



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**THE AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG)**

**REPORT OF THE FIRST MEETING OF THE AIRSPACE AND AERODROME  
OPERATIONS SUB-GROUP  
AAO SG/1**

*(Dakar, Senegal, 29 to 31 May 2017)*

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

**APPROVED BY THE MEETING  
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## **PART I – HISTORY OF THE MEETING**

### **1. PLACE AND DURATION**

1.1 The First Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO SG/1) was held ICAO WACAF Regional Office in Dakar, Senegal, from 29 to 31 May 2017.

### **2. OPENING**

1.2 The Meeting was opened by Mr. Mam Sait Jallow, Regional Director, ICAO Western and Central African Regional Office. In his Opening remarks, Mr. Jallow expressed his gratitude to the participants as well their States and Organizations for the time and efforts expended to attend the meeting. He invited the meetings attention to the Terms of Reference of APIRG, highlighting that roles of the Group were primarily the development and maintenance of the AFI Air Navigation Plan (ANP, ICAO Doc 7474), as well as the identification and resolution of air navigation deficiencies, and that the implementation of SARPs, Regional Requirements remained the responsibility of States.

1.3 He recalled that in adopting the Aviation System Block Upgrades (ASBU) methodology introduced in the 4<sup>th</sup> Edition of the ICAO Global Air Navigation Plan (GANP, Doc 9750) in 2013, APIRG, at its 19<sup>th</sup> Meeting held here in Dakar in October 2013, agreed under Conclusion 19/48 to re-organize its structure and working methods in order to effectively address the implementation by States of the ASBU modules applicable to the AFI Region. To this end, he acknowledged the importance of the first meeting of APIRG AAO/SG and the Sub-Group to focus on its assigned mandate and expected deliverables as per the guiding documents to ensure that we remain on course, noting that States and Organizations were expected to be more involved in the work of APIRG, while the Secretariat continues to provide the necessary guidance and coordination.

1.4 On the matter of status of implementation, Mr. Jallow noted with concern that the flow of information from States and organization had been significantly low. He called on the Sub-Group to particularly look into this challenge and propose solutions. On related matters, he noted that the development of the 1<sup>st</sup> Edition of the APIRG Annual Air Navigation Report was due by the end of 2017 and urged the AAO/SG to do the needful with regard to its portion of the report, and recognized the important role of international organizations and the industry in the report development. He also highlighted the importance of an effective AFI Deficiency database thorough assessment of its air navigation infrastructure against the GANP requirements and enabling technology roadmaps, which should inform investments towards implementation. In this regard, the noted the forthcoming 3<sup>rd</sup> ICAO World Aviation Forum (IWAF/3) scheduled for November 2017 in Abuja, Nigeria as a golden opportunity to present outcomes of the status of implementation assessments.

1.5 Finally, Mr. Jallow reminded the participants that their primary role in the Sub-Groups was the interest of the AFI Region, and as such urged them to work as experts of the Sub-Group in order to achieve Regional goals.

### 3. ATTENDANCE

1.6 The meeting was attended by forty-six (46) participants. The list of participants is at the **Attachment A** to the Report.

### 4. OFFICERS AND SECRETARIAT

1.7 The meeting was chaired by Mr. Simon Zwane, Senior Manager ATM Planning Air Traffic and Navigation Services, South Africa. Mr. Seboeso Machobane, Regional Officer ATM/SAR ESAF Office was the Secretary of the meeting, assisted by Mr. Nika Mèhèza Manzi, Regional Officer, AGA WACAF Office. Messrs. Arthemon Ndikumana, Deputy Regional Director, ESAF Office and Albert Taylor Regional Officer, ATM/SAR.

1.8 WACAF Office also supported the meeting.

### 5. LANGUAGE

1.9 Discussions were conducted in the English and French languages and documentation was to the extent possible also issued in the two languages.

### 6. AGENDA

6.1 The following Agenda was adopted:

<b>Strategic Objective</b>	<b>Agenda Item No.</b>	<b>Subject</b>
A & B	1.	<b>Adoption of the agenda and Election of Chairperson and Vice Chairperson of the AAO/SG</b>
A & B	2.	<b>Review of the APIRG Conclusions/Decisions applicable to the AAO/SG</b>
	3.	<b>Planning and implementation</b>
	3.1	<b>Airspace (safety, capacity and efficiency)</b>
	3.2	<b>Aerodrome Operations (safety, capacity and efficiency)</b>
A & B	4.	<b>Identification of the linkage between APIRG Projects</b>
	4.1	<b>Linkage between APIRG Projects under the AAO/SG</b>
	4.2	<b>Linkage between APIRG AAO/SG and IIM/SG Projects</b>
A & B	5.	<b>AFI Air Navigation Reporting Forms (ANRF)</b>
	6.	<b>AFI Air Navigation Deficiencies Database</b>
A & B	7.	<b>Terms of Reference (TOR), Composition and Future Work Programme of the AAO/SG</b>
	8.	<b>Any other business (AOB)</b>

**7. CONCLUSIONS AND DECISIONS – DEFINITION**

6.2 All APIRG Sub-Groups and Task Forces record their actions in the form of Conclusions and Decisions with the following significance:

- a) **Conclusions** deal with the matters which, in accordance with the Group's terms of reference, merit directly the attention of States on which further action will be initiated by ICAO in accordance with established procedures; and
- b) **Decisions** deal with matters of concern only to the APIRG and its contributory bodies.

