ensuring compliance of the AFI Region with annual reporting requirements in an effective, synchronized and timely manner, and report to APIRG/24 and RASG-AFI/7 meetings in 2021.

Status of Implementation of the AFI Safety and Air Navigation Targets

1.13 AFCAC reported that the Abuja Safety Targets were amalgamated with the Air Navigation Services performance indicators in December 2017. Subsequently, a mechanism was developed by AFCAC to monitor the status of implementation of the Abuja Safety and ANS Targets. Consistent with this mechanism, questionnaires were sent to member States in August and October 2019 to collect feedback meant to assist AFCAC determine the status of implementation.

1.14 The average status for 26 States that responded was 47% implementation of ASTs and this figure was below the 2019 target of 60%. Most safety related targets showed progress in terms of implementation while there was limited progress for ANS related targets. The main highlights were:

1.15

- **Reduction of the African accident rate from 8.6 to 2.5 per million departures** – the accident rate increased from 5.16 to 10.34 and fatalities increased from 20 to 184;
- **PBN Procedures for Instrument Runways** – 75% of member States had Instrument Runways with approved PBN procedures;
- **ANSPs Peer Review Programme** – At least 27 States joined the ANSPs Peer Review Programme. Nigeria conducted in partnership with Roberts FIR and Ghana peer review missions for improvement of their individual Safety Management System;
- **National Plan for reduction of CO₂ Emissions** - 27 African States developed and submitted to ICAO National Plans for the reduction of CO₂ emissions due to international civil aviation.

1.16 The meeting acknowledged the work done by AFCAC and encouraged States to respond to the AFCAC questionnaire. The meeting formulated the following conclusion:

APIRG/23 & RASG-AFI/6 Conclusion 2/07: Implementation of the Abuja Safety and ANS targets

That, in order to expedite implementation of the Abuja Safety and ANS targets:

- a) **States establish and implement automated safety data collection and information sharing tools consistent with AFCAC's Mechanism for Monitoring Implementation of Safety Systems & Initiatives;**
- b) **States develop and implement required national plans related to various Safety and ANS targets;**
- c) **AFCAC and ICAO facilitate alignment of targets with GASP/GANP and clearly establish measurable objectives, associated targets and indicators;**
- d) **AFCAC facilitate development of appropriate continental master plans, required to ensure comprehensive implementation of the ANS targets.**

PART III:
TWENTY-THIRD MEETING OF THE
AFRICA-
INDIAN OCEAN PLANNING AND
IMPLEMENTATION REGIONAL
GROUP (APIRG/23)

AGENDA ITEM 0: ADOPTION OF THE AGENDA AND WORK PROGRAMME & ELECTION OF THE BUREAU

The Agenda adopted by the meeting is provided at Appendix 2A to this report.

AGENDA ITEM 1: FOLLOW-UP ON APIRG/22 MEETING CONCLUSIONS AND DECISIONS AND APCC/5 CONCLUSIONS AND DECISIONS

Review of the action taken by the APCC/5 on APIRG/22 Conclusions and Decisions

1.1 The meeting discussed among other items, the presentation of the format of APIRG/RASG-AFI meetings under the revised terms of reference, the performance framework for Regional Air Navigation Planning and Implementation including the status of implementation of APIRG/22 Conclusions and Decisions, the review of APIRG Procedural Handbook, review of the APCC ToRs, the future work programme with schedule of next meetings of APIRG and its auxiliary bodies, and the development of the APIRG Annual Air Navigation Report.

1.2 While appreciating the progress made in the implementation of some APIRG/22 Conclusions and Decisions, the meeting was informed of challenges faced by the ICAO Regional Offices in the collection of data notably on the implementation of APIRG Conclusions and Decisions from States and organizations. The meeting was informed that APCC identified APIRG/22 Conclusions that continue to be valid and actions required by States, regional organizations and ICAO Regional Offices to further facilitate and support their effective implementation.

1.3 The meeting underscored the importance of implementing “APIRG Conclusion 22/01: *Effective implementation of AFI Regional ANS projects* and Conclusion 22/02: *Regular and timely reporting on the status of implementation of APIRG Conclusions and Decisions*”, as a prerequisite to proper reporting on implementation status.

1.4 It was noted that the implementation of the above two APIRG Conclusions and Decisions will allow Administrations and organizations to provide the Secretariat with the required information on the status of implementation of APIRG Conclusions and Decisions on a regular basis, in order to assess progress in strengthening the air navigation system, and reporting as required by APIRG.

Review of the status of implementation of APIRG/22 Conclusions and Decisions

1.5 The meeting recalled that the APIRG/22 meeting adopted forty-two (42) Conclusions and five (5) Decisions. In addition, it was recognized that one of the important elements in the monitoring and evaluation process of the APIRG activities was the review of the implementation of these aforementioned Conclusions and Decisions. The meeting considered the status of implementation of the APIRG/22 Conclusions and Decisions as presented in **Appendix 2B** to this report.

Review of outcomes of APCC/5 meeting

1.6 The meeting was informed that APCC/5 considered the revised amendments to APIRG activities which require amendment to APIRG Procedural Handbook.

1.7 With regards to the proposed revised Terms of Reference for APIRG, the meeting was updated on the requirement of convening meetings annually in the Regional Offices, to the extent possible, to facilitate proper access by States and the need to seek approval from the President of the Council to host meetings outside Regional Offices' premises. The meeting noted that the AFI Region is facing challenges to comply with the preferred location of meetings at Regional Offices due to the unavailability of resources and adequate facilities to host the meetings in the adopted format.

1.8 The meeting was informed that APCC agreed that, the ICAO Council President be requested to allow the AFI region to conduct APIRG meetings outside the Regional Offices premises for efficiency and comfort of participants to the meetings.

1.9 The meeting was also informed that the APCC considered and endorsed the reports of the AAO/SG3 and IIM/SG3 meetings held virtually in August and October 2020 respectively.

1.10 The meeting appreciated that APCC also directed the Subgroups to take advantage of the new normal and ensure effective and efficient delivery of the subgroup projects.

1.11 The meeting also noted that as part of its mandate, the APCC developed the draft Agenda for the APIRG/23 meeting and considered future work program for APIRG and its Auxiliary bodies.

AGENDA ITEM 2: PERFORMANCE FRAMEWORK FOR REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION

Outcome of the Third meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO/SG3)

2.1 The Group was informed that the Third Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO/SG3) was held virtually, from 3 to 5 August 2020 and was attended by two hundred and forty-three (243) participants, from twenty-eight (28) AFI States and nine (9) Regional and International Organizations. Due to the prevailing COVID-19 circumstances, the Sub-Group extended the mandates of its Chairperson and Vice-Chairperson until its next meeting.

2.2 The AAO/SG3 reviewed the status of implementation of the APIRG/22 Conclusions and Decisions applicable to the Sub Group and the specific Projects adopted by APIRG, discussed the Projects challenges and follow-up coordination actions by all parties. Finally, AAO/SG3 discussed the progress made in relation to the AFI Air Navigation Deficiency Database and reviewed its Terms of Reference (TOR).

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

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

Planning and implementation

2.4 The meeting noted the various challenges being experienced by the AAO/SG, specifically, the effective and efficient implementation of APIRG projects. The status of implementation of AAO/SG Projects is presented in the **Appendix 2C** to this report. In consideration of the fact that not much progress has been made in the implementation of the projects due to various reasons, the Group 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.

AFI ATM Master Plan

2.5 The meeting 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 decision:

APIRG/23 Decision 23/01: 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) be established; and**
- b) tasks assigned to the Project Team may include any other identified experts from the region as considered necessary.**

CONOPS for Free Routing Airspace Implementation in AFI

2.6 With regard to APIRG/21 discussions on issues on improved operations through Enhanced En Route Trajectories under ASBU modules, the meeting noted with appreciation that some AFI FIRs in the region were already implementing free routing trials. It was recognized that the region should build on the experience gained in other similar 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.

2.7 The Meeting was informed that with regard to ICAO SARPs and lessons learnt from the current implementation of DRO in the AFI region and 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 2D** 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 to support FRA implementation.

APIRG/23 Conclusion 23/02: Prioritization of Free Routing Airspace implementation

That, in order to support the recovery of aviation industry from the devastating impact of COVID-19, reduce aviation environmental footprint, and contribute to the attainment of ICAO Strategic Objectives:

- a) States be encouraged to prioritize Free Route Airspace (FRA) implementation; and**
- b) ICAO Regional Offices and IATA conduct an awareness workshop on Free Routing Airspace implementation.**

AFI RVSM Collision Risk Assessment 13 Report

2.8 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:

APIRG/23 Conclusion 23/03: 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 contact details of their national RVSM Managers 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) ARMA provide to States twice a year results of the Collision Risk Assessment;**
- c) ICAO and ARMA conduct on regular basis awareness workshops for State-appointed national RVSM Focal Points responsible for RVSM data returns to ARMA; and**
- d) States carry out an in-depth incident investigation to all reported large height deviations.**

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

2.9 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 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 Meeting therefore agreed on the following Conclusion:

APIRG/23 Conclusion 23/04: Implementation of TAG and AIAG Recommendation

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 be 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 March 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.**

PBN Implementation

2.10 With regard to PBN implementation, the meeting was informed that some States submitted national PBN implementation plans to the ICAO Regional Offices, albeit having some of them being based on the old template. The meeting 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 formulated the following Conclusion:

APIRG/23 Conclusion 23/05: 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 31 March 2021;**
- b) ICAO and AFPP conduct a survey on PBN flight procedure and CCO/CDO implementation in the AFI region by 31 March 2021;**
- 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 as a matter of urgency and align them with the new ICAO NPIP format.**

PBCS Monitoring

2.11 Considering the relevant requirements 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 AAO and IIM Sub Groups were tasked to coordinate the establishment of PBCS implementation team to finalize the draft AFI region PBCS plan, and develop an implementation roadmap. The meeting therefore formulated the following conclusion and Decision.

APIRG/23 Decision 23/06: 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 AAO and IIM Sub-Groups coordinate with the established PBCS implementation Team to finalize the draft AFI region PBCS plan, provide awareness, develop an implementation roadmap in collaboration with 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.**

ASCAAR

2.12 The meeting noted the progress made in the implementation of the AFI Secondary Surveillance Radar (SSR) Code Allocation and Assignment Review (ASCAAR) Project. Taking note that although the ICAO Regional Offices circulated the State Letter requesting States to appoint the ASCAAR project focal points, many are yet to do so, therefore the meeting urged the States that have not done so to appoint the FPs as a matter of urgency to ensure the completion of the project coordination and implementation. The meeting was also informed that due to required processes in the change of the Regional Air Navigation Plan (ANP) the agreed APIRG/22 timelines were no longer feasible. In this regard the meeting extended the completion of the implementation period to end of June 2021.

Search and Rescue (SAR)

2.13 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 a SAR system.

2.14 The meeting was also updated on actions taken by ICAO through the AFI Plan SAR project in collaboration with AFCAC, to assist States for the establishment of an efficient, robust and operational SAR organisation. ICAO conducted a three-day SAR workshop on 8-9 October, and 12 November 2020 to foster SAR implementation in the AFI region. The table in **Appendix 2E** provides a snapshot of States that responded to the SAR gap analysis on the actual status of SAR implementation in the AFI region. The meeting therefore formulated the following Conclusion:

APIRG/23 Conclusion 23/07: Appointment of State SAR Points of Contact and submission of National SAR Plans

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

- a) States, which have not yet done so, to nominate SAR Points of Contact (SPOC) and communicate the nominees to the ICAO Regional Offices as a matter of urgency;**
- b) States establish National SAR Coordinating Committees and ensure implementation of the SAR improvements;**
- c) States, that have not already done so, complete and submit National SAR Plans to their ICAO Regional office by 31 March 2021; and**
- d) the ICAO Regional Offices coordinate the development of a harmonized AFI Regional SAR plan.**

Civil/Military Cooperation and Coordination

2.15 The meeting noted the importance of fostering improved efficiency in airspace management through civil/military coordination, and formulated the following conclusion:

APIRG/23 Conclusion 23/08: Improved civil/military coordination:

That, in order to improve civil/military coordination:

- a) ICAO conduct a Civil/Military cooperation workshop by 30 April 2021; and**
- b) States establish Civil / Military Cooperation Committees, develop Civil/Military Manual and Standard Operating Procedures and a Memoranda of Cooperation (MOC) by 30 June 2021.**

Overflight Clearance Permission

2.16 The meeting recalled provisions of Article 1 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 for 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.

2.17 South Africa reiterated that the processes for granting OVFC varied from one country to another, are dependent 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 formulated the following conclusion:

APIRG/23 Conclusion 23/09: 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 be 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 be 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; and
- c) States be encouraged to include provisions for overflight clearance (OVFC) and non-traffic stops in the Bilateral Agreements (BASA) and Multilateral Agreements to include such exceptions as may be suitable for their airline's operations.

Status of implementation of Aerodrome Operations Projects and ASBU Modules

2.18 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 the low rate of responses received so far from States, poor feedback on Projects Teams activities, and the review of the composition of the Project Teams.

2.19 The meeting was informed that the aerodrome certification project design and implementation covers both oversight and SARPs implementation aspects (covered by AAO/SG activities). The meeting therefore noted the merging of some projects under the aerodrome certification project (see **Appendices 2F and 2G** of the report). This will avail more resources and improve the efficiency of the Projects implementation. The meeting therefore formulated the following conclusion and decision:

APIRG/23 Conclusion 23/10: 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 be merged with the aerodrome certification Project as per Appendices 2F and 2G to the report.

APIRG/23 Decision 23/11: Implementation of Aerodrome Operations Projects and ASBU Modules

That, in order to foster the implementation of the Projects:

- a) the Project Teams composition be revised;

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

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

2.20 The meeting noted 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 recalled the need for States to take appropriate actions.

Global Format for Reporting of Runway Surface Conditions (GRF)

2.21 The meeting was updated on the outcomes of the Conclusion 22/41 related to the Implementation of the Runway surface conditions (GRF). 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 meeting therefore urged States to implement the APIRG's Conclusion 22/41.

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

2.22 The meeting was informed that the AAO/SG3 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 AAO/SG3 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.

APIRG/23 Conclusion 23/12: CART Recommendations relevant to AAO/SG Activities

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

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

Air Navigation Infrastructure Gap Analysis

2.23 The meeting discussed the 2019 Aviation Infrastructure for Africa Gap Analysis, for which purpose, 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 reviewed by the meeting. The meeting therefore formulated the following Conclusion and Decision.

APIRG/23 Conclusion 23/13: Endorsement of the survey questionnaire for the conduct of Air Navigation Infrastructure Gap Analysis

That, in order 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 be endorsed.

APIRG/23 Conclusion 23/14: Data collection for Air Navigation Gap analysis

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

- a) ICAO Regional Offices circulate 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.