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## **PART II: REPORT ON AGENDA ITEMS**

### **REPORT ON AGENDA ITEM 1: ADOPTION OF THE AGENDA AND ELECTION OF CHAIRPERSON AND VICE CHAIRPERSON OF THE AAO/SG**

1.1 The meeting reviewed the proposed agenda for the First Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO SG/1), copy of which had been forwarded to States and International Organizations as an attachment to the invitation State Letter. The agenda was adopted as indicated in paragraph 6 of the History of the Meeting.

1.2 In accordance with established procedure within APIRG, the representative from Guinea proposed Mr. Simon Zwane, Senior Manager, ATM Planning, ATNS South Africa as Chairperson of the AAO Sub-Group, the nomination was seconded by Namibia, Angola, Botswana and acclamation. The representative from Ghana nominated Mr. Mbodj Ndoudory Aliou, Director of Aerodrome Safety and Standards from ANAC Mauritania as Vice Chairperson of the Sub-Group. The nomination was seconded by Niger, Benin and acclamation. Accordingly, Messrs. Zwane and Mbodj were elected Chairperson and Vice-Chairperson respectively of the APIRG AAO Sub-Group.

1.3 In accepting the election, Mr. Simon Zwane thanked the participants for their confidence in him, and assured them that, with their able support he will do his best to serve the proceedings of the Sub-Group. He expressed his hope on the successful function and deliver of results by the Sub-Group. Mr. Mbodj also expressed his sincere gratitude to the Sub-Group for confidence on him to successfully serve as its official and assured it of his commitment to do the best.

### **REPORT ON AGENDA ITEM 2: REVIEW OF THE APIRG CONCLUSIONS/DECISIONS APPLICABLE TO THE AAO/SG**

2.1 The meeting reviewed the Conclusions and Decisions formulated within the framework of APIRG, applicable to the AAO Sub-Group for follow up and update as necessary, including consolidation where appropriate, and the enhancement of the mechanism for follow up of actions required to facilitate their implementation.

2.2 In order to establish the appropriate context for review of the Conclusions and Decisions, in particular focus on the relevant results, the Sub-Group recalled the Terms of Reference APIRG and noted that:

*APIRG is primarily responsible for the development and maintenance of the AFI Air Navigation Plan (ANP, ICAO Doc 7474), as well as the identification and resolution of air navigation deficiencies. It is a planning and coordination mechanism and, while implementation is the responsibility of States, APIRG can play a significant role in supporting the implementation of Standards and Recommended Practices (SARPs) as well as Regional requirements. In this regards, APIRG is charged with the following TASKs, of which the Sub-Group is established to enable the delivery:*

- a) ensure continuous and coherent development of the AFI Air Navigation Plan and other relevant regional documentation in a manner that is*



- harmonized with adjacent regions, consistent with ICAO SARPs and reflecting global requirements;*
- b) facilitate the implementation of air navigation systems and services as identified in the AFI Air Navigation Plan with due observance to the primacy of air safety and the environment;*
  - c) Identification and addressing of specific deficiencies in the air navigation field; and.*
  - d) Coordinate with RASG-AFI on safety issues.*

2.3 The Sub-Group also noted that during its 200<sup>th</sup> Session in December 2015, the ICAO Air Navigation Commission (ANC) approved the following guidance for drafting of Conclusions and Decisions by the PIRGs and RASGs (AN Min.200-10 7/12/15).

***Drafting of Conclusions and Decisions***

- a) Conclusions should be clear and understood stand-alone. They should be developed applying the principles of specifying Who, What and When of the action in the Conclusion text. They should be preceded by a paragraph that includes a brief rationale for the conclusion – the Why.*
- b) The text of Conclusions and Decisions should be summarized separately in a table which includes the Who, What and by When. Conclusions that were considered by the meeting to require action from ICAO HQ should thus be clearly identifiable. Examples of such conclusions are those considered to require action on SARPs or have relevance for other regions.*
- c) Draft Conclusions and Decisions proposed by contributory bodies which are subsequently accepted by the PIRG/RASG plenary meeting should be included in the PIRG/RASG meeting report and the table summarizing the Conclusions and Decisions.*

2.4 It was also recalled that at its Eighteenth Meeting in Kampala, Uganda, 27-30 March 2012, APIRG agreed on Decision 18/01, amongst others, instructing the Sub-Groups to review and consolidate all the APIRG Conclusions from APIRG/13 to APIRG/18 itself. In addition, the Sub-Groups were to adopt a system of reviewing the validity of Conclusions and Decisions every two successive APIRG meetings. In this regards, the Consolidated Conclusions were presented to and adopted by the APIRG/19 Meeting. It was noted in this regards that the Conclusions and Decisions from the APIRG/19, and Extraordinary Meeting of APIRG were due for consolidation.

2.5 The Sub-Group noted that the number of Conclusions and Decisions to be addressed, which include those of APIRG/19, APIRG/EO and APCC/1 was significant high and could not be effectively processed during the three days' period of the meeting itself. In this regard, the meeting established a small working group (SWG) to commence work on the Conclusions, proceed with the tasks listed hereunder after the meeting using electronic media, and deliver the revised work by 30 June 2017.