The AFI Air Navigation Plan (ANP)

2.24 The meeting noted the update of the AFI Air Navigation Plan (ANP) 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 further updated on the Sixth Edition of the GANP with the updated ASBU framework and the initial version of the Basic Building Blocks (BBBs) framework.

The AFI Air Navigation Reporting Forms

2.25 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 enhance provision of assistance to States in filling the ANRF, the meeting agreed on the following Conclusion.

APIRG/23 Conclusion 23/15: 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; and**
- 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.**

AFI Air Navigation Deficiency Database

2.26 The meeting noted the progress made in the implementation of the 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, aiming to coordinate the collection and management of deficiencies as well as the revised list of minimum reporting areas pertaining to the AAO/SG.

2.27 The meeting was updated on the ongoing activities 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.

AAO/SG contribution to the APIRG Annual Report

2.28 The meeting noted 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. The meeting was informed that a survey questionnaire was submitted to States to provide inputs for the publication of the first AFI ANR.

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

2.29 The meeting was updated on the participation of States and Organizations to the Sub-Group 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 conclusion.

APIRG/23 Conclusion 23/16: 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.

Outcome of the Third meeting of the APIRG Infrastructure and Information Management Sub-Group (IIM/SG3)

2.30 The Third meeting of the APIRG Infrastructure and Information Management Sub-Group (IIM/SG/3) was held virtually from 12 to 14 October 2020.

2.31 The meeting was attended by two hundred and fifteen (215) participants comprising representatives of thirty-one (31) States, five (5) Air Navigation Service Providers (ASECNA, ATNS, GCAA, KCAA, SODEXAM) and two (2) international airlines association (AFRAA & IATA).

2.32 The meeting conducted in the English and French languages with simultaneous interpretation, adopted and discussed eight (08) agenda items.

Review of the Conclusions/Decisions of the Second meeting of the APIRG Infrastructure and Information Management Sub-Group (APIRG IIM/SG2)

2.33 The meeting reviewed the status of implementation of the Conclusions and Decisions of the Second Meeting of the APIRG IIM Sub Group held in Dakar, Senegal from 09 to 11 July 2018 and noted that while some conclusions were successfully implemented, others were yet to be completed. The meeting therefore urged States/Organizations to undertake the effective implementation of the outstanding conclusions and decisions of the APIRG IIM/SG2 and other previous meetings.

2.34 The meeting expressed concern on the low pace of participation of project team members to the activities of the project and noted the lack of response to Project Team Coordinator (PTC) requests for project coordination. Therefore, the Secretariat was requested to circulate the list of IIM Projects Teams to States/Organizations and encourage States to confirm their nominees and assess the expertise, availability, commitment and participation as project Team members.

2.35 The meeting also encouraged States to notify the Secretariat in any instance of unavailability of appointed experts.

The following conclusion was formulated:

APIRG/23 Conclusion 23/17: Participation in the activities of APIRG IIM SG Projects Teams

That, in order to increase the efficiency of the work of the APIRG IIM/SG:

- a) **States/Organizations members of the APIRG IIM/SG:**
 - i) **Update the Secretariat and confirm their nominees with contact details by 29 January 2021**
 - ii) **Verify the expertise, availability, commitment and participation of their nominated experts**
 - iii) **Take advantage of the available teleworking tools to ensure their effective and continuous participation in the activities of the IIM Sub Group and notify the Secretariat of instances of unavailability of appointed experts;**
- b) **APIRG IIM/SG Chair and Vice-chair convene quarterly PTCs coordination meetings to assess the progress made and identify the challenges, the first meeting being conducted before 14 January 2021.**

2.36 The meeting was informed that the survey questionnaires developed by some Project Teams were not yet forwarded to States for completion and therefore invited the Secretariat to disseminate the survey documents. States were invited to respond to the questionnaires in a timely manner and to take the necessary measures for the effective and active attendance of their experts in the APIRG IIM Projects activities

The following conclusion was formulated:

APIRG/23 Conclusion 23/18: Effective and efficient coordination of the IIM Projects activities

That, in order to efficiently contribute to the APIRG IIM projects activities and to ensure their timely completion:

- a) the Secretariat distributes the projects survey questionnaires by 31 January 2021; and**
- b) States respond to the survey questionnaire before 31 March 2021; and continuously take the necessary measures for the effective and active attendance of their experts in the APIRG IIM Projects activities**

Review of the outcome of the APIRG/22 meeting

2.37 The meeting was presented with the Conclusions and Decisions of the APIRG/22 meeting held in Accra, Ghana from 29 July to 2 August 2019 with focus on those addressing the areas pertaining or linked to AIM, CNS and MET.

AIM Matters

2.38 In the area of Aeronautical Information Management (AIM), the meeting was provided with an update on the AIM Project to support States in the implementation of quality management system (QMS) in a digital/electronic AIM environment through the establishment of an “AIM Go-Team for the AFI Region”.

2.39 The meeting was informed that the project document was currently under review for submission to the AFI Plan Steering Committee for further consideration.

CNS Matters

2.40 The meeting reviewed the outcome of the APIRG/22 meeting pertaining to the area of Aeronautical Communication, Navigation, Surveillance and Spectrum (CNS) and commended the good progress of the implementation of AIDC, AMHS and ADS-B space in the AFI Region.

2.41 The meeting discussed different initiatives by States and industry. In this regard, the meeting agreed on the need to integrate the implementation of those Regional initiatives in the framework of the APIRG projects approach.

2.42 Furthermore, the meeting discussed the sustainability of aeronautical infrastructure and information systems, and noted the need to continue and reinforce the cooperation and harmonization in planning and speeding up implementation, operation and monitoring of interconnected systems. The following conclusion was formulated:

APIRG/23 Conclusion 23/19: Cooperation and harmonization in planning implementing, operation and monitoring

That, in order to build sustainable aeronautical infrastructure and information systems, States/Organizations:

- a) **take the appropriate measures and actions aimed at integrating their implementation programme/plans into Regional initiatives promoted by the framework of APIRG projects approach; and**
- b) **reinforce cooperation and harmonization in planning and speed up implementation, operation and monitoring of interconnected systems.**

MET Matters

2.43 The Secretariat presented the outcome of the APIRG/22 meeting in the area Aeronautical Meteorology (MET) which gave emphasis to the need for coordination under MET Project 2 and informed the meeting that Senegal had effectively appointed two experts to take the role of the Project Team Coordinators for MET Project 2.

2.44 The meeting was further briefed of the APIRG/22 discussions pertaining to the dissemination of meteorological information in the ICAO Meteorological Information Exchange Model (IWXXM). In this regard, a summary of the AFI IWXXM workshop conducted from 15-16 September 2020 was provided to the meeting. The workshop highlighted the importance of the global document adopted by the ICAO MET Panel (METP) in 2016 entitled- “Guidelines for the Implementation of OPMET Data Exchange using IWXXM”, and informed the meeting of the draft AFI version developed to cover regional requirements.

2.45 The meeting also reminded States of previous APIRG Conclusions and of the need to take the necessary steps to expedite the development and implementation of IWXXM capabilities.

The following conclusion was formulated:

APIRG/23 Conclusion 23/20: AFI IWXXM Implementation Guideline and development of capabilities of handling OPMET data in digital format

That, in the framework of the ICAO Annex 3 provision related to the IWXXM, and to improve the exchange of OPMET data in digital format:

- a) **the Secretariat with the support of the coordinators and members of MET Project 1 take the appropriate measures and steps to ensure that the AFI IWXXM Implementation Guideline document as contained in Appendix 2H is finalized and made available to States not later than 15 January 2021;**
- b) **States be invited to expedite the development of IWXXM capabilities for exchange of OPMET data in digital format to meet the implementation date in accordance with ICAO Annex 3;**
- c) **States that have developed capabilities for exchange of OPMET data in digital format are encouraged to enter into bilateral/multilateral agreements for testing of their systems; and**

- d) COM Project 2, consider the provision of the AFI AMHS Manual and integrate an appendix focusing on the AMHS Profile for OPMET IWXXM in line with the EUR AMHS Manual.**

Coordination between AAO/SG and IIM/SG

2.46 The meeting was informed that APIRG/22 addressed technical issues related to the IATA survey on Aeronautical Mobile Service (AMS) and implementation of Performance Based Communication and Navigation (PBCS) and therefore noted the need to increase the liaison between the two APIRG Sub Groups i.e. AAO/SG and IIM/SGs. In this regard, PTCs were encouraged to regularly review their project document, with the aim to identify and act upon IIM projects linkage with AAO Projects and circulate a linkage matrix amongst Projects Teams in order to prevent duplication and ensure harmonization of the implementation of ASBU modules and threads.

The following conclusion was formulated:

APIRG/23 Conclusion 23/21: Coordination of Regional AAO and IIM Projects

That, in order to comply with ANS operational requirements:

- a) each PTC with the support of the Secretariat regularly reviews the project document, identify and act upon IIM project linkage with AAO Projects and circulate a linkage matrix amongst Projects Teams; and**
- b) the Projects Teams identify coordination actions to be undertaken in order to prevent duplication and ensure harmonization of the implementation of ASBU modules and threads.**

Funding of IIM Projects

2.47 The meeting was also informed that APIRG/22 discussed issues related to the mechanisms and opportunities of funding IIM Projects and took note of the summary of the requirements of the African Development Bank (AfDB) in its contribution to APIRG/22.

2.48 This summary informed that the AfDB contribution focused on the financing options for regional projects that should comply with the following:

- a) Regional approach preferred
- b) Involvement of private sector encouraged through PPP
- c) Co-financing
- d) Projects included in a Master Plan

2.49 In consideration of the APIRG Conclusion 22/34: Organization of a Round Table for APIRG *Projects Funding* approved by APIRG/22, the meeting urged Project Teams to expedite the finalization of the projects initiation documentation and project cost estimation for consideration by the APCC and APIRG for funding.

The following conclusion was formulated:

APIRG/23 Conclusion 23/22: IIM Projects Package for Funding

That, in order to facilitate IIM Project funding:

- a) **the Projects Teams expedite the finalization of the projects initiation documentation (Description, Organization, Term of Reference, Business case, Plans, questionnaires, projects inter linkage....) and project cost estimation for consideration by the APCC and APIRG;**
- b) **the APCC review the consolidated package of IIM projects for submission to APIRG; and**
- c) **the APIRG Chair with the assistance of the Secretariat and AFCAC promote the package of IIM projects to funding organizations**

Status of implementation of the AFI IIM Regional projects adopted by APIRG

Aeronautical Information Management Projects

2.50 Under this Agenda Item, the meeting was provided with the status of implementation of AIM Projects presented by Kenya, the PTC of AIM Project 1- Assessment and development of QMS applied to AIM in AFI States and ASECNA on behalf of Benin, PTC for AIM Project 2- Implementation of Aeronautical Information Exchange Systems (AIXM) (AFI).

2.51 The Teams developed the project documents (Project Description, Project Organization, project Questionnaire etc.), planned activities associated with deliverables for the 2021-2023 period and AIM Project 1 conducted a survey to establish the levels of compliance and implementation of AIM-QMS.

2.52 The meeting was reminded that as a technical matter involving interoperability concerns, the successful implementation of AIXM requires the effective participation of a set of experts sufficiently representative of the region.

2.53 The meeting requested the Secretariat to provide guidance on the implementation of the Go-Team activities in the AFI region and to distribute the updated questionnaire for States' completion by the end of the first quarter of year 2021.

2.54 States were encouraged to nominate AIM focal point(s) to the PTC and to express their willingness to participate in the Regional AIM QMS Go-Teams by providing subject matter experts.

The following conclusion was formulated:

APIRG/23 Conclusion 23/23: Coordination and guidance on the implementation of AIM Go-Team activities in AFI States

That, for the successful implementation of the activities of the “AIM Go-Team for the AFI Region”:

- a) **the Secretariat provides the project with guidance on the implementation of the Go-Team activities in the AFI States and distributes the updated questionnaire for States to respond not later than 31 March 2021; and**
- b) **States, in consideration of the slow progress made in the Region's effective implementation of QMS in AIM, undertake the necessary action not later than 14 January 2021 to expedite this activity through:**

- i) **Nominating AIM focal point(s) to the PTC and copy to the IIM Secretariat; and**
- ii) **Expressing their willingness to participate in the Regional AIM QMS Go-Teams by providing subject matter experts.**

2.55 The meeting was informed that there was no report on AIM Project 3- *Implementation of the provision of electronic terrain and obstacle data (e-TOD)* in the AFI Region, since the appointed PTC from Nigeria was absent and did not give any information on the project. The corrective action in this regard is envisaged in Conclusion 3/05: *Operationalization of the APIRG IIM SG COM Project 2 and AIM Project 3* of the IIM/SG 3rd meeting.

Aeronautical Communication Navigation Surveillance and Spectrum Infrastructure and Systems

Communication Projects

2.56 The meeting was updated on the work carried out by Project Teams in the area of Aeronautical Fixed and Mobile Services. This update was provided by Mali PTC COM Project 1-Implementation of Ground/Ground Communication (ATS/DS, AIDC, VoIP); South Africa PTC COM Project 3- Implementation of Air/Ground communication (HF/VHF voice data, CPDLC); ASECNA on behalf of Togo PTC for COM Project 4-Integrated Aeronautical Telecommunication Infrastructure; and Côte d'Ivoire for COM Project 5-Assessment of cyber safety and resilience of the ANS system in the AFI Region.

2.57 The PTCs presented to the meeting the status of progress (Development of baseline documents, completion of the development of the survey questionnaires etc.) the tasks assigned to the Projects, identified the challenges and informed on their intended future actions.

2.58 In view of coordination for projects harmonization, the meeting agreed to establish a Project Team Coordinator Core Team tasked to develop the IIM Projects Master Plan, to track all the IIM Projects activities and provide periodic reports. The following decision was formulated:

APIRG/23 Decision 23/24: Development of IIM Projects Master Plan

That, in order to facilitate IIM Projects planning implementation and monitoring, a Project Team Coordinator Core Team (South Africa, Cameroon, Cote d'Ivoire and Uganda) is established with the assistance of the Secretariat under the supervision of Chair and Vice Chair to develop the IIM Projects Master Plan by 31 July 2021; track all the IIM Projects activities and provide quarterly reports.

2.59 The meeting was informed of the status of implementation of the AFI navigation services Cyber safety and resilience project with 75 % of the project tasks defined in the initial planning completed.

2.60 An ICAO Regional workshop on Cyber Safety and Resilience for Air Navigation Systems with Tabletop Exercise was held at the ICAO Regional Office in Nairobi, Kenya from 3 to 5 December 2019, to foster a cyber-safety culture that promotes a resilient and secure cyberspace for ANS.

2.61 The meeting emphasized on the need to continue training of technical personnel to reinforce their capability in cyber securing ANS systems.