- a) review the APIRG Conclusions/Decisions APIRG/19, APIRG/EO and APCC/1 applicable to the AAO/SG, identify those that continue to be valid as well as actions to further facilitate their implementation; those that are no longer applicable (actions completed, covered by others, overtaken by events or otherwise redundant);

- b) review the formulation used in the Conclusions and Decisions which continue to be valid/relevant, and take action to align their formulation with the guidelines provided by the ANC; and
- c) take other relevant and incidental action as necessary.

2.6 The list of members of the *SWG on Review of Conclusions/Decisions* is reflected at **Appendix 2A** to this report. The consolidated Conclusions and Decisions from within the framework of APIRG as reviewed and updated by the meeting are at **Appendix 2B** to the report on agenda item 2. The Sub-Group therefore agreed on the following Draft Conclusion:

**Draft Conclusion 01/X: Review of the APIRG Conclusions/Decisions applicable to the AAO/SG**

**Action Item 1/1:**

The Sub-Group established a SWG (as reflected in Appendix 2A) on the Review of Conclusions/Decisions to continue work on the review and consolidation of the APIRG/19, APIRG/20, APIRG/EO and APCC/1 Conclusions/Decisions applicable to the AAO/SG and circulate them to members of the AAO/SG for comments by 30 June 2017.

**Action Item 1/2:**

The Chairperson of AAO/SG to submit the Conclusions and Decisions reviewed by the AAO SG/1, to the forthcoming meeting of APIRG.

**REPORT ON AGENDA ITEM 3: PLANNING AND IMPLEMENTATION**

3.1 The Sub-Group recalled that, at its Twentieth Meeting in Yamoussoukro, Côte d'Ivoire, 30 November – 2 December 2015), APIRG endorsed under Conclusion 20/40: *Projects Identification and Implementation Issue*, the initial set of projects proposed by its Sub-Groups.

3.2 The Sub-Group also noted that at its First Meeting in Nairobi, 30 to 31 January 2017, the APIRG Projects Coordination Committee (APCC) reviewed and endorsed the work that had been carried out by the Joint Meeting of Sub-Groups Aerodrome Operations Planning (AOP/SG); and Air Traffic Management/Aeronautical and Information Management/Search and Rescue (ATM/AIM/SAR/SG) (JMAASG), Nairobi, Kenya, 5 - 8 July 2016, with respect to projects definition and prioritization. However, the APCC/1 further required that project be defined in more detail, rationalized and linked.

3.3 The Sub-Group noted that due to, inter alia, issues related to operationalization of the new APIRG Structure and working methodology, most APIRG Projects under the AAO/SG had not commenced. As regards the status of implementation in the areas to be addressed by the Projects, there was limited information as the flow of information from States was significantly low. In general however, the Sub-Group was of the view that implementation progress in the States was low. Detailed assessment of implementation progress is reflected in **Appendix 3A** and **Appendix 3B** to this report.

3.4 The meeting noted that there have been many discussions on the number of Project to be carried out under the Sub-Group. However, it was noted that in adopting the “project management approach,” the Terms of Reference of APIRG and its scope of work as mandated by the ICAO Council did not change. The work that used to be carried out by the various contributory bodies (Sub-Groups, Task Forces, Study Groups, etc.) still required to be performed, and had become reflected as Projects.

3.5 The meeting also recalled that the APIRG/20 Meeting, in its discussing under Agenda Item 4 (Reorganization of the APIRG), acknowledged that a single Project Team can deliver two or more related projects in order to optimize resources and facilitate coordinated delivery. In order to facilitate progress monitoring and resource allocation, the Sub-Group noted the importance, in some cases, of retaining the identity of individual projects carried out by a particular Project Team.

3.6 **Airspace operations.** With regard projects in the airspace area specifically, the meeting acknowledged the lack of implementation of the ASBU modules and stressed the need to identify the obstacles to implementation and find workable solutions to address them. The meeting emphasized the need to expedite implementation of modules such as B0-APTA due to its impact on various safety targets.

3.7 It was noted that although many States indicate progress with regard to B0-CCO and B0-CDO, the terminal routes developed to facilitate their implementation were not supported by appropriate airspace design and such not effective. As such the Sub-Group emphasized the carrying out of PBN Airspace Concepts in order to enable the implementation of PBN itself and modules such as B0-CCO and B0-CDO in particular. It was also noted that with respect to Module B0-FRTO, there had been limited progress in moving from the PBN RNAV 10 specification towards RNAV 5, which requires regional seamlessness, and other stricter Navigation Specification. As such there was need to prioritise the applicable projects to facilitate progress in this regard.

3.8 The meeting noted with appreciation the progress made by the East African Community (EAC) with regard to the seamless operations in EAC Upper Flight Information Region (UFIR). It was noted that the initiative, and similar ones in the Regional further highlight the need to prioritize the review and update of the AFI Secondary Surveillance Radar (SSR) code allocation plan and assignment procedures which are contained the AFI Air Navigation Plan in order to respond to the increased demand of the codes.

3.9 In view of the above discussion on consolidation of efforts, the Sub-Group was of the view that the PBN Airspace Concept, AFI Optimized Route Trajectories and Airspace (AORTA) and NAVSPEC and Separation Minima Transition (NASMIT) projects should be carried out by one Project Team in order to benefit from the associated synergies.