The following Conclusion was formulated:

APIRG/23 Conclusion 23/25: Cyber Safety and Resilience of the Air Navigation Systems

That, in order to reinforce States/Organizations technical personnel capability in cyber securing ANS systems, ICAO with the collaboration of the industry within the framework of the APIRG, increase its support in activities aimed at raising awareness of ANS Cyber safety and resilience through webinars/workshops/seminars on Cyber safety and resilience of ANS systems for the AFI Region.

2.62 The meeting noted that there was no report on COM Project 2-*Implementation of Ground/Ground communication (AFTN, AMHS)*, since the appointed PTC from Nigeria did not provide any information on the project.

Navigation Project

2.63 The meeting was provided by the PTC appointed by Cameroon with the update on the Navigation Project. The Team reported to have finalized the development of a questionnaire aiming to gather information on the deployed radio navigation and GNSS infrastructure, and to assist in identifying the availability and reliability of these systems in the AFI region.

Surveillance Project

2.64 Ghana, PTC of the Surveillance project, reported to the meeting on the effective completion of the development of the survey questionnaire aimed at gathering information on the deployed surveillance infrastructure as well as access the possibility of sharing surveillance data between neighboring States.

2.65 The PTC reported on initiative for Surveillance Data Sharing in the airspaces along the Gulf of Guinea among Four (4) ANSPs namely, ASECNA, Ghana Civil Aviation Authority (GCAA) Nigeria Airspace Management Agency (NAMA) and The Roberts FIR. The four ANSPs have signed some initial Memorandum of Cooperation (MoC) and have a roadmap for implementation. This Roadmap has also been affected by the COVID-19 pandemic. Though this initiative does not cover the entire AFI, region, it is the belief that the experiences gained by such an initiative can be shared with other states in the hope that it would encourage them to follow suit.

Spectrum Project

2.66 The progress of the aeronautical Frequency Management Project – SPEC project including the scope and the actions conducted, was presented to the meeting by Uganda, PTC of the project. The meeting noted the challenges faced by the SPEC Project Team members and identified a need to review the draft Terms of Reference, Project Description and the Project planning document.

2.67 The meeting was informed about the ITU preparatory work plan for WRC-23 (4 topics & 19 agenda items), the outcome of the 1st ATU Preparatory Meeting for the WRC-23 and noted the key lessons learnt from WRC-19, the work plan and leadership of ATU to WRC-23 and ATU strategic plan elements including ATU COVID-19 action as well as the outcome of the 10th ICAO Frequency Spectrum Management Panel Working Group (FSMP WG/10) meeting held from 17- 26 August 2020, to discuss the draft ICAO position for the International Telecommunication Union World Radio communication Conference 2023 (ITU WRC-23).

In the framework of the preparation of ITU WRC-23 the following conclusions was formulated:

APIRG/23 Conclusion 23/26: Preparation of ITU WRC-23

That, in order to promote ICAO Position and ensure the proper protection of aeronautical spectrum, States/Organizations:

- a) **start the work for the preparation of WRC-23 as soon as the ICAO Position for ITU-WRC-23 Agenda Items on aeronautical spectrum requirements is made available to them; and**
- b) **based on the lessons learnt from the last WRCs, reinforce their collaboration with the sub Regional Association of National Regulators of Telecommunication and work closely with ATU.**

Aeronautical Meteorology Project

2.68 The PTCs for MET Project 1, from South Africa and MET Project 2 from Senegal presented the activities of their Projects and on the draft reviewed Terms of References that had been developed. The presentation from MET Project 1 also highlighted the low level of participation by States in the 2019 AFI Regional SIGMET tests and emphasized the importance of States' participation in the 2020 SIGMET Tests.

2.69 In addition, the meeting also noted the decision made by the ICAO METP/4 pertaining to the WMO guideline for MET Quality Management System (QMS) implementation.

2.70 Furthermore, the meeting adopted the Terms of Reference of MET Project 1 and MET Project 2 and their Projects deliverables for 2021-2022 in order to expedite the work assigned to AFI IIM MET Projects.

The following conclusions was formulated:

APIRG/23 Conclusion 23/27: Adoption of the MET Project 1 and MET Project 2 Terms of Reference and their Projects deliverables for 2021-2022

That, in order to expedite the work assigned to AFI IIM MET Projects:

- a) the proposed MET Project 1 and MET Project 2 Terms of References and their associated project deliverables be adopted;**
- b) considering the ICAO METP/4 Decision 8/1 which calls for the discontinuation of the Manual on the Quality Management System for the Provision of Meteorological Service for International Air Navigation (ICAO Doc 9873), States/Organizations be encouraged to discontinue the use of ICAO Doc 9873 and use WMO No. 1100; and**
- c) AFI States and Organizations are encouraged to participate in the annual AFI SIGMET tests.**

Challenges and impediments

2.71 The main challenges noted by PTCs in the conduct of the projects have been identified as but not limited to the following:

- a) challenges already identified by APIRG /22;
- b) limited involvement of experts nominated to the groups as well as the lack of response to questionnaires by some States;
- c) lack of awareness of Team members about subject matters (Cyber safety and resilience of ANS, AMHS, VoIP, AIDC ...); and
- d) technical network connectivity challenges (via Teleconference, GoToMeeting, Skype)

2.72 The meeting invited the Secretariat to disseminate the questionnaire documents and invited States to respond to the questionnaire in a timely manner and to take the necessary measures for the effective and active attendance of their experts in the APIRG IIM Projects activities

Air Navigation Planning, Deficiencies and Reporting in the AIM, CNS and MET Areas

Air Navigation Planning e-ANP in the AIM, CNS and MET Areas

2.73 The Secretariat reminded the meeting of APIRG/21 which shared the outcomes of the 2017 Regional Awareness Seminar on the AFI Air Traffic Management (ATM) Volcanic Ash Contingency Plan (VACP), and also APIRG Conclusion 21/35 which urged States to develop and conduct Volcanic Ash exercises using the guidance contained in Appendix F of ICAO Doc 9766 (Handbook on the International Airways Volcano Watch (IAVW)).

2.74 The meeting was reminded of the importance of collaborative decision-making (CDM) and involvement of all relevant stakeholders when mitigating the hazards posed by volcanic ash.

The following conclusion was formulated:

APIRG/23 Conclusion 23/28: Development of Volcanic Ash Contingency Plans and conduct of Volcanic Ash exercises in the AFI Region

That, in view of the need for the provision of information to airlines and en-route aircraft before and during a volcanic eruption:

- a) the State Volcano Observatories in Table MET I-1 provide their updated contact details to the Secretariat by 29 January 2021 for sharing with the States/Organizations;**
- b) States that have not developed volcanic ash contingency plans and conducted Volcanic Ash exercises should do so, using the guidance in the AFI Volcanic Ash Contingency Plan as contained in Appendix H of the AFI Regional ATM Contingency Plan by 30 June 2021; and**
- c) ICAO assist in planning and conducting a coordinated regional Volcanic Ash exercise by 31 December 2021.**

Air Navigation Deficiencies and Reporting in the AIM, CNS and MET Areas

2.75 The Secretariat presented an overview of the most recent developments pertaining to the AFI Air Navigation Deficiency Database (AANDD) following APIRG/22 meeting discussions on the AANDD and the minimum reporting requirements for all air navigation areas. The report included the activities embarked on by the Secretariat to identify the minimum reporting areas for all air navigation disciplines i.e. AIM, CNS, MET, AGA and ATM.

2.76 To highlight on the required information on the air navigation deficiencies and reporting in the AIM, CNS and MET areas, the meeting was presented with the minimum reporting requirements in the AIM, CNS and MET areas by the Secretariat. The Secretariat also indicated that a workshop will be conducted to sensitize States on these minimum reporting requirements as well as the operation of the AANDD web interface. It was also noted with apprehension, that some States had not appointed focal points for the AANDD.

Initiatives by States & Industry

2.77 States and Organizations provided the meeting with initiatives that are being conducted at regional or sub regional level.

2.78 The meeting taking cognizance of the fact that space weather service information is a support to international air navigation as part of ICAO's Global Air Navigation Plan (Doc 9750), was reminded that ICAO amended Annex 3, Annex 15, PANS-AIM and PANS-ATM require the inclusion of the provision of space weather from designated centers.

2.79 It was reported that South Africa (through the South African National Space Agency -SANSa) is the designated Regional Space Weather Centre for the provision of space weather information to national and regional Air Navigation Service Providers (ANSPs) and operators. In this regard, South Africa (SANSa) was requested to lead a new IMSG MET Project to deal with tasks related to Space Weather.

The following Conclusion was formulated:

APIRG/23 Conclusion 23/29: Establishment of a Regional Space Weather Project

That, in order to ensure the provision of the space weather service information in the AFI Region:

- a) **an APIRG IIM MET Project 3-Space Weather Project is established within the IIM SG to guide the implementation of the Annex 3 provision relating to Space Weather requirements within the AFI Region;**
- b) **South Africa, hosting the AFI Regional Space Weather Center through the South African National Space Agency (SANSA), coordinate the APIRG IIM MET Project 3; and**
- c) **ICAO regional Offices, after reception of the Project initial document by 31 January 2021, call for nominations of the project team members from interested AFI States/Organizations.**

2.80 The meeting also agreed that a lot of work has to be done by States/Organizations in order to comply with the ICAO Annex 3 requirements for the provision of space weather. Coordination between the Regional Space Weather Centre (SANSA) and States' regulatory authorities, ANSPs and operators was pointed out as a key element to the development of action plans for the implementation of Space Weather requirements.

2.81 The IIM/SG3 meeting therefore concluded that the Secretariat and the Regional Space Weather Centre would take the appropriate steps to assist States.

The following conclusion was formulated:

APIRG/23 Conclusion 23/30: Development of action plans for the implementation of Space Weather requirements

That; in order to improve the implementation of requirements for the provision of space weather services in air navigation plans:

- a) **States/Organizations consider the implications of Annex 3 space weather requirements for AFI States' regulatory authorities, ANSPs and operators' operational policies;**
- b) **the designated Regional Space Weather Center (SANSA) liaise with other relevant national institutions in the AFI region to ensure effective coordination;**
- c) **the Secretariat, with the support of the designated Regional Space Weather Centre (SANSA), take appropriate actions to assist States to meet the space weather implementation requirements**

2.82 IATA presented the African Indian Ocean (AFI) Aeronautical Information Management Action Group (AIM AG), a multi-stakeholder collaborative forum and initiatives for the purpose of identifying deficiencies and challenges in the AFI aeronautical information and through collaborative engagement between parties develop and implement recommendations and remedial actions. The core membership comprises of ICAO, IATA, IFAIMA and CANSO.

2.83 The meeting noted this initiative and encouraged the Group to support the AIM Projects under the IIM/SG through sharing relevant AIM AG outcomes and recommendations in order to harmonize ongoing initiatives and activities in the area of AIM.

The following conclusion was formulated.

APIRG/23 Conclusion 23/31: Africa and Indian Ocean Aeronautical Information Management Action Group (AFI AIM AG)

That, in order to harmonize ongoing initiatives and activities in the area of AIM:

- a) States wishing to participate in the AFI AIM AG:**
 - i) Nominate their Representative/s for the AIM AG and the AIM AG Microsoft Teams Collaboration Platform through e-mail to the AIM AG secretariat (kirkmanl@iata.org);**
 - ii) Actively participate in the activities of the AFI AIM AG; and**
- b) the AIM AG supports the AIM Projects under the IIM/SG through sharing relevant AIM AG outcomes and recommendations**

APIRG IIM SG COM Project 2-Implementation of Ground/Ground Communication (AFTN, AMHS) in Kenya

2.84 Kenya reported on an effective implementation of AMHS and confirmed their availability to assist neighboring Centers for interconnection taking into account the lesson learnt from the challenges encountered since 2014.

2.85 ASECNA provided the meeting with an update on Regional Projects on AFI Aeronautical, AIM and CNS Infrastructure, Systems and Spectrum. In this regard progress was made in the AIS-AIM transition, through the implementation of e-AIP and an Online NOTAMs platform.

2.86 Progress was also noted in the implementation of CNS infrastructure including VSAT Networks modernization and interconnection (AFISNET, CAFSAT, NAFISAT/SADC.2), implementation of AMHS and AIDC with inter regional connection (Dakar/Recife) and ongoing discussion with Spain and Morocco, conduct of the ASECNA “SBAS for Africa & Indian Ocean” project at preoperational stage as well as the ASECNA ADS-B project that encompasses ground and space based ADS-B.

2.87 Initiative of cooperation were reported such as Cooperation in the Gulf of Guinea (between ASECNA, GCAA, NAMA and the Roberts FIR); AFI North West Area (ANWA) Cooperation; SNMC; ASECNA/ATNS MoU.

2.88 It was agreed that with the support of the Secretariat, cooperation should be reinforced in order to ensure the interconnectivity of CNS systems for the implementation of AIDC and AMHS.

2.89 The meeting took note of the information and encouraged States/Organizations to expedite the implementation of the aeronautical CNS infrastructure and information services to achieve a seamless AFI Airspace and to strengthen cooperation for improvement of the aeronautical CNS infrastructure and systems.

AFI Air Navigation Deficiencies

2.90 The meeting noted the progress made in the implementation of the 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 2I** to the report), aiming to coordinate the collection and management of deficiencies as well as the revised list of minimum reporting areas (**Appendix 2J**).

2.91 The meeting was updated on the ongoing actions 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.

APIRG/23 Conclusion 23/32: Endorsement of AANDD Management process and minimum Reporting Areas and nomination of 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 Deficiency Database management process as well as the revised minimum reporting areas are endorsed; and**
- b) States and Organizations that have not yet done so, are urged to nominate as a matter of urgency, not later than 31 January 2021, Focal Points for interaction with the AANDD.**

CANSO Response to COVID-19

2.92 CANSO presented to the meeting the initiatives taken by CANSO Africa to assist the air navigation services providers in the region respond to the COVID – 19 impact on air navigation service provision.

2.93 Noting, the number of capacity enhancement programmes provided in the form of webinars to address training of personnel, recovery measures for ANSPs as contained in the newly developed CANSO guidance material, and collection of air traffic data for trend determination, the meeting appreciated the work done so far and encouraged States to take advantage of the available information from CANSO.

CANSO support to ASBU

2.94 The meeting took note of the activities by CANSO in promoting the implementation of ASBU Block Zero since the inception of the partnership with ICAO on the initiative in 2014.

2.95 Taking cognizance of the very important webinars carried out during the year in line with promoting awareness on ASBU elements to be prioritized, to assist in the recovery of the aviation industry from COVID-19, the meeting encouraged CANSO and other stakeholders to continue providing more such programmes in the region.

Global Reporting Format

2.96 The meeting took cognizance of the webinar on Global Reporting Format (GRF), a methodology for assessing and reporting runway surface conditions, held by CANSO in partnership with ICAO and other key stakeholders on 27 May 2020 to provide the region with awareness of the expected implementation.

2.97 Noting the importance of such awareness programmes, the meeting encouraged more awareness workshops to help the region prepare for effective implementation.