3.10 The Sub-Group reviewed all Project assigned to be carried out by project teams reporting to it, and identified links between them. In addition, the Sub-Group took action to identify links between the projects under the AAO/SG and those under the IIM/SG, in order to facilitate coordination of activities and resources.

3.11 Recognizing the progress made in the implementation of Module B0-FRTO with respect to efficient en-route trajectories, the AAO/SG acknowledged the need to facilitate the transition to B1-FRTO, with respect to free routing, as a continuation of the Regional progress in the upper airspace optimization.

3.12 It was noted with appreciation that there were FIRs in the Region which were ready to begin trials free routing trials, and that some experience had been gained in establishing Atlantic Ocean Random Routing Area. In this regard, the meeting agreed that while B1-FRTO was not yet a prioritized APIRG Project, as part of APIRG responsibilities to facilitate implementation, the Sub-Group should take necessary action to coordinate the trial initiative of FIRs that are ready, in order to establish large portions of airspace from contiguous FIRs, to enable the effective realization of benefits from the free routing operations. The Regional Offices were requested to take a leading role in the required coordinative processes.

3.13 The meeting also recognized that there was a relationship between concepts such as free routing and the seamless operations being contemplated under the various sub-regional harmonized/unified control of upper airspace, which the Secretariat was requested to take into consideration.

3.14 The meeting noted that implementation workshops were held in the ESAF area from which States in the ESAF area and their air navigation service providers (ANSPs) as well as some FIRs in the ESAF/WACAF interface were assisted to develop Contingency Plans (CPs) required under Annex 11 to the Chicago Convention, and to coordinate the related contingency routes. Accordingly, such States were considered to have the ability readiness to complete and publish their CPs in accordance with Annex 11. It was also noted that ESAF area portion of the Regional CP had been developed during the said workshops.

3.15 The ICAO Regional Offices were requested to conduct CP implementation workshops in order to assist States in the WACAF area, that have not already been assisted, to development and publish their CPs as a matter of priority, and to facilitate completion the Regional CP.

3.16 It was noted that the Secretariat was following up with the States in this regard. The Sub-Group recalled that CPs had also been developed for in the FIR in which ASECNA was responsible for the provision of ANS, both in the ESAF and WACAF areas. However, ASECNA was urged to update the CPs by ensuring the inclusion of Public Health Emergency (PHE) and Volcanic Ash contingency by 31st August 2017, and to publish the updated CPs.

3.17 The meeting discussed the relationship between the CPs required under Annex 11 and the aerodrome emergency plans required under Annex 14. It was noted that there were overlaps of certain requirements and events. Amongst others, an aerodrome emergency could trigger the required to activate an ATS CP due to area control service facilities located at the aerodrome that have been disabled. PHE issues could also overlap and affect both the aerodrome and the airspace. That said, the requirements under the two Annexes were separate and different.

3.18 **Aerodrome operations.** With regard to projects in the area of aerodrome operations, the Sub-Group also noted slow progress in the implementation of the identified projects. Some initiatives under AFI Plan such as the aerodromes certification and runway

safety programme implementation were progressing under the AFI Plan and other mechanisms. However appropriate action needed to be taken to ensure the effective implementation of the projects.

3.19 Concerns were raised on the issue of rescue and firefighting services, particularly the issue related to training of the personnel. The meeting recalled the availability of training centres in the Region, such as those in Douala (Cameroon) that has already trained personnel from several States in the region. The Secretariat was requested to call the attention of States to the availability of training facilities in the Region and encourage them to take advantage of the facilities.

3.20 Issues related to the emergency planning in difficult areas, wildlife/ environmental/ land use and obstacle control management were also discussed. Ghana shared its experience on the aerodrome data publication especially data related to the RFFS.

3.21 In view of the forgoing discussions, the Sub-Group agreed on the following Conclusions, Decisions and Action Items:

**Draft Conclusion 01/X: Prioritized APIRG Projects under the AAO Sub-Group**

**That, the prioritized list of APIRG Projects to be carried out under the AAO/SG is at Appendix 3A and Appendix 3B to this report**

**Draft Conclusion**

**That,**

- a) States that have participated in the ATS Contingency Plan workshops or otherwise received guidance from ICAO Regional Offices on the development of Contingency Plans (CPs) should publish their CPs by 30 November 2017 to take effect on 2 February 2017;
- b) States that have not already done so, update their CPs to include Public Health Emergency (PHE) and VA provisions; and
- c) ICAO is requested to conduct ATM CP workshops in order to assist States in the WACAF area in the development and coordination of the CPs to enable their publication by States, and completion of the Regional CP.

**Action Item 1/3:**

ICAO to remind States on the availability of Rescue and Fire Fighting (RFF) training centres in the AFI Region and encourage them to take advantage of these facilities to address the deficiencies in the area of RFF.

**Action Item 1/4:**

ICAO to facilitate implementation actions by States and ANSPs that are ready to commence trials on ASBU Module B1-FRTO (specifically Free routing) with respect to coordination between the applicable FIRs.

**Action Item 1/5:**

ICAO to circulate a follow-up State Letter to concerned States and organizations, requesting them to formally nominate members to the SG and Project Teams in accordance with the APIRG Procedural Handbook.