KPIs at State and Regional Level for APIRG Projects aligned to ASBU framework

2.98 The meeting was briefed on the focused approach Kenya has taken to address the Key Performance Indicators (KPIs) on the APIRG projects aligned to the ASBU framework.

2.99 The meeting took note of the information provided, that Kenya, being motivated by the need for a Data Driven Performance Management of its Air Navigation Services had developed an ANS operational Performance measurement and monitoring (OPMM) framework as part of the Kenya Airspace Master plan 2015-2030 to facilitate performance measurement and monitoring of the trends, value additions and actual benefits of implementing various Aviation System Block Upgrade (ASBU) modules and Safety management systems plan.

2.100 In recognition that the maximum benefits can only be derived from such system through a regional approach which can allow for joint review of the aggregated performances within the region, the meeting encouraged States to adopt performance data reporting and measurement culture as part of performance framework for ASBU implementation as well as consider exploring the possibility of establishing a mechanism for sharing performance data collection at sub-regional and/or regional level.

AGENDA ITEM 3: RVSM AIRSPACE SAFETY

ARMA initiatives in Ensuring Continuous Use of RVSM Airspace

3.1 The meeting took cognizance of the ANC and the Council's feedback on the report of APIRG/22, which entailed the concerns, expressed by the Air Navigation Commission on RVSM Airspace Safety, and in particular highlighted that the AFI Collision Risk Assessment for 2017 was approximately 1.6 times larger than the 2016 assessment. Furthermore, the meeting recalled that the Council expressed concern that the combined effect of increases in the probabilities of vertical overlap was caused by improper flight level crossings and flying at wrong flight levels.

3.2 The secretariat underscored the Council's concern about the fact that some States were not submitting RVSM data to the RMA Office on a monthly basis and therefore called on APIRG/RASG-AFI to address the concerns.

3.3 The meeting was apprised on the joint ICAO and ARMA workshop and actions aimed at addressing the current challenges and possibly reversing the trend which included updating and training of national RVSM focal points; and the establishment of effective measures to ensure submission of RVSM data to ARMA monthly. The meeting reiterated, that the responsibility for ensuring for submission of RVSM data to ARMA remains with States, and accordingly urged States that delegate provision of ATS to an agency or another contracting States, to ensure that a workable mechanism is established to fulfil that responsibility, and ensure that evidence of compliance are provided to the delegating State.

3.4 The meeting noted that whilst the function of submitting monthly RVSM data to ARMA could be delegated to an ANS provider, the functions and responsibilities concerning RVSM approval and height monitoring have to be performed by the regulatory authorities. Consequently, States may have more than one focal points in order to meet the dual requirements of providing requisite information to ARMA.

3.5 The meeting expressed concerns that the Total Risk for 2018 has not improved and called on States and ICAO to take concrete actions to remedy the situation. Consequently, the actions listed below were identified:

- a) All AFI States are requested to comply with the recommendations of ICAO Doc 9930;
- b) All FIRs are urged to submit RVSM Safety Assessment data as required at monthly intervals in order for the various safety assessment tasks to be under taken and completed as per ICAO provisions;
- c) States should ensure height monitoring is conducted regularly on going, as Altimetry System Error is a catastrophic invisible risk that can be prevented by ensuring operators comply to regular height monitoring as per ICAO Annex 6 FOR Long Term Monitoring Requirements;
- d) States to nominate focal points for RVSM and update ARMA using an **F1 form** by **31 December 2020**. Each of the AFI States must have a focal point for RVSM irrespective of whether it manages its own upper airspace or not;
- e) AFI States that have not already done so should publish AIP SUPP by 31 December 2020 for the implementation of SLOP on **25 February 2021**, for the safety discount to be added to the next Collision Risk Assessment. Guidance of SLOP implementation in Surveillance and Random Routing Areas to be published on Circular 354.

3.6 Reacting to the call by the Council to APIRG/RASG-AFI to address the concerns, the meeting and APIRG Chairperson in particular expressed disappointment that some issues such as delayed submission of RVSM data to the ARMA on monthly basis which was neither too complicated nor difficult for States, and yet the action were necessary to ensure compliance, and accordingly urged States to endeavor to fulfil the requirement.

APIRG/23 Conclusion 23/33: Nomination of RVSM focal points and submission of data to ARMA

That, in order to improve the submission of RVSM data to ARMA, States that have not already done so, nominate focal points for RVSM and update ARMA using an F1 form by 31 December 2020.

APIRG/23 Conclusion 23/34: Implementation of SLOP as discount for CRA/15

That, in order to add the safety discount to the fifteenth Collision Risk Assessment, AFI States that have not already done so, publish AIP SUPP by 31 December 2020 for the implementation of SLOP on 25 February 2021.

AFI PBCS Monitoring

3.7 The meeting recalled APIRG Conclusion 22/12 regarding the establishment of the AFI Performance-Based Communication and Surveillance (PBCS) Monitoring. Accordingly, the AFI PBCS monitoring be established as part of the AFI RMA monitoring mechanism. ARMA informed the meeting that though its function and responsibilities for PBCS has the same goal as RVSM, the mechanism is a little different. The below listed AFI PBCS functions and responsibilities have been added to ARMA and SATMA (EUR/SAM Corridor) list of responsibilities:

- a) Receive reports of non-compliance (Doc 9869 refers) with RSP180 and RCP240 from AFI ANSPs and transmitting reports to the respective RMA associated with the State of the respective operator/aircraft;
- b) Receive and maintain records of RCP and RSP approvals issued by States of Operator/Registry associated with current State responsibility and incorporating into expanded RVSM/PBCS approvals database and follow-up as appropriate instances of non-approved aircraft being identified in PBCS airspace. This would be determined by augmenting the existing monthly RVSM approvals check to incorporate a similar check against PBCS approvals where these have been included in the flight plan but no approvals record is held by RMAs; Verify compliance with State PBCS requirements applicable to RMAs with designated areas of responsibility that include airspace where PBCS is implemented; and
- c) Sharing records of RCP and RSP approvals between RMAs in line with current sharing practices of RVSM approvals for the ability of States/ANSPs to verify that aircraft operators filing PBCS capabilities in the flight plan are authorized to do so.

3.8 The meeting recalled APIRG Conclusion 22/13 (a) which called on States to start the pre-implementation process in developing policies that will be in line with the adoption of RSP180 and RCP 240. Furthermore, the meeting was presented with the revised ARMA **Form F2 in Appendix 2K** to be used for approval and amendments of an operator/aircraft for RVSM operations, and **ARMA Form F3 in Appendix 2L**, which States are required to use for withdrawal of the RVSM approval of an operator/aircraft, copies of which must be submitted to the ARMA by the most appropriate method.

3.9 Upon the request of ICAO, copies of templates of duly filled ARMA forms F2 and F3 were presented to participants to enable proper completion of the forms by nominated State RVSM focal points. From the aforementioned, the following Conclusion was adopted.

APIRG/23 Conclusion 23/35: Adoption of new ARMA forms F2 and F3

That, in order to improve the process of RVSM and PBCS monitoring by States and ARMA, the new ARMA Form F2 and Form F3 which include both RVSM and PBCS Approvals are adopted for use by States as applicable for RVSM/PBCS approval, amendment and withdrawal.

Trans-Regional Large Height Deviations

3.10 The meeting was informed of the challenge of Large Height Deviations (LHD) occurrences at the boundaries of the MID Region and AFI Region which continues to be of concern to ARMA. There are three hotspots between the AFI Regional Monitoring Agency (ARMA) and MID RMA (MRMA) where regular trans-regional co-ordination failures occur. The Sanaa FIR submits numerous LHD reports daily for three FIRs in the AFI Region namely Mogadishu FIR, Asmara FIR and Djibouti FIR, mostly due to ATC transfer of control coordination errors due to human factors, which are called LHD Category E.

3.11 The meeting recalled the feedback from the Air Navigation Commission on large height deviations (LHD) reported within the Mogadishu FIR, noting to at least 51 LHDs reported to the MID Regional Monitoring Agency (RMA) were for aircraft exiting Mogadishu FIR into the Sanaa FIR during August 2019 alone. It was further noted that the AFI RMA (ARMA) does not currently receive any RVSM data or LHD reports from Somalia.

3.12 The meeting was apprised of various actions taken to remedy the LHD occurrences including a meeting between ARMA and MRMA on 19 October 2020, and several coordination meetings initiated by ESAF and MID offices and attended by Addis, Sanaa and Mogadishu FIRs, with the participation of IATA, and high-level interventions from ESAF Regional Director to the Directors General of Djibouti and Eritrea Civil Aviation Authorities. The aforementioned actions have led to the review of ATC procedures and review of ATC Letters of Agreement between adjacent ATC units. In addition, Somalia has started submitting monthly RVSM data returns to ARMA and is increasingly responding to ICAO ESAF office on many ATM issues.

3.13 The meeting urged ICAO ESAF and MID offices and the Regional Monitoring Agencies to continue to engage the appropriate ATS authorities for the three FIRs and assist the RMAs to ensure further reduction of Trans-Regional Large Height Deviations.

APIRG/23 Decision 23/36: Reduction of Trans-Regional Large Height Deviations

That, in order to assist the RMAs to ensure further reduction of Trans-Regional Large Height Deviations, ICAO ESAF and MID offices and the AFI and MID Regional Monitoring Agencies continue to:

- a) **engage the appropriate ATS authorities of Asmara, Djibouti, Mogadishu and Sanaa FIRs; and**
- b) **assist them in taking appropriate actions for a significant reduction of the high numbers of Trans-Regional Large Height Deviations.**

Implementation of an operational supervision center at ASECNA

3.14 ASECNA informed the meeting of ongoing activity within the Agency for the implementation, on behalf of its Member States, of an operational supervision center for monitoring the performance parameters of communication, navigation, surveillance and air traffic management systems in order to facilitate the deployment of performance-based communication and surveillance (PBCS), performance-based navigation (PBN), airspace capacity management and air traffic flow management through ATFM and SWIM.

3.15 The main functions of the operational supervision center which will enable ASECNA to have a centralized global view of air navigation operations throughout the airspace are as below:

- centralized supervision of the automated air traffic management system;
- centralized management of flight plans;
- traffic flow and capacity management;
- performance monitoring of the PBCS communication and surveillance means;
- centralized compilation of RVSM data and transmission to ARMA;
- the management of exception and alert situations in the context of SAR operations.

3.16 ASECNA informed the meeting of the willingness of its Member States to strengthen collaboration and the sharing of the data collected between this supervisory center and ARMA and the other air navigation service providers in the region

AGENDA ITEM 4: OTHER AIR NAVIGATION ISSUES

Under this Agenda Item, the meeting was provided with the progress made in the development and implementation of ANS service and supporting CNS infrastructure.

Implementation of Multilateration (MLAT) to Facilitate Gate to Gate Surveillance

4.1 Kenya provided to the meeting the progress made by the Kenya Civil Aviation Authority (KCAA) in the implementation of ASBU Module BO-75 (Safety and Efficiency of Surface Operations) under the Performance Improvement Area (Airport Operations) through the implementation of MLAT at four aerodromes that have not been facilitated with Surface Movement Radar (SMR).

4.2 The objective of the project is to provide Airport surface surveillance applications for ground and aerodrome control including aircraft derived data for ground-based ATM tools, situational awareness including tagging obstacles, airport low visibility operations, multiple runway monitoring.

4.3 The MLAT system is designed to also support ground conflict detection by providing frequent updates of aircraft and vehicle positions, enable monitoring of aircraft and vehicles and provide protection against runway incursions, monitor taxiing operations in low visibility operations minima conditions.

SBAS for Africa and Indian Ocean (A-SBAS) development status

4.4 ASECNA presented to the meeting its “SBAS for Africa & Indian Ocean” (A-SBAS) programme aimed at enhancing navigation and surveillance operations, and to meet airspace users’ requirements. It was reported that under the coordination of ASECNA and the support of the French Space Agency (CNES) and of the European Space Agency (ESA), a dedicated network of GNSS stations, so-called SAGAIE, was deployed to collect and process real GNSS data from core constellations for the AFI region specific feasibility studies.

4.5 The three steps services provision plan was presented to the meeting as well as the signal-in-space compliance with corresponding SARPs from ICAO Annex 10 as well as with Minimum Operational Performance Standards (MOPS) of the RTCA (Radio Technical Commission for Aeronautics) and EUROCAE (European Organization for Civil Aviation Equipment) was outlined.

4.6 It was also reported that the pre-operational service, was effective since September 2020. This service, delivered from a test-bed using the NigComSat 1-R GEO satellite, aims to carry-out technical trials, build operational competencies, and undertake field demonstrations with partner airlines (ASKY, Air Côte d'Ivoire, Air Senegal, Air France, Emirates, etc.) and illustrate the benefits of the future operational safety-of-life SBAS services which are expected to be delivered from 2024. The A-SBAS infrastructure development status was also presented. At this date, the architecture is fully defined, the preliminary system design is completed and the progressive service areas and related performances are endorsed.

4.7 ASECNA also presented the outcomes of their Cost-Benefit Analysis (CBA) performed to assess the profitability of the use of SBAS services by airlines over the 2025-2045 period, and highlighted the increasing number of airspace users interested in SBAS services in Africa, some of them even calling for expediting their deployment.

4.8 ASECNA therefore recommended the acceleration of the provision of SBAS services in the AFI region, based on the "SBAS for Africa and Indian Ocean" and any other initiative that may emerge, to enable interested users to take advantage of safety, efficiency and environmental benefits as soon as possible, while ensuring existing navigation services continue to be delivered to users.

4.9 It was agreed that any SBAS initiative should commit to refrain from imposing unnecessary restrictions to aircraft operations due to lack of SBAS equipage and, that no costs related to SBAS will be incurred directly or indirectly by airspace users who do not use such technology.

4.10 The meeting noted that the airlines which are equipping or are planning to equip their aircraft with SBAS technology are doing so based upon their individual operational requirements and business cases. It also recognized that the airlines that are not planning to utilize SBAS have valid concerns that they may be adversely impacted by SBAS implementation in the region. Therefore, no SBAS mandate should be applied.

AFRAA's perspective on EGNOS implementation in the AFI Region

4.11 AFRAA provided the meeting with African Airlines Association concerns relating to the SBAS infrastructure requirement to cover the entire AFI airspace and onboard equipage challenges against COVID-19 devastating effect on Africa's aviation sector.

4.12 The meeting was informed on the outcome of surveys by AFRAA Technical Operations and Training Committee on four SBAS systems' infrastructure, including WAAS, EGNOS, MSAS, and GAGAN, implemented in the USA, Europe, Japan, and India respectively from which it results.

4.13 AFRAA indicated that from the above four SBAS reviews, Africa being a vast continent, would require for the full implementation of SBAS, a more extended infrastructure than the combined ones of the USA, Europe, Japan, and India. Indeed, Africa landmass accommodates the USA, Europe, Japan, India, plus China. Both the USA and China areas are in a similar range of 9.6 million Km².

4.14 AFRAA also informed the meeting that beyond the infrastructure costs African airlines would need to invest an important amount to equip a fleet of 250 jet aircraft operating on the continent only when aviation must restore the traveler's confidence in the context of COVID-19.

4.15 The meeting was reminded that in the framework of the implementation of AUC flagship projects such as AfCFTA and SAATM to accelerate COVID-19 recovery and sustain aviation development, affordable airfares are imperative to stimulate traffic growth and competitive fares require all stakeholders' cooperative efforts. Therefore, priority should be given by Air carriers, airport operators, Air Navigation Service providers, and Civil Aviation Authorities in their investment strategy and programmes to the improvement of their respective productivities to significantly decrease operating costs so that passengers enjoy slashed airfares in Africa.

4.16 The meeting commended the presentations on the subject matter and recognized the interest of SBAS in delivering Safety-of-Life Service. However, pending issues related to the infrastructure provision across the continent, its maintenance and cost effectiveness of the deployment were raised.

4.17 The meeting received an update from the African Union Commission (AUC) on the conduct of a CBA on the implementation of an AFI SBAS, in accordance with the Single African Air Transport Market (SAATM) Joint Priority Action Plan (JPAP). In substance, he informed the meeting that the AUC has secured the funding for the required CBA to facilitate stakeholders' decision-making, and that the recruitment process for a consultant to assist in this exercise was being finalized. The CBA should be launched early 2021 and completed by end of June 2021 and, thereafter, the results of the study will be presented to stakeholders for validation, and the APIRG Strategy for the introduction of GNSS services in the AFI Region will be updated accordingly. Furthermore, AFCAC urged Administrations and Organizations including the industry to be cooperative by providing raw data that will be collected by the consultant to conduct the CBA.

4.18 It was therefore agreed that the AUC and AFCAC should fast-track the conduct of the CBA and provide the outcome by the proposed date of end of June 2021 with the support of States and Organizations, strongly invited to provide the consultant with the required data.

4.19 Following the discussions, the meeting agreed to reinstate APIRG Conclusion 22/39 calling upon AFCAC, in coordination with the ICAO Regional Offices to convene a regional workshop on AFI GNSS/SBAS. In this respect, the Secretariat informed the meeting that the regional workshop called for by APIRG and under the JPAP will involve all supporting stakeholders, namely airspace users (IATA, AFRAA), ANSPs, the JPO, the AUC, AFCAC and ICAO. This workshop which is intended to facilitate exchange of information and capacity building on SBAS, was being coordinated with AFCAC to take place in the aftermath of the APIRG/23 meeting.

4.20 In summary, the meeting requested AFCAC and ICAO Regional Offices to convene a regional workshop on AFI GNSS/SBAS in January 2021, and recommended the AUC complete the CBA for a continental SBAS by June 2021, as per schedule. The validated CBA should be presented to the APIRG/24 in November 2021 for consideration in line with the regional GNSS strategy.

CANSO Mombasa ATFM Roadmap

4.21 The meeting was appraised of the developments since the inception of the CANSO MOMBASA ATFM ROADMAP on 6 August 2018, an initiative under the auspices of CANSO Africa to support the implementation of Seamless airspace in the African Region in line with APIRG/21 and APIRG/22 conclusions on seamless airspace for Africa.

4.22 The meeting noted with appreciation the outcomes of the webinars carried out in 2020, to assist states build capacity in understanding the Air Traffic Flow Management (ATFM) concept, and encouraged states and ANSPs to utilize this knowledge in developing national ATFM implementation plans.

East African Community (EAC) Seamless Upper Airspace

4.23 The meeting was updated on the progress made by the East African Community (EAC) Partner States in the implementation of the Seamless Upper Airspace over the airspace of six (06) Partner States, which is in line with the Abuja Safety Target 13.

4.24 Taking note that to realize the desired interoperability of the surveillance systems, and provide reduce workload for pilots and air traffic control, the implementation of the reviewed SSR code management plan was necessary, the meeting urged ICAO to expedite the AFI SSR CMP implementation process to conclude by first quarter of 2021.

Regional and Interregional Activities

4.25 The meeting was appraised of the Second Atlantic Coordination Meeting (ACM/2) that took place at ICAO Headquarters, Montréal, Canada, from 18 to 20 February 2020 under the auspices of the Director Air Navigation Bureau, supported by ANB as Secretariat, Western and Central African Office (WACAF), the European and North Atlantic Regional Office (EUR/NAT), and South America Regional Office (SAM), and attended by all involved ICAO Planning and Implementation Regional Groups (PIRGs) respective Chairpersons.

4.26 The meeting reiterated the need for coordination and harmonization between the North Atlantic (NAT) and the South Atlantic (SAT), highlighting the requirement for coordination between neighboring areas and the need to consolidate the SAT vision and the further alignment between the NAT and the SAT.

4.27 It was reported that the ACM/2 covered various topics such as ASEPS trials, ADS, PBCS, AMHS, CPDLC, AIDC and airspace safety monitoring, reviewed the ongoing plans, projects and trials presented by stakeholders, and underscored the urgent need for:

- a) harmonization and cross-regional coordination to enhance the remote/oceanic operations in the entire Atlantic airspace;
- b) a reduction of complexity in order to enable the required capacity;

- c) bringing benefits to all stakeholders (airlines-ANSPs) together with the increase of safety; and
- d) embracing the change and develop a structure that would improve harmonized implementation with the involvement of States, ANSPs and other aviation stakeholders.

4.28 The meeting was briefed on the SAT activities since the ACM/1 meeting, as well as the activities and results from the last SAT/24 meeting (June 2019). It was noted that work on the contingency plan harmonization was completed by ICAO. However, SAT members were requested to complete their actions including nomination of focal points and alignment with national ATM Contingency Plans.

4.29 The meeting initiated a process for the alignment of the SAT Vision and CONOPS with the NAT2030 vision and advised that updates to the SAT vision and CONOPS will be presented at the SAT/25 meeting.

4.30 The meeting considered the development of an implementation plan for a revised SAT working structure which would include; implementation steering and safety oversight mechanisms. It was recommended to apply a three-level approach, including a high level body, and coordination, technical and safety management levels. Accordingly, ASECNA and France were requested to develop and submit to the Secretariat proposals including the structure, concept of operations (CONOPS), vision document and related terms of reference, to be distributed to all SAT stakeholders for review and further consideration and approval by SAT/25. The draft SAT Handbook was developed by ASECNA and France, and distributed to SAT stakeholders for their review and comments.

4.31 The meeting reminded States in the SAT area of their responsibility to submit their occurrence reports, including Large Height Deviation reports, as well as the monthly data returns to the respective regional monitoring agencies.

4.32 The meeting acknowledged the progress made by the ACM, commended the NAT and SAT for ongoing cooperation and support among States and stakeholders, and advocated for continuous collaboration between all the partners. ASECNA expressed satisfaction with cooperation with NAT and SAT members with ongoing trials and implementation of new systems and operations.

4.33 The meeting was informed of the inspiration provided by the NAT/SAT cooperation that has resulted and contributed to assistance to Mauritius in the implementation of SLOP and impetus to similar collaboration for the in India Ocean. The meeting commended the USA FAA for donating equipment to ARMA to facilitate the provision of its monitoring functions.

From the foregoing, the meeting adopted the following conclusion:

APIRG/23 Conclusion 23/37: Harmonization and improvement of air traffic services over the entire Atlantic

That, in order to improve operations and safety of flights, States in the SAT area and/or stakeholders:

- a) **be urged to implement actions necessary for the harmonization and improvement of air traffic services over the entire Atlantic;**
- b) **review and provide their comments to the Secretariat on the proposed SAT working structure contained in Appendix 2M;**
- c) **submit their occurrence reports, including Large Height Deviation reports, as well as the monthly data returns to the respective regional monitoring agencies; and**
- d) **provide further guidance on collaboration among the various ICAO Regions to facilitate improvement of air traffic services over the entire Atlantic.**

RHWAC / MWOs collaboration experimentation and development of Dakar RHWAC

4.34 ASECNA presented to the meeting the results of the EUR-MED/AFI coordination experiment carried out by ASECNA in collaboration with Meteo France as part of the work under the ICAO MET Panel's Work Group on Meteorological Information and Service Development (METP WG-MISD). The meeting noted and embraced this initiative and agreed that for the benefit of all concerned States, this initiative by ASECNA be included under the SIGMETs Tasks of the IMSG's MET Project 1.

4.35 In response to ASECNA's request for the preparations related to the prospective establishment of the Dakar Regional Hazardous Weather Advisory Center (RHWAC), the meeting noted the on-going work under the METP WG-MISD's RHWAC Work Stream related to the development of requirements for the provision of hazardous weather information. This work includes the development of a Concept of Operations, as well as defining the preliminary functional and performance requirements for the systems to provide this hazardous weather information.

After consideration of the proposals by ASECNA, the meeting formulated the following decision:

APIRG 23 Decision 23/38: RHWAC/MWOs collaboration experimentation and development of the Regional Hazardous Weather Advisory Center (RHWAC)

That, in order to harmonize ongoing initiatives and activities of the METP related to the Regional Hazardous Weather Advisory Center (RHWAC) Work Stream:

- a) **the experimentation of RHWAC coordination between the ASECNA zone and other AFI States be considered for further deliberations under the MET Project 1 of the IIM/SG; and**
- b) **the activities related to the establishment of RHWAC(s) for the provision of harmonized information on a global scale of dangerous en-route weather conditions for aviation be aligned to the developments within the METP WG-MISD.**

Increase in operational capabilities for NAVAIDS calibration and flight validation of instrument flight procedures

4.36 The meeting was informed that ASECNA strengthened its capacities to carry out the commissioning control and/or the periodic control of all the air navigation and landing aid equipment as well as the validation of in-flight instrument flight procedures. Indeed, in order to meet the demands of States and service providers from States in the AFI region and other non-members of the region, ASECNA has since September 2020 has acquired a second even more efficient calibration aircraft.

4.37 More capacities are thus offered and requests that have not yet been met or on hold can be made on time in a collaborative framework and in the sharing of available resources. The meeting commended ASECNA for the achievement and encouraged States to make use of these resources for calibration of NAVAIDS and in-flight validation of flight procedures.

AGENDA ITEM 5: APIRG AIR NAVIGATION REPORT 2019/2020

5.1 The meeting was updated on the progress made on the development of the APIRG Air Navigation Report 2019/2020, and the need for closer coordination of the Annual Reporting of the AFI Region.

5.2 The meeting recalled that APIRG established an Annual Air Navigation Reporting Team (AANRT) tasked with developing the APIRG Annual Air Navigation Report based on available information, including the Air Navigation Deficiency Database, global/regional reports, survey results, studies, gap analyses, traffic forecast data, etc.

5.3 The meeting noted that the APIRG AANRT is currently in the process of developing an AFI Air Navigation Report for 2019/2020 based on the comprehensive information contained in the Consolidated Annual Report to Council on PIRGs and RASGs activities for 2019/2020 (AN-WP8416 refers) as shown in **Appendix 2N** of the report.

5.4 The meeting invited States and Organizations wishing to provide their contributions to the APIRG Air Navigation Report 2019/2020 to submit them to the Secretariat by 31 December 2020. The AANRT was encouraged to learn from the experience gained by the RASG-AFI ASRT in the development of annual safety reports. In doing so, the release of the AFI Annual Air Navigation Report – 2019/2020 was expected by no later 31 March 2021.

From the foregoing, the meeting adopted the following conclusion:

APIRG/23 Conclusion 23/39: Publication of the APIRG Air Navigation Report - 2019/2020

That, in order to ensure timely release of the AFI Annual Air Navigation Report:

- a) **States, AFCAC, ASECNA, ATNS, AIRBUS, IATA and CANSO nominate their representatives to the Annual Air Navigation Reporting Team (AANRT) by 31 December 2020, to develop and coordinate the publication of the APIRG Annual Air Navigation Report for 2019/2020 by 31 March 2021; and**

- b) States and Organizations wishing to provide their contributions to the APIRG Air Navigation Report 2019/2020 submit such contributions to the Secretariat by 31 December 2020.**

AGENDA ITEM 6: REVIEW AND UPDATE OF THE TERMS OF REFERENCE, FUTURE WORK PROGRAMME OF THE APIRG AND ITS AUXILIARY BODIES

6.1 The meeting noted that the revised PIRG terms of reference by the Council triggered consequential amendments to APIRG procedural handbook and related meeting terms of reference, procedures and processes.

6.2 The meeting further acknowledged the ICAO Council Decision C-DEC 210/4 calling for among others, the enhancing the PIRGS and RASGs, including, but not limited to better alignment and harmonization of groups working mechanisms, the need to adopt a project based methodology for the work the group undertakes, means to increase effectiveness and efficiency of the groups, and closer link between PIRGs and States DGCAs.

6.3 The main areas requiring attention include, the APIRG working methodology, relations with other bodies and organizations, status of observers, participation to and convening of meetings, reporting, working papers and other documentation.

6.4 The meeting noted the main changes of the APIRG meeting terms of reference relating to the reporting requirements on:

- a) common implementation challenges identified amongst PIRG members and possible solutions, assistance required and estimated timelines to resolve, if applicable, by AFI region;
- b) identification of and recommendations on particular actions or enhancements that would require consideration by the ANC and Council to address particular challenges, including the need for amendment proposals to global provisions and guidance materials submitted by States;
- c) a list of issues cross-referenced to actions to be taken by ICAO Headquarters and/or Regional Offices;
- d) based on the GANP, and associated KPIs and tools, report to the extent possible on the status of implementation of air navigation goals, targets and indicators, including the priorities set by the AFI region in the AFI air navigation plans exploring the use of regional dashboards to facilitate monitoring regional progress being made; and
- e) a list of items for coordination with the RASG and a concise summary of the outcome of related discussions.

6.5 Due to the volume of material proposed for addition to the APIRG handbook and terms of reference, the meeting decided to refer to the document as a new edition (APIRG Procedural Handbook Sixth Edition December 2020) instead of a revision. Hence, the APIRG Procedural Handbook Sixth Edition was adopted, the electronic version of the APIRG Handbook and its terms of reference will be available at online on the ICAO ESAF and WACAF websites, under APIRG. Consequently, the following decision was adopted:

*APIRG/23 Decision 23/40: APIRG Procedural Handbook Sixth Edition,
December 2020*

That, in order to align the consequential amendments to APIRG Procedural Handbook and related meeting terms of reference, procedures and processes to incorporate the revised Generic Terms of Reference for PIRGS as approved by ICAO Council, in line with decision C-DEC 210/4 aimed at enhancing and improving the performance and expected results:

- a) the APIRG Procedural Handbook Sixth Edition, December 2020 including its amended Terms of Reference be approved;**
- b) the electronic version of the APIRG Handbook and its Terms of Reference be made available online on the ICAO ESAF and WACAF websites, under APIRG**

6.6 The Group reviewed and endorsed its future Work Programme encompassing the activities of its subsidiary Bodies per **Appendix 2P**.