**Draft Decision 1/1:**

APIRG is requested to adopt modified membership guidelines with respect to the AAO SG, enabling States and organizations to nominate expertise to both technical areas of the Sub-Group (Aerodrome operations and Airspace).

**Draft Decision 1/2:**

That, in order to facilitate harmonized introduction of Remotely Piloted Aircraft Systems (RPAS) into the AFI airspaces, and to address airspace safety risks associate with RPAS operations particularly in non-segregated airspace, APIRG to consider to establishing, as matter of priority, a specific mechanism to more directly guide States in their integration of RPAS in non-segregated portions of airspace in FIRs for which they are responsible for the provision of air traffic services (ATS).

**REPORT ON AGENDA ITEM 4: IDENTIFICATION OF THE LINKAGE BETWEEN APIRG PROJECTS**

**Linkage between APIRG Projects under the AAO/SG  
Linkage between APIRG AAO/SG and IIM/SG Projects**

4.1 The meeting recalled that the existing set of APIRG Projects to be carried out under its two Sub-Groups were adopted by the APIRG/20 Meeting Yamoussoukro, Cote d'Ivoire, 30 November – 2 December 2015 under Conclusion 20/49. Based on the meeting of the Bureau of APIRG, Nairobi, Kenya, 2 - 3 June 2016, Joint Meeting of Sub-Groups Aerodrome operations planning (AOP/SG) and Air Traffic Management/Aeronautical and Information Management/Search and Rescue (ATM/AIM/SAR/SG) (JMAASG), Nairobi, Kenya, 5 - 8 July 2016, commenced the task of defining the APIRG projects under the AAO/SG, using a uniform template.

4.2 At its First Meeting in Nairobi, 30 to 31 January 2017, the APIRG Projects Coordination Committee (APCC) reviewed and endorsed the work that had been carried out by the JMAASG, and requested the AAO SG/1 meeting to carry out the following tasks:

- ensure that the prioritization of projects is aligned with the priorities in the Regional Air Navigation System Implementation Plan, as well as in the RPOs. The APIRG prioritization of ASBU Modules is reflected at **Appendix 4A** to this report;
- ensure that the projects are structured according to applicable areas of routing
- complete the formulation (definition) of projects assigned to the Sub-Groups using the standardized template adopted by the APCC.
- establish the linkage of Projects under each Sub-Group, as well as linkage between projects of the two Sub-Groups.

4.3 Furthermore, it was noted the APCC also agreed to the prioritization of the *AFI SSR Code Allocation and Assignment Review (ASCAA)*, as well the *ATS Competency Study*, amongst others.

4.4 In carrying the formulation/definition of the AAO/SG projects, the meeting noted there was limited time owing to the different interpretation of terminologies used in the

template. In this regard, the meeting established a small working group (SWG) to finalize the task after the scheduled sessions of meeting and submit it to form part of the AAO SG/1 report.

4.5 With regard to the linkage of project under each Sub-Group, as well as linkage between projects of the two Sub-Groups, the meeting established the links as at **Appendix 4B and Appendix 4C** to this report, respectively.

4.6 In view of the foregoing discussions, the AAO SG/1 meeting agreed on the following Action Items:

**Action Item 1/7:**

The Secretariat to complete the project definition work started by the SG and forward to the SWG (as reflected in Appendix 2A) on *Project Definition* identified to review and accept the project definitions on behalf of the Sub-Group.

**Action Item 1/8:**

The Secretariat to define the terms and titles of fields used in the APIRG Project Definition template in order to facilitate their consistent application in defining projects

**Action Item 1/9:**

The Secretariat to ensure inclusion of definition/description of the expertise required in the project teams.

**Action Item 1/10:**

The Secretariat to complete the linkage between APIRG projects with respect to the AAO and IIM Sub-Groups.

**REPORT ON AGENDA ITEM 5: AFI AIR NAVIGATION REPORTING FORMS (ANRF)**

5.1 The Sub-Group recalled that the Air Navigation Reporting Forms (ANRF) was a customized tool for Aviation System Block Upgrades (ASBU) Modules which was recommended for application in setting planning targets, monitoring implementation, identifying challenges, and measuring implementation/performance and reporting.

5.2 The result is analysed by ICAO and aviation partners and utilized in developing the Regional Performance Dashboard and the Annual Global Air Navigation Report. The conclusions from the Global Air Navigation Report will serve as the basis for future policy adjustments, aiding safety practicality, affordability and global harmonization, amongst other concerns.

5.3 The meeting recalled that the APIRG/20 meeting adopted Conclusion 20/05: *Status of implementation of ASBU Block 0 modules*, inter alia, urging States to provide information on the status of implementation of ASBU modules using the ANRFs or other reporting tools as may be provided, at least twice a year.

5.4 The meeting noted that, the reporting of implementation progress called for under the APIRG Conclusion 20/05 was significantly limited and that the level of responses on surveys conducted by the Secretariat to collect information on the ASBU implementation was

also significantly low. In a recent survey conducted early 2017, only 15 AFI States responded to the survey. The meeting was nevertheless of the view that implementation of ASBU modules was low.