AGENDA ITEM 7: ANY OTHER BUSINESS

7.1 Information was provided to the meeting on the ICAO Global Symposium on the Implementation of Innovation in Aviation (8 to 11 December 2020 – online/virtually) aimed to discuss the integration of innovation in aviation to address emerging issues.

PART IV:

**SIXTH MEETING OF THE REGIONAL
AVIATION SAFETY GROUP FOR AFI
REGION (RASG-AFI/6)**

AGENDA ITEM 0: REVIEW AND ADOPTION OF THE DRAFT AGENDA AND MEETING WORK PROGRAMME

The Meeting adopted its Agenda and Work Programme as indicated in **Appendix 3A** to this report.

AGENDA ITEM 1: FOLLOW-UP ON RASG-AFI/5 AND RASC/5 MEETINGS CONCLUSIONS AND DECISIONS

RASG-AFI/5 Meeting Conclusions and Decisions

1.1 The Secretariat presented to the RASG-AFI/6 meeting, the status of implementation of the Conclusions and Decisions of the RASG-AFI/5 meeting, which was jointly held with APIRG/22 at Accra, Ghana, from 29 July to 2 August, 2019, indicating that 2 of the 11 Conclusions and 4 of the 7 Decisions adopted by the RASG-AFI/5 meeting had so far been accomplished.

1.2 It was noted that the unprecedented outbreak of COVID-19 pandemic has contributed severely and impacted negatively on the implementation of the Group's Work Programme, as the priorities and focus were re-directed to addressing the challenges posed by the pandemic. The meeting was further informed that 5 of the 11 Conclusions and 10 of the 11 Decisions adopted by the RASG-AFI/4 meeting held at Nairobi, Kenya, in October, 2017 had been accomplished. All the open items in the Conclusions and Decisions of RASG-AFI/4 that so require, have been carried over to the Group's Work Programme for 2021.

1.3 Although progress has been made in the implementation of the Group activities, it was noted that some of the activities are continual in nature thus, their status of implementation remained on-going, with the levels of implementation stipulated. The meeting therefore formulated the following decision and conclusion:

RASG-AFI/6 Decision 6/01: Follow-up on RASG-AFI/5 conclusions and decisions

That, in order to improve the implementation of conclusions and decisions, the Secretariat expeditiously and rigorously follow up on the implementation of all the open items in the list of RASG-AFI/5 Conclusions and Decisions and carries over to the Group's future Work Programme items that so require.

RASG-AFI/6 Conclusion 6/02: Commitment of required resources to address issues raised in the conclusions drawn by the RASG-AFI meetings.

That, in order to improve the implementation of conclusions and decisions, all RASG-AFI States and other stakeholders commit required resources and take the necessary actions to address issues raised in the conclusions drawn by the RASG-AFI meetings within the stipulated timeframes.

RASC/5 Meeting Conclusions and Decisions

1.4 The meeting was informed that the fifth meeting of the RASG-AFI Steering Committee (RASC/5) was for the first time, held virtually on 28 October 2020 due to COVID-19 restrictions. Boeing as Co-Chairperson of the RASC, chaired the Meeting.

Review of proposed amendments to the RASG-AFI Procedural Handbook

1.5 Proposal for the amendment of the RASG-AFI Procedural Handbook was presented to the meeting by the Secretariat. Highlighted were proposals originating from the terms of reference for PIRGs and RASGs that were approved by the ICAO Council in line with Decision C-DEC 210/4, aimed to enhance and improve the performance and expected results of the Groups. The meeting after discussions directed the Secretariat to submit the draft revised RASG-AFI Procedural Handbook to RASG-AFI/6 for approval. The Meeting in addition formulated the following Decision.

RASG-AFI/6 Decision 6/03: Familiarisation with the provisions of the revised RASG-AFI Procedural Handbook

That, in order to enhance the performance and expected results of the Group, the Secretariat convenes a virtual meeting with stakeholders for familiarisation with the provisions of the revised RASG-AFI Procedural Handbook.

RASG-AFI Projects and Critical Activities

1.6 The meeting was provided with details on the status of implementation of the RASG-AFI Projects that are supported by the AFI Plan, Safety Fund (SAFE), Aviation partners and States. These projects cover Fundamentals of Safety Oversight (FSO), Significant Safety Concerns (SSC), Emerging Safety Issues (ESI), and Aircraft Accident Investigation (AIG). The meeting noted the significant progress made as well as the challenges faced by the States and formulated a Conclusion as follows:

RASG-AFI/6 Conclusion 6/04: RASG-AFI Projects and Critical Activities.

That, for the effective and efficient implementation of the RASG-AFI projects and critical activities:

- a) **ICAO and stakeholders intensify high-level intervention and commitment of more resources to the resolution of the SSC in Eritrea by 30 June 2021;**
- b) **States/Airports demonstrate more commitment towards the implementation of their aerodrome certification action plans; and**
- c) **RASG-AFI States initiate and conduct their SSP Gap Analysis and subsequently develop and implement SSP implementation plans.**

Release of the 6th Edition of the RASG-AFI Annual Safety Report

1.7 The RASG-AFI Annual Safety Report Team (ASRT) presented to the meeting the 6th Edition of the RASG-AFI Annual Safety Report, which was officially released during the 23rd Meeting of the AFI Plan Steering Committee in July, 2020. The Report is normally released during RASG-AFI Meetings or AFI Aviation Week Events. However, due to the COVID-19 pandemic, both events were re-scheduled thus, the release at the AFI Plan Steering Committee meeting. The meeting appreciated the work of the ASRT, and its related feedback from the readership.

1.8 The Report is available at the ICAO Regional Offices websites of WACAF and ESAF at: <https://www.icao.int/wacaf/Pages/default.aspx> and <https://www.icao.int/esaf/Pages/default.aspx> respectively.

1.9 The meeting noted the contents of the 6th Edition of the RASG-AFI Annual Safety Report and the recommendations provided therein; and commended the Annual Safety Report Team (ASRT) for the hard work in producing the annual reports consistently since the team's inception in 2014.

Review of the status of implementation of the revised Abuja Safety and Air Navigation Targets

1.10 AFCAC presented the status of implementation of the revised Abuja Safety Targets and ANS Performance Indicators by its Member States and other stakeholders as at the end of 2019.

1.11 The meeting noted the status and challenges related to implementation and reporting of progress; and the plans by AFCAC to promote and adopt the use of automated data collection tools for monitoring Safety and ANS targets. The meeting therefore formulated the following Conclusions:

RASG-AFI/6 Conclusion 6/05: Revision of the Abuja Safety Targets

That in order to ensure consistency between the GASP and the Abuja Safety Targets, AFCAC, in collaboration with ICAO and other key stakeholders, revises the Abuja Safety Targets by 30 June 2021 and ensure that they are consistent with the goals, targets and indicators specified in the current edition of the Global Aviation Safety Plan (GASP).

RASG-AFI/6 Conclusion 6/06: Establishment of the Performance Dashboard

That in order to enhance the reporting of the status of the implementation, AFCAC accelerates the process of establishing a Performance Dashboard by 31 March 2021, for reporting and monitoring the status of implementation of the Abuja Safety and Air Navigation Targets.

RASG-AFI/6 Conclusion 6/07: Assistance to States in the implementation of the Abuja Targets

That to improve the implementation of the Abuja Safety and Air Navigation Targets, ICAO and other key stakeholders intensify coordination and interventions necessary to assist Member States to implement all targets, especially the ANS targets by 31 December, 2022; and AFCAC to be convening periodic meetings with the States' Focal Points on the progress of implementation.

AFI Regional Aviation Safety Plan (AFI-RASP)—Strategy for the Development and Implementation of the AFI-RASP

1.12 The meeting recalled ICAO Assembly Resolution A40-1 on the Global planning for safety and air navigation that urges Member States to implement National Aviation Safety Plans (NASP), consistent with the Global Aviation Safety Plan (GASP) in order to continually reduce fatalities and the risk of fatalities.

1.13 It was reported that each ICAO Region should develop a Regional Aviation Safety Plan (RASP) consistent with the GASP and that States should develop national aviation safety plans that are consistent with their respective RASPs. The meeting formulated the following Decision and Conclusion:

RASG-AFI/6 Decision 6/08: Development and implementation of Regional Aviation Safety Plan (AFI-RASP)

That, in order to continually reduce fatalities and the risk of fatalities, the RASG-AFI:

- a) **develop and implement an AFI Regional Aviation Safety Plan (AFI-RASP) by 31 December 2021;**
- b) **appoint two co-secretaries from each ICAO Regional Office (ESAF and WACAF) by 31 January 2021, to spearhead the process of developing and implementing the AFI-RASP and its subsequent revisions as well as monitoring the development and implementation of the NASPs of States;**
- c) **establish a working group (RASP-WG) by 30 June 2021, to be responsible for developing and implementing the AFI-RASP, comprising representatives from the ICAO Regional Offices, States that have registered significant progress in the development and implementation of their NASPs, organizations and aviation industry partners.**

RASG-AFI/6 Conclusion 6/09: Development and implementation of National Aviation Safety Plans (NASPs)

That, in order to continually reduce fatalities and the risk of fatalities, the RASG-AFI States:

- a) **develop and implement their national aviation safety plans (NASPs) by 31 December 2021, in line with Assembly Resolution A40-1: ICAO Global planning for safety and air navigation; using existing guidance material and tools developed by ICAO;**
- b) **adopt the NASP template and consider working in collaboration with other States in the region, the AFI Regional Aviation Safety Group (RASG-AFI), and the ICAO Regional Offices to ensure consistency of the NASP with the AFI-RASP and the current edition of the GASP;**
- c) **provide their NASP to their respective ICAO Regional Office for posting on the ICAO GASP public website; and**
- d) **submit proposals to ICAO for the update of guidance material related to national aviation safety plans.**

AGENDA ITEM 2: REPORTS ON RASG-AFI ACTIVITIES

2.1 Updates on the status of implementation of the activities of the RASG-AFI and its contributory bodies were presented to the meeting by the respective Champion States and by the Secretariat. The RASG-AFI has established four Safety Support Teams (SST), as its contributory bodies, whose purpose and objective is to respond to the immediate safety challenges facing the RASG-AFI Region by facilitating and providing support in the development, prioritization and implementation of safety enhancement initiatives. The SSTs comprise, Significant Safety Concerns (SSC); Fundamentals of Safety Oversight (FSO); Aircraft Accident and Incident Investigation (AIG); and Emerging Safety Issues pertaining to Loss of Control In-Flight (LOC-I), Controlled Flight Into Terrain (CFIT), Runway Safety and Aeronautical Information Management (AIM).

2.2 The meeting was reminded that RASG-AFI Steering Committee (RASC) oversees and provides directional guidance to the SSTs in their efforts to develop mitigation strategies, which include gathering and processing safety data and information in line with the Global Aviation Safety Plan (GASP). Following the reports, the Group drew the relevant Decisions and Conclusions accordingly.

Significant Safety Concerns (SSC) project (Champions: Ghana, South Africa, AFCAC).

2.3 The meeting was informed that as at 30 October 2020, only one SSC remained unresolved in one State (Eritrea) within the RASG-AFI region. This SSC was identified in 2010 in the area of flight operations relating to the certification of air operators.

2.4 In March 2020, ICAO confirmed the existence of an SSC in Côte d'Ivoire in the area of Air Navigation Services pertaining to the ground and flight validations of published instrument flight procedures. This SSC was identified during the USOAP CMA audit conducted in the State in December, 2019. On 29 June 2020, ICAO determined that the corrective actions taken by Côte d'Ivoire had resolved the immediate risk associated with the SSC finding.

2.5 The SST-SSC, under the championships of Ghana, South Africa and AFCAC, has achieved significant progress and continues to assist States in their efforts to resolve existing SSCs as well as prevent the emergence of new ones. From the inception of the SSC-SST in 2013 to date, 19 SSCs have been resolved in 12 States.

2.6 It was recommended that going forward, stakeholders, including development partners, should intensify funding to the SST-SSC to sustain or increase the implementation of the necessary safety enhancement Initiatives. Furthermore, the meeting urged the SST - SSC to profile all States in order to identify those with latent or potential SSCs and provide them with tailored assistance to resolve or mitigate the associated safety risks.

RASG-AFI/6 Decision 6/10: Safety Support Team – Significant Safety Concerns (SST- SSC)

That, in order to sustain or increase the implementation of the necessary safety enhancement Initiatives, RASG-AFI Steering Committee (RASC) through SST-SSC, in collaboration with ICAO, States and other relevant partners, including AFCAC, COSCAPs/RSOs and Industry:

- a) **call for high level ICAO intervention and more commitment of resources from stakeholders, to maintain and intensify technical assistance to Eritrea, to ensure the resolution of the outstanding SSC by 31 March, 2021; profile all States on an ongoing basis in order to proactively identify those with latent or potential SSCs and provide them with tailored assistance to prevent, resolve or mitigate the associated safety risks; and**
- b) **maintain and intensify provision of financial resources through the AFI Plan, SAFE, and other development partners, to progress the work of the SST- SSC.**

Fundamentals of Safety Oversight (FSO) project (Champions: Senegal, Uganda).

2.1 Fundamentals of Safety Oversight (FSO) project under RASG-AFI aims to support beneficiary States with low levels of Effective Implementation (EI) to enhance their safety oversight capabilities with particular focus on the implementation of CE-1 through CE-5 of a State Safety oversight system.

2.2 The SST-FSO, under the championship of Senegal and Uganda, continues to assist States in their efforts to increase their EIs and prevent emergence of SSCs. The implementation strategies include, assistance activities conducted by the Regional Offices under the AFI Plan FSO Project; the AFCAC AFI Cooperative Inspectorate Scheme (AFI-CIS) and assistance provided by COSCAPs and RSOOs.

2.3 As at 30 October 2020, FSO assistance missions were conducted to Liberia, Sao Tome and Principe, Central African Republic, Guinea, Comoros, Djibouti, Lesotho, Seychelles, Eswatini, Eritrea, Malawi and Burundi. Some of these assistance activities were coordinated and conducted with the participation of relevant experts from States with strong oversight systems and RSOOs. With the travel restrictions imposed worldwide due to the COVID-19 pandemic, assistance to States continue to be provided through virtual means.

2.4 It was noted that the current average USOAP EI score for States assisted under the AFI Plan FSO project is 23.88%, shows an improvement from 20.47% in 2018. However, more efforts and resources are still needed to assist States, especially those that have never been audited and those with EIs lower than 40%, to establish and maintain robust and sustainable safety oversight systems. Consequently, increased and sustained funding, including from ICAO, through the AFI Plan and the SAFE, and the development partners is essential to maintain or even increase the momentum of the progress registered.

RASG-AFI/6 Conclusion 6/11: Safety Support Team - Fundamentals of Safety Oversight (SST-FSO)

That, in order to assist States to establish and maintain robust and sustainable safety oversight systems:

RASC through SST-FSO, in collaboration with ICAO, States and other relevant partners, including AFCAC, COSCAPs/RSOOs and Industry:

- a) **profile all States in order to identify those with existing low EIs and those with deficiencies, and provide them with tailored assistance to resolve or mitigate the associated safety risks; and**

- b) maintain and intensify provision of financial resources through the AFI Plan, SAFE Fund, and other development partners, to progress the work of the SST-FSO.**

Emerging Safety Issues (ESI) Project (Champions: Kenya, ACI- Africa, ASECNA).

2.5 Under the SST-ESI, the ICAO Regional Offices and Kenya (as the RASG-AFI Champion State for ESI) have undertaken a number of activities related to Loss of Control In- Flight (LOC-I). These include Symposia and/or Workshops on LOC-I and Upset Prevention and Recovery Training (UPRT) held annually from 2015 to 2019 in line with the RASG-AFI, LOC-I, 5-year implementation plan.

2.6 In the context of the COVID-19 pandemic and related challenges like the non-availability of Flight Simulation Training Devices (FSTD) and shrinking training budgets, the risk of skills and knowledge degradation for pilots' competencies related to UPRT are all the more apparent.

2.7 Therefore, in order to address these issues, among others, the Regional Offices and the Champion State conducted a virtual workshop on LOC-I/UPRT on 17 and 18 November 2020, which was attended by 168 participants.

RASG-AFI/6 Conclusion 6/12: Safety Support Team - Emerging Safety Issues (SST-ESI, Loss of Control In-flight (LOC-I)

That, in order to address efficiently safety issues related to LOC-I and UPRT:

- a) States are urged to report on yearly basis, progress made at their level on the implementation of the LOC-I 5-year Plan of action;**
- b) States, Organizations and Industry to complete the LOC-I online and subsequent surveys, for adequate reporting of progress made on the area and to share safety data relating to LOC-I;**
- c) States, Organizations, air operators and training organizations to nominate experts by 28 February, 2021 and to actively participate in the activities of the Core Expert Group on LOC-I and UPRT;**
- d) SST-ESI to continuously enhance the RASG-AFI Model guidance material; and**
- e) States, Organizations, air operators and training organizations to continue to actively participate in the annual LOC-I/UPRT workshop.**

Aircraft Accident and Incident Investigation (AIG) Project (Champions: Ethiopia, Cape Verde, IFALPA)

2.1 The Secretariat informed the meeting that the SST – AIG aims to assist States establish independent accident investigation entities at both national and/or regional levels. This AIG Project is intended to provide States with guidance on the regulatory provisions and tools to ensure harmonization in the area of AIG.

2.2 Under the AIG Project, two workshops were conducted in August and September 2018, in Nigeria and Ethiopia, respectively. A third workshop was conducted in November 2019 in Benin. The workshops provided participants with guidance on the development and implementation of harmonized legislative frameworks, regulations, and associated procedures required for the establishment of a State aircraft accidents and incidents investigation system.

2.3 As a way forward, States will be assisted to reinforce their AIG capacity by establishing a collaborative scheme through which States, with the support of RSOOs/RAIOs and ICAO Regional Offices, will undertake the development of model harmonized regulations and investigation procedures manuals. This will also include development of the necessary processes and tools to enable or facilitate States to delegate civil aviation accidents investigating tasks, or establish or join a Regional Accident and Incidents Investigation Organization (RAIO).

RASG-AFI/6 Decision 6/13: Safety Support Team – Aircraft Accident and Incident Investigation (SST-AIG)

That, to assist States establish independent accident investigation entities at both national and/or regional levels, RASC through SST-AIG, in collaboration with ICAO, States and other relevant partners, including AFCAC, COSCAPs/RSOOs/RAIOs and Industry, provide assistance to States to establish and implement independent and effective aircraft accident and incident investigation systems through:

- a) establishment of an effective legislative framework;**
- b) establishment of mechanisms, such as memoranda of understanding (MOUs), with other relevant entities, including other States and Judicial Authorities;**
- c) building of capacity in the form of appropriately trained and qualified investigators by providing scholarships and fellowships as a means of implementing effective training programmes.**

State Safety Programme (SSP)

2.4 The meeting was presented with an update on implementation of the AFI Plan State Safety Programme (SSP) project. The SSP implementation project was initially developed under the AFI Plan to support the establishment of a sound safety oversight system in twenty-four (24) States with eligibility based on the attainment of the 60% EI regional target. The eligible States were encouraged to further promote aviation safety by embracing safety management principles with a view to proactively address emerging safety risks by using consistent, data-informed approaches to implement smarter, system-level, risk-based safety oversight.

2.5 Within the framework of the project, eligible States are provided with safety management training for their regulatory and service provider staff involved in the implementation of SSP and SMS, respectively, to build understanding of operational safety management processes with practical examples. The project was launched in February 2017 for a duration of 24 months with the following eligible States: Botswana, Burkina Faso, Cabo Verde, Cameroon, Cote d'Ivoire, Ethiopia, Gambia, Ghana, Kenya, Madagascar, Mali, Mauritania, Mauritius, Morocco, Namibia, Niger, Nigeria, Senegal, South Africa, Sudan, Togo, Tunisia, Uganda, and Zimbabwe.

Since the 20th meeting of the AFI Plan Steering Committee (AFI Plan SC) and as more AFI States attain the 60% EI target, the SSP Project Document was revised to incorporate new eligible States including Benin, Congo, Gabon, Mozambique and Rwanda.

2.6 It was reported that the Project implementation approach was revised to take into account SSP implementation based on satisfactory implementation of SSP Foundation Protocol Questions (PQs). States are assisted in the review for acceptability and implementation of the USOAP Corrective Action Plan (CAP), for the SSP Foundation PQs as well as the review of the States' results of the SSP Gap Analysis Questions. Furthermore, States are sensitized on SSP Implementation Assessments (SSPIAs) under the USOAP CMA and the associated amended SSP-related PQs. With the prevailing COVID-19 pandemic, remote guidance and assistance continue to be provided to States in monitoring their performance on the USOAP CMA OLF (Democratic Republic of Congo, Sierra Leone, Guinea, etc.).

2.7 The meeting noted that moderate progress has been achieved by States towards implementation of safety management provisions as envisaged under the project notably: 91% of the States started SSP gap analysis (Level 1); 73% of the States completed SSP gap analysis (Level 2); 46% of the States have defined SSP implementation plan (Level 3); and only one State (Rwanda) has fully implemented SSP (Level 4). The meeting commended Rwanda for the achievement and urged other States to share their experience.

2.8 As a way forward, there is need to: intensify technical assistance to States with special emphasis on assisting States to develop and implement SSP implementation plans and to perform self- assessment of SSP Foundation Protocol Questions and, when applicable, develop and implement corresponding corrective action plans (CAPs); and progressively co-opt into the SSP Project additional States as and when they attain the threshold of 60% EI.

In view of the above, the following conclusion was formulated:

RASG-AFI/6 Conclusion 6/14: State Safety Programme (SSP) and Safety Management System (SMS) Implementation

That, to promote aviation safety by embracing safety management principles with a view to proactively address emerging safety risks:

- a) States to initiate their SSP Gap Analysis using the available ICAO tools, in order to develop an SSP implementation plan;**
- b) States continue their efforts to establish and implement State Safety Programme (SSP), with the support of ICAO through the AFI Plan SSP Project, in accordance with the GASP, Annex 19 provisions, and in line with the relevant revised Abuja Safety target; and**
- c) Regional and International Organizations are invited to share tools and examples which support effective State Safety Programme (SSP) and Safety Management System (SMS) implementation, for establishment of regional data base and posting onto the ICAO safety management implementation website.**

Aerodrome Certification Project

2.9 The meeting was updated on the status of implementation of the aerodrome certification Project supported by the AFI Plan to assist States certify their international aerodromes. The Regional Offices and States continue to pursue the implementation of the Aerodrome Certification Project. So far, 12 international Airports (Abidjan, Bamako, Lagos, Abuja, Niamey, Libreville, Dakar, Maputo, Lusaka, Kigali, Manzini and Windhoek) in 11 beneficiary States have been certified. This achievement raised the percentage of certified aerodrome in Africa from 22.05% in 2016 to 29.55% in November 2020.

2.10 It was underscored that the challenges faced in the project implementation are mainly related to the CAAs/Airports commitment and the resolution of deficiencies found at airports, as well as the availability of trained technical personnel at both the CAAs and the airports Operators level.

2.11 In accordance with the Project document, meetings and workshops continue to be conducted for the remaining and new beneficiary States. The ICAO Regional Offices are currently following up on the implementation of the Action Plans of the nine (9) remaining States, and are still calling on these States to increase their commitment to the full implementation of the Project. Some States such as Benin, Botswana, Burkina Faso, Cameroon, Congo, and Seychelles that had been slow in implementation of the Action Plan, have recently shown progress and were due to complete the certification process by end of 2020 or early 2021.

AGENDA ITEM 3: ICAO “NO COUNTRY LEFT BEHIND (NCLB)” INITIATIVE

3.1 The Secretariat presented information and updates on the ICAO “No Country Left Behind (NCLB)” Initiative and its achievements since its inception in 2014.

3.2 The meeting recalled that the No Country Left Behind (NCLB) initiative highlights the efforts by ICAO to assist States in the implementation of Standards and Recommended Practices (SARPs) whilst ensuring global harmonization and States’ access to the socio-economic benefits of safe and reliable air transport. The NCLB also supports efforts to resolve Significant Safety Concerns (SSCs) as well as other safety, security and emissions-related issues.

3.3 Furthermore, as part of the NCLB Initiative, ICAO provided more direct assistance to developing countries through coordination and pooling of resources, and participation in regional efforts, mobilization of voluntary funds and build capacity. The NCLB initiative therefore coordinate and publicize Organization-wide activities consistent with these priorities.

3.4 The meeting was presented with some of the key ICAO activities and implementation resources in collaboration with and support of the NCLB initiatives notably:

The ICAO World Aviation Forum, Regional Implementation support and NCLB

3.5 The ICAO World Aviation Forum is designed for high-level government officials responsible for transport and infrastructure, finance, economy, and tourism; and key industry and financial partners. It identifies needs, facilitates the funding and financing required to accelerate the implementation of international civil aviation global standards and policies in support of the No Country Left Behind (NCLB) initiative. The Forum also urged stakeholders to share information and best practices with a view to ensuring sufficient resources for sustainable aviation development.

3.6 Regional Implementation support - through the various activities of the PIRGs and RASGs in the different ICAO regions included the conduct of seminars and workshops, establishment of a framework for effective implementation and support, technical assistance activities, AFI Plan activities, AFI Flight Procedure Programme (AFPP), Security and Facilitation as well as Environmental Protection.

3.7 The meeting noted the achievements of the NCLB initiative with the increased global awareness on the importance of effective implementation of ICAO Standards and Recommended Practices (SARPs), policies, plans and programmes, partnerships and pooling of resources to support the sustainable development of aviation.

RASG-AFI/6 Conclusion 6/15: Support to ICAO NCLB Initiative

That, in order to enhance support to the ICAO NCLB Initiative, RASG-AFI States and other Stakeholders, including international and regional organizations and service providers embrace and contribute resources, including financial and in-kind, to ensure effective implementation of the NCLB Initiative.

AGENDA ITEM 3.2: UPDATE ON THE SAFETY INITIATIVES BY STATES, REGIONAL ORGANIZATIONS, INDUSTRY AND PARTNERS, ESPECIALLY UNDER THE CONTEXT OF COVID-19.

Remote Performance of Regulatory Certification and Oversight Activities

3.2.1 The United States (U.S.) Federal Aviation Administration (FAA) presented to the meeting information relating to the remote performance of regulatory certification and oversight activities. It was reported that FAA had been developing this technology for a while and expanded both its capability and use during the COVID-19 pandemic in order to continue exercising its safety oversight responsibilities despite travel restrictions and inaccessibility of facilities.

3.2.2 The primary tools the FAA is using include remote cameras, microphones, electronic document retrieval and review, and working with certificate holders and applicants through video or audio conferencing.

3.2.3 The meeting noted that the main benefit of performing oversight activities remotely is the efficiency gained through not requiring inspectors to travel. This means the practice can continue, even when circumstances once again facilitate routine/frequent travel. The ability to see, through cameras, laptops, etc., a remote location will likely mean fewer physical visits by inspectors over time.

3.2.4 The FAA continues to standardize processes, to learn where the technology is appropriate for sampling and verification work and where the technology may not assist with oversight or needed some adjustments.

3.2.5 As a way forward the meeting invites the FAA to share any guidance material relating to the conduct of remote oversight process as well as On the Job Training material which is on development in order to enables States to gain experience on this new methodology.

Guidance on operationalization of remote oversight and surveillance programme

3.2.6 The meeting was presented with the EAC CASSOA guidance material on remote oversight as an alternative mechanism of traditional oversight. The COVID-19 pandemic has constrained civil aviation authorities to explore alternative methods to ensure continuous compliance with regulatory requirements in particular, conducting remote auditing of aviation operations as necessitated by the emergence of adverse circumstances which impede the conduct of on-site safety oversight activities.

3.2.7 The meeting underscored the importance of developing mechanisms for the conduct of remote oversight. Hence, the need to establish a consistent, structured, reliable and timely regulated entity evaluation mechanism for the successful implementation of effective remote oversight.

3.2.8 Meanwhile, in determining the applicability of remote oversight or auditing on a particular entity, consideration should be given to effective Safety Management System (SMS) implementation, good compliance record/history and a sound safety culture in the performance of aviation activities.

3.2.9 The meeting was reminded the release of ICAO Doc 10144 - Handbook for CAAs on the management of aviation safety risks related to COVID-19 and the existence of other guidance materials to support States to mitigate the risks related to the COVID 19 pandemic. This information is available on the ICAO webpages COVID-19-Safety-Risk-Management (<https://www.icao.int/safety/SafetyManagement/Pages/COVID-19-Safety-Risk-Management.aspx>) and COVID-19 Operational Safety Measures (<https://www.icao.int/safety/COVID-19OPS/Pages/operational-safety-measures.aspx>).

RASG-AFI/6 Conclusion 6/16: Development of remote safety oversight mechanism

That, to explore alternative methods to ensure continuous compliance with regulatory requirements, AFI States establish a formal mechanism for the conduct of effective and efficient remote safety oversight activities and consequently, amend their Inspector's Handbooks to include related procedures and processes; and ensure that appropriate training is provided to concerned personnel.

New ACI-ICAO Airport Safety Professional qualification programme

3.2.10 The meeting was informed that on 04 November 2020, ACI and ICAO launched the Airport Safety Professional qualification programme which is the second programme developed jointly by ACI and ICAO after the Global ICAO-ACI Airport Management Professional Accreditation Programme (AMPAP) which was first introduced in 2007.