5.5 The Sub-Group also noted other planning developments within the framework of APIRG, the Regional Aviation Safety Group (RASG-AFI) and the Global Air Navigation Plan (GANP). Amongst others, the ASBU Block 0 implementation timelines have been adjusted; in the 5<sup>th</sup> Edition of the GANP, the Block 1 timeframe starts in 2019, an adjustment from 2018 in the 4<sup>th</sup> Edition. The Abuja Safety Targets adopted by the African Ministerial Conference on Safety in July 2012, had were expanded to include the hitherto excluded ANS safety targets. Consequently, the ANS Key Performance Indicators and Targets which were adopted by APIRG/20 have been adjusted to new target dates.

5.6 Furthermore, it was recalled that the APIRG/20 Meeting agreed on Conclusion 20/04: *(AFI ANS key performance indicators, targets and monitoring*, adopting the institutional and regional ANS key performance indicators (KPIs) and targets for the AFI Region, and requested the Secretariat to continue the development of appropriate targets for ASBU Block 0 modules and RPO KPIs for adoption by APIRG.

5.7 In view of the above, the Sub-Group acknowledged that a number of planning targets and dates that envisaged for the ASBU implementation had elapsed, and required to be reviewed, revised to establish new planning targets and dates. In this regard, and due to time constraints, the meeting established a SWG as reflected in **Appendix 2A** to continue the review and update after the AAO SG/1 meeting sessions, on behalf of the Sub-Group, starting with the starting (as a priority) with ANRF relating to priority ASBU modules B0-FICE, B0-ACAS, B0-APTA, B0-FTRO, B0-DATM in the AFI ANP.

5.8 In this regard, the Sub-Group agreed on the following Action Items:

**Action Item 1/11**

**The SG established a SWG as reflected in Appendix 2A to carry out the following tasks:**

- a) Update the ANRF by 30 June 2017 and forward to the Secretariat to form part of the report;**
- b) Consider and adapt available templates/forms (including the ASBU implementation tracker presented by IATA) for tracking/monitoring implementation of ASBU and Regional Performance Objectives, for use in monitoring and reporting on implementation of the AAO SG related requirements. Target date 30 June 2017;**
- c) Develop a survey based on the abovementioned implementation tracking/monitoring form and upload it on a web-based platform to collect information on status of implementation, by 17 July 2017.**

*(Note: Item c) relates to discussion under agenda Item 6).*



**REPORT ON AGENDA ITEM 6: AFI AIR NAVIGATION DEFICIENCIES DATABASE**

6.1 **AFI Deficiencies and Use of minimum reporting areas.** The meeting recalled that in accordance with the *Uniform Methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies*, approved by the ICAO Council in 2001, an air navigation **deficiency** is described as follows:

*A deficiency is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.*

6.2 The meeting also recalled that at its Seventeenth Meeting in *Ouagadougou, Burkina Faso, 2-6 August 2010*, APIRG noted that based on available information at the time, the list of deficiencies was significantly outdated. The Group accordingly agreed on Conclusion 17/99: *Elimination of Air Navigation Deficiencies in the ATM/AIS/MAP and SAR Fields*, inter alia, calling for establishment of a comprehensive list comprising all air navigation deficiencies consistent with the ICAO definition of deficiency as approved by Council, and urging States and International Organizations (including IATA, IFALPA, IFATCA) to actively contribute towards updating the deficiency database. Furthermore, in order to facilitate reporting and update of the deficiency database, the APIRG/18 Meeting in Kampala, Uganda, 27-30 March 2012, under Conclusion 18/62 agreed on a list of minimum reporting areas.

6.3 Notwithstanding, the AAO SG/1 meeting noted that not much progress had been made in developing the deficiency database, primarily due to lack of reporting of the deficiencies, highlighting the importance for establishment of further or improved mechanisms to encourage reporting.

6.4 **AFI Air Navigation Deficiency Database (AANDD).** The meeting was provided with the presentation on the functionalities and progress in developing the AANDD, and noted that this tool had reached threshold of readiness. In this regard, a State Letter (ES AN 1/6 – 0392 dated 24 May 2017) had been circulated to AFI States and concerned organizations, inviting them to nominate focal points for interaction with the web-based AANDD, so that they could be issued with access credentials.

6.5 The meeting acknowledged that the AANDD would provide a much more new, potentially effective mechanism for reporting and encouragement to resolve deficiencies. However, it was highlighted that effective user support (to Regional Officers, States and Industry) as well as system maintenance of the AANDD, was essential to make it a viable tool. Amongst others, the tool's user-friendliness and responsiveness were paramount; without them, end-users could be discouraged from its use, bringing the deficiency database challenges back to "square one."

6.6 In view of the above, the meeting requested the ICAO AFI Regional Office to provide adequately trained AANDD ICT end-user support, ideally prior to the system being availed to States and organizations. Accordingly, the AAO/SG formulated the following Draft Decision:

**Draft Decision 1/3:**

That, in order to facilitate effective and uninterrupted use of the AANDD including effective user support of the web-based system, the ESAF and WACAF Regional Offices are requested to ensure the availability of appropriately trained ICT personnel to provide continued system technical support to concerned users.

6.7 **Air Navigation Infrastructure Gap Analysis.** On the issue of implementation of gap analysis, the meeting acknowledged that the rapid growth of air traffic globally would need to be supported by effective implementation, which in some cases would entail significant investment commitments. However, the Sub-Group also acknowledged that available information on the status of implementation in the Region was too limited to adequately support decisions on actions to be undertaken to foster implementation. Furthermore, States' responses to surveys seeking to establish the status of implementation continued to be significantly low. In a recent survey carried out through a State Letter circulated in February 2017, only 15 of the 48 AFI States had responded by the deadline.

6.8 The meeting noted that ICAO had already begun highlighting a number of these issues under the No Country Left Behind (NCLB) initiative launched at the end of 2014, highlighting that the continued safety and efficiency of global aviation, critical to a wide range of citizens and economic sectors, required coordinated assistance for States in need and determined commitment on behalf of governments, industry and the development community in the years ahead.

6.9 The meeting also noted that the third ICAO World Aviation Forum (IWAF), themed "*Financing the Development of Aviation Infrastructure*" was scheduled to be hosted by Nigeria in November 2017. The IWAF was designed for high-level government officials responsible for transport and infrastructure, finance, economy, and tourism; and key industry and financial partners. Its objective is to identify needs, facilitate 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, and to share information and best practices with a view to ensuring sufficient resources for sustainable aviation development.

6.10 In view of the above, the AAO/SG agreed to contribute to the APIRG conduct of a gap analysis, and in this regards, given the time limitation for the meeting, established a *SWG: Update of AFI Air Navigation Reporting Forms (ANRF) & GAP Analysis* as at **Appendix 2A**, to update the ANRFs and develop tools for the gap analysis to be carried out and completed before the APIRG/21 meeting.

6.11 **Inputs to the APIRG First Annual Report (2016).** The meeting recalled that ICAO is required to review the GANP every three years and, if necessary, all relevant Air Navigation Planning documents through the established and transparent process. The appendices to the GANP were to be analysed annually by the Air Navigation Commission to ensure they remain accurate and up to date. In addition, the progress and effectiveness of

ICAO Regions and States against the priorities set out in their respective regional and State air navigation plans should be annually reported, using a consistent reporting format, to ICAO. This would assist regions and States in adjusting their priorities to reflect actual performance and address any emerging air navigation issues.

6.12 It was also noted that, depending on implementation parameters such as the complexity of the operating environment, the constraints and the resources available, regional and national implementation plans will be developed in alignment with the GANP. Such planning requires interaction between stakeholders including regulators, users of the aviation system, the air navigation service providers (ANSPs), aerodrome operators and supply industry, in order to obtain commitments to implementation.

6.13 In view of the above, the meeting noted that the APIRG Projects Coordinating Committee (APCC) agreed to establish an *Annual Air Navigation Report Team* involving industry. As part of its contribution to the development of the *Annual Air Navigation Report*, the AAO/SG established an *Air Navigation Report Editorial Committee* comprising members reflected in **Appendix 2A** to this report, to carry out the following tasks:

- a) identify and develop content for the AFI Air Navigation Report; and
- b) coordinate the inclusion of other resource providers (e.g. industry partners) as necessary to support the report development activities up to publication

#### **REPORT ON AGENDA ITEM 7: TERMS OF REFERENCE (TOR), COMPOSITION AND FUTURE WORK PROGRAMME OF THE AAO/SG**

7.1 The Meeting recalled that in its Decisions 19/48 (*Re-organization of APIRG*) and EO/01 (*Restructuring and Reorganization of APIRG*), APIRG establishing the new structure of APIRG and its Contributory Bodies, which were further endorsed by the APIRG/20 meeting, with key objective of improving the effectiveness of APIRG in supporting regional implementation. In establishing the new APIRG Sub-Groups, APIRG agreed on specific Terms of Reference which were intended to support the mandate of the Group.

7.2 The meeting noted that the Joint Meeting of the Air Traffic Management/Aeronautical Information Management/ Search and Rescue Sub-Group (ATM/AIM/SAR/SG) and the Aerodrome Operations Planning Sub-Group (AOP/SG) (JMAASG) held in Nairobi, Kenya, 5-8 July 2016, noted that the process for formal nomination of States officials as agreed during the APIRG/20 Meeting did not take place in accordance with the APIRG Handbook. In order to facilitate the operationalization of new structure, as tasked by Bureau of APIRG, the JMAASG, identified States and organizations to form the core membership of the AAO/SG and the Project Teams thereunder.

7.3 In accordance with normal practice within APIRG, the AAO SG/1 meeting reviewed its ToR with the objective of identifying need for improvement to be recommend to APIRG. After deliberations on the matter, the meeting agreed that there was no need for changes or modifications, and accordingly endorsed the original ToR as at **Appendix 7A** to this report.

7.4 The meeting however, requested the Secretariat to circulate State Letters providing explanation on the expertise requirements for participation in the Sub-Group, and urging States and organizations to nominate membership to the Sub-Group in accordance with the Procedural Handbook. Specific reference was made to the fact that the AAO/SG required expertise primarily from the aerodromes and ground aids area (AGA) and the airspace operations or air traffic management (ATM) and search and rescue (SAR). In this case it was not clear whether the State identified by the JMAASG on behalf of APIRG, were to nominate an official for each of the areas or just one.

7.5 The meeting also noted the desire of some States not identified by the JMAASG, to be included in the membership of the AAO/SG. Guidance was provided that such States could forward appropriate communication to that effect, to APIRG through the Regional Offices accredited to the respective States (ESAF and WACAF).