3.2.11 The Programme is aimed at capacity building of Airport personnel (Operators and Regulators) which still remains challenge on the African continent. The meeting further noted that the programme will support the African airport industry in the recovery and sustainability efforts by assisting airports to align safety practices with ICAO SARPS.

3.2.12 ACI further reported that the ASP targets to train and recognize senior airport managers and airport regulators who have demonstrated an understanding of relevant ICAO Standards and Recommended Practices (SARPs), developed professional excellence in the field of airport airside operations as well as maintained ACI industry best practices.

3.2.13 The ASP Programme is an online course delivered by ACI Certified Instructors and incorporates an exam for full accreditation. After completion of the Programme, State regulators and airport operations personnel who have undertaken the program will be able to employ best practices at airports at the same time ensuring that the ICAO SARPS are adhered to at the airports.

AFI State Safety Programme (SSP) Peer Review Mechanism

3.2.14 The meeting was presented with a proposal by Kenya and South Africa, for the establishment of an AFI State Safety Programme (SSP) Peer Review Mechanism as part of the AFI Plan SSP project. This mechanism is expected to provide for a State-to-State peer review through sharing of technical experts among AFI States to support the development and implementation of their SSP.

3.2.15 Furthermore, it was recognized that the objective of the mechanism is to ensure that all AFI states have achieved the GASP and Regional goal of effective SSP implementation by 2025. The programme recognizes the importance of management of safety as one of the top priorities in achieving the acceptable level of safety performance and reducing aviation safety risks. It therefore supports the GASP mandate to reduce operational risks and implement proactive programmes to manage safety and prevent accidents and loss of life and damage to property/infrastructure.

3.2.16 It is envisaged that the establishment of the AFI SSP Peer Review Mechanism will ensure that States benefit from each other's expertise and resources in the improvement of SSP implementation.

3.2.17 The meeting noted the moderate progress, so far, achieved by States in the AFI region in the implementation of SSP with only 1 AFI State (Rwanda) having achieved full implementation of SSP.

It was further noted that the challenges faced by States in advancing SSP implementation include lack of qualified technical personnel and resources. Therefore, the sharing of technical experts and resources among the AFI States, as part of the AFI SSP Peer Review Mechanism, will include the sharing of guidance materials and tools that will assist States in the implementation of their SSP, assistance in performing self-assessment of SSP Foundation PQs and support in the implementation of corresponding Corrective Action Plans (CAPs).

3.2.18 In order to initiate the project, the meeting agreed to consider establishment of the proposed pilot programme consisting of 6 States that are at different levels of SSP implementation. To this end, South Africa, Kenya, Rwanda, Cote d'Ivoire, Nigeria and Togo were identified to be part of the pilot programme to concretize the concept. The programme will eventually be expanded to include other AFI States to be identified at a later stage.

3.2.19 The meeting agreed to the consultation by the Regional Offices on the modalities to the establishment of the AFI SSP Peer Review Mechanism as a means to complement the AFI Plan SSP Project with a view to further enhance and improve SSP implementation in the region.

RASG-AFI/6 Decision 6/17: Support to the SSP Peer Review Mechanism

That, in order to explore the benefits of the SSP Peer Review Mechanism, the ICAO Regional Offices facilitate the finalization of modalities towards the establishment of the SSP Peer Review Mechanism, taking into consideration the involvement of subject matter experts (SMEs) in the deployment of the Aviation Safety Risk Management iPack.

RASG-AFI/6 Conclusion 6/18: Cooperation amongst States in the AFI SSP Peer Review Mechanism

That, in order to promote cooperation amongst States, RASG-AFI States collaborate, work together and mobilize the required financial resources, to establish and implement the AFI SSP Peer Review Mechanism to enhance safety, through effective SSP implementation, in a quest to achieve the related regional goals and targets.

FAA Aerodrome Inspection Practices due to COVID-19

3.2.20 The meeting was informed that the Federal Aviation Administration (FAA) has partnered with ICAO to organize a webinar aimed at informing inspectors and aerodrome operators of how FAA is reducing exposure to COVID-19 and conducting remote inspection oversight to ensure safety at certificated airports as a basis for best practices. The webinar aims to share experiences with Aerodrome operators about necessary protocols to adhere to both prior to and during an aerodrome inspection process.

3.2.21 The meeting was further informed that, two representative States from the AFI region will each provide their experiences and lessons learned on aerodrome inspection during COVID-19. AFI States were therefore encouraged to participate in the webinar by nominating Aerodrome Inspectors and Operators to benefit from this long standing relation between ICAO and FAA.

ICAO Government Safety Inspector Course Conversion to Virtual Delivery

3.2.22 FAA informed the meeting that the ICAO endorsed Government Safety Inspector (GSI) training courses are being converted from classroom to virtual format. The GSI Air Cargo Certification Course 18702 has already been converted to virtual delivery and two courses have been scheduled by ICAO to be delivered in December 2020.

3.2.23 The FAA and ICAO will begin conversion of the remaining courses into virtual delivery format beginning with the GSI Air Operator Certification Course 18700, and followed by GSI Personnel – Personnel Licensing Course 18710, and GSI Airworthiness – Air Operator and Approved Maintenance Organization Course 18701. Each of these course conversions will take about eight weeks, followed by a validation course offering FAA’s Model Civil Aviation Regulations Version 2.10 and publication of new version in November 2020.

3.2.24 The meeting recalled that the Model Civil Aviation Safety Act (Act) and the Model Civil Aviation Regulations (MCARs) were developed and published to assist States in carrying out their aviation safety oversight responsibilities. The Act and the MCARs provide primary information sufficient to allow a State to meet its overall safety oversight responsibilities and to emphasize State’s commitment to aviation safety as required by ICAO Safety Oversight Critical Elements 1 – Primary Aviation Legislation and 2 – Specific Operating Regulations.

3.2.25 It was further noted that over 80 ICAO Contracting States, that have adopted previous versions as the basis for their civil aviation law and civil aviation regulations, currently use the MCARs. In addition, the MCARs support the ICAO Endorsed Government Safety Inspector training courses. The MCARs can be found on the FAA web site at: <https://www.faa.gov/about/initiatives/iasa/mcar>/<https://www.faa.gov/about/initiatives/iasa/mcar/>

AGENDA ITEM 4: REVIEW OF THE FUTURE WORK PROGRAMME OF THE RASG-AFI AND ITS AUXILIARY BODIES

4.1 The meeting was presented with the Work Programme of the RASG-AFI and its contributory Bodies for 2021. The activities cover those of the RASC, the Safety Support Teams (SSTs), RASG-AFI regional meetings and the Joint APIRG/RASG-AFI Coordination Task Force (ARC-TF) meetings.

4.2 The new working arrangement for APIRG and RASG-AFI Meetings (Joint Opening and Closing Plenaries; and sessions in-between) has required an amendment to the RASG-AFI Procedural Handbook to reflect same, as well as the provisions of the 2020-2022 Edition of the GASP. This arrangement is intended to ensure proper coordination between the Groups and ensure that all safety activities at the regional and sub-regional levels are properly coordinated amongst role players to avoid duplication of efforts.

4.3 The meeting noted that the sole Significant Safety Concerns (SSCs) remaining in the RASG-AFI Region in Eritrea is long overdue and should be resolved in the near future. In addition, Aircraft Accident and Incident Investigation (AIG) continues to be generally a weak area in the region. Furthermore, it was noted that the AFI Plan study will inform the way forward as far as the streamlining of regional organizations is concerned. Follow-up actions on the two AIG Workshops held at Addis Ababa, Ethiopia, and Abuja, Nigeria, in August and September, 2018 respectively, to facilitate development of harmonized legislation, regulations and procedures in States, would be undertaken in the context of COVID-19 pandemic.

4.4 It was underlined that a key focus area relates to inclusion of certain items on the list of emerging safety issues for the Region, such as Remotely Piloted Aircraft Systems (RPAS) and progressive increase in EI levels in all areas for all States, taking into account the concept of High Safety Oversight Index (greater than 1) in all functional areas.

RASG-AFI/6 Decision 6/19: Review and endorsement of the RASG-AFI Work Programme for 2021

That, for an effective, flexible and coordinated planning of activities, RASG-AFI/6 approves the Work Programme for 2021 of RASG-AFI and its Contributory Bodies as contained in the Appendix 3B to this report.

AGENDA ITEM 5: REVIEW AND UPDATE OF THE RASG-AFI PROCEDURAL HANDBOOK AND TERMS OF REFERENCE

5.1 Following the review of the terms of reference (ToR) of the PIRGs and RASGs by the ICAO Council to improve the performance and expected results of the Groups, the twenty-second Meeting of the AFI Planning and Implementation Regional Group (APIRG/22) and the Fifth Meeting of the Regional Aviation Safety Group for Africa-Indian Ocean (RASG-AFI/5) held at Accra, Ghana, in July 2019, tasked the two Groups to make consequential changes related to the revised terms of reference to the APIRG and RASG-AFI as contained in their respective Procedural Handbooks.

5.2 The main aspects of the generic ToRs are to clarify the roles of stakeholders and promote partnership among them, harmonize the methods of work and improve regional reporting through more frequent meetings. It was agreed that the option to further expand the generic terms of reference to suit the regions needs will ensure flexibility of the work and lay the foundation for a more efficient meeting model and reporting.

5.3 The Secretariat presented proposals for the amendment of the RASG-AFI Procedural Handbook to incorporate the Terms of Reference of RASGs approved by the ICAO Council in line with Decision C-DEC 210/4 aimed at enhancing and improving the performance and expected results of the Group.

5.4 The ICAO Council Decision, C-DEC 210/4 stated several objectives for enhancing the PIRGs and RASGS, including;

- a) Better alignment and harmonization of the Groups' working mechanisms;

- b) The need to adopt a project-based methodology for the work the Groups undertake;
- c) Means to increase effectiveness and efficiency of the Groups; and
- d) Closer link between PIRGs and RASGs and States' DGCA's.

5.5 To achieve the above objectives, it called for the revision of the Terms of Reference (ToR) of PIRGs and RASGs as contained in their respective Procedural Handbooks. The RASG-AFI Procedural Handbook has therefore, been revised accordingly. Due to the volume of material being proposed for addition to the Handbook, it was deemed necessary to refer to it as a new edition instead of a revision. The electronic version of the Handbook will be available online at the ICAO WACAF and ESAF Websites (<https://www.icao.int/wacaf/Pages/default.aspx> and <https://www.icao.int/esaf/Pages/default.aspx> respectively).

The meeting formulated the following Decision:

RASG-AFI/6 – Decision 6/20: Review and update of the RASG-AFI Procedural Handbook and the Terms of Reference of RASG-AFI.

That, in order to improve the performance and expected results of the RASG-AFI:

- a) the proposed amendment to the RASG-AFI Procedural Handbook be approved; and**
- b) the Secretariat finalize the revised RASG-AFI Procedural Handbook accordingly and publishes it, to be effective 1 January 2021.**

AGENDA ITEM 6: ANY OTHER BUSINESS (AOB)

6.1 There being no business discussed under this agenda item.

PART V:
APIRG/23 AND RASG-AFI/6
SECOND JOINT SESSION

AGENDA ITEM 1: REVIEW AND ADOPTION OF THE CONCLUSIONS AND DECISIONS OF THE APIRG/23 AND RASG-AFI/6 MEETINGS

1.1 The meeting reviewed and adopted the Conclusions and Decisions of the APIRG/23 and the RASG-AFI/6 Meetings as presented in the text.

AGENDA ITEM 2: ANY OTHER BUSINESS (AOB)

2.1 There being no business discussed under this agenda item.

AGENDA ITEM 3: VENUE AND DATE OF THE NEXT APIRG & RASG-AFI MEETINGS

3.1 The meeting welcomed Nigeria's gracious offer to host the next meetings of the APIRG and RASG-AFI. It was agreed that the next APIRG and RASG-AFI meetings would take place in November 2021 and the Secretariat will make consultations with the State and advise on the modalities of hosting the meetings.

AGENDA ITEM 4: CLOSING CEREMONY

4.1 Mr. Magueye Maramé Ndao, Director-General, ANACIM, Senegal, presided over the closing ceremony. He applauded the efforts of the Secretariat towards ensuring the successful conduct of the APIRG/23 and RASG-AFI/6 meetings. He challenged States to carry out their responsibilities with a view to achieving effective implementation of the agreed Conclusions and Decisions whilst citing the examples of responding to requests for information and designation of focal points as simple tasks that could easily be addressed by States.

4.2 Mr. Prosper Zo'o Minto'o, Regional Director, ICAO Western and Central African Regional Office, Dakar, in his closing remarks, thanked all participants for their active participation in the meetings. He highlighted the new format of conducting our meetings vis-à-vis the virtual meetings held since the outbreak of the COVID-19 pandemic. He expressed profound gratitude to the Chairs of the two (2) Groups and their respective Bureaus members for their effective leaderships in steering the affairs of the Groups. He echoed the call for participants to ensure the effective implementation of the agreed Conclusions and Decisions. To conclude, he informed the meeting on the demise of Capt. Usman Muhtar, the immediate past Director General of Nigeria Civil Aviation Authority (NCAA).

4.3 For his part, Mr. Barry Kashambo, Regional Director, ICAO Eastern and Southern African Regional Office, Nairobi joined his counterpart, Mr. Prosper Zo'o Minto'o, in extending heartfelt condolences to the family of the late Capt Usman. He informed the meeting that the ANC has recognized the increased participation in the meetings of the two Groups with a record 500 participants having taken part in the recently concluded APIRG/23 meeting. He applauded the efforts of the Subgroups that support the work of the APIRG. He concluded by extending invitation to all participants to the forthcoming Global Symposium in Innovation in Aviation scheduled for 8 – 11 December 2020. Mr. Kashambo read out a statement on the 10th Anniversary of the ICAO's State Action Plan (SAP) Initiative scheduled for 7 December 2020 and co-organized by the ESAF and WACAF Regional Offices.

4.4 Capt. Gilbert Kibe, Director General and Chairperson of the RASG-AFI congratulated the Secretariat and all participants on the successful conduct of the APIRG/23 and RASG/6 meeting virtually. He also challenged the meeting on the effective implementation of the agreed Conclusions and Decisions to ensure further enhancement of aviation safety in the region in line with the goals and targets of the GASP and GANP. He expressed his optimism on the world's defeat of the Corona virus and the holding of physical APIRG and RASG-AFI meetings in Nigeria, next year. He concluded by expressing heartfelt condolences on the demise of Capt. Usman to his family, to the Nigeria Civil Aviation Authority and to the Federal Republic of Nigeria.

4.5 Mr. Nabil Naoumi, the President of the Air Navigation Commission also addressed the APIRG/23 and RASG-AFI/6 closing session. The meeting congratulated and expressed its deep appreciation to the President of the Air Navigation Commission for making time to address the AFI regional groups' meetings despite a very busy schedule. His address is provided as **Appendix 1D** to this report.