**REPORT ON AGENDA ITEM 8: ANY OTHER BUSINESS (AOB)**

8.1 There being no other business, the meeting was officially closed Mr. Arthemon Ndikumana, Deputy Regional Director, ICAO Eastern and Southern Africa Office. He thanks the Sub-Group for the professionalism in the application of its expertise, favouring a continent-wide vision over individual, national or group preferences, in order to ensure the effective implementation of Projects under the APIRG framework. He finally takes the opportunity to express once again the gratitude of ICAO to States and Organizations for their continuous support to ICAO initiatives.

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**APPENDIX 2A - AAO SG/1 SWG****SWG: Review of Conclusions/Decisions**

## Members:

1. Angola (A Ferreira)
2. Cote d'Ivoire
3. Kenya (Richard Cherop) - SWG Coordinator
4. Mauritania
5. Namibia (Dennis Gaingob)
6. Togo (Semenya E Koudjo)
7. ASECNA (Alain Ngoma-Mby)
8. IATA (Protus Seda)
9. Secretariat Coordinator - (Seboeso Machobane)

**SWG: Update of AFI Air Navigation Reporting Forms (ANRF) & GAP Analysis**

## Members:

1. Kenya (Tirrus Mutunga)
2. Senegal (Ndoumbe Niang Thioune)
3. (Badara Diop)
4. ASECNA (Alain Ngoma-Mby)
5. (Sohou Luc Enagnon)
6. IATA (Protus Seda) - SWG Coordinator
10. Secretariat Coordinator - (Albert Taylor)

**SWG: AAO/SG Projects Definition**

## Members:

1. Ghana (Anita Nmashie) - SWG Coordinator
2. Guinee (Fara Tolno)
3. Namibia (Allan van der Heiden)
4. Kenya (Teresa Njoki)
5. Senegal (Ndoumbe Niang Thioune)
6. ASECNA (Alain Ngoma-Mby)
7. IATA (Protus Seda)
11. Secretariat Facilitator - (Nika Manzi)

**Air Navigation Report Editorial Committee**

## Members:

1. Cote d'Ivoire (Anouan Tcho Sylvère)
2. Ghana (Anita Nmashie)
3. Kenya (Richard Cherop)
4. Namibia (Allan van der Heiden)
5. South Africa (Simon Zwane)
6. Togo (Semenya E Koudjo)
7. ASECNA (Alain Ngoma-Mby)
8. IATA (Protus Seda) - SWG Coordinator
12. Secretariat Facilitator - (Albert Taylor)

## APPENDIX 3A - AIRSPACE (SAFETY, CAPACITY AND EFFICIENCY) – PRIORITY PROJECTS

### Projects under the AAO/SG: Status of Implementation – Airspace

	PROPOSED PROJECTS	PRIORITY	RELATED ASBU MODULES/RPO	STATUS OF IMPLEMENTATION	CONSTRAINTS
1	PBN Airspace Concept (Airspace Design)	A	B0-FRTO; B0-CCO, B0-CDO	Not started; Est. 10%	<ul style="list-style-type: none"> <li>Many States still have no PBN Plan or is not robust</li> <li>Collection of information is a challenge. Communication to ANSPs could be an area of improvement</li> </ul>
2	AORTA – (AFI Optimized Route Trajectories and Airspace)	A	B0-FRTO: En-route, Terminal; B0-CCO, B0-CDO	Not started	
	a) ATS route network maintenance (ARNM)				
	b) Harmonization of En-route and Terminal Airspace Trajectories (HETAT)	A			
	c) Flexible – User Preferred Routing Initiatives (FURIs)	B			
3	AFI SSR Code Allocation and Assignment Review (ASCAAR)	A	B0-ASUR B0-SNET	Not started	
4	ATS Competency Study (ATSCS)	A	Not Applicable	25%	
5	Contingency Planning and Operational Coordination (CPOC)	B	Not Applicable	Not started 65%	Internal processes to publication

	<b>PROPOSED PROJECTS</b>	<b>PRIORITY</b>	<b>RELATED ASBU MODULES/RPO</b>	<b>STATUS OF IMPLEMENTATION</b>	<b>CONSTRAINTS</b>
6	Assistance on State Safety Programme Implementation (ASSPI)	C	GASP Safety Initiatives	Not started	
7	Operational Requirements for CNS (OPREC)	A	B0-FRTO, B0-ASUR, B0-SNET	Not started	
8	NAVSPEC and Separation Minima Transition (NASMIT)	A	B0-FRTO	Not started	
9	Civil/Military Cooperation & FUA Seminar/Workshops	C	APIRG Conclusions and ICAO activities	Not started 25%	
10	RVSM & Operational Safety in ATS (ROSATS)	A	B0-FRTO	Not started (Continuous)	
	a) Analysis, Solutions and Monitoring of UCRs (ASMU)			Implementation led by the AFI TAG	Resources to the TAG
	b) Assistance to Resolve Immediate Safety Concerns in ATS (ARISC)			20%	
11	Estimation, Reporting and Monitoring of Benefits from Operational Improvements (ERMBOI)	B	APIRG Conclusions (18/58, 18/59)	Not started	
12	Development of SAR plans for RCC/JRCC/RSC	A		50% AFI Plan covering 12 States in ESAF and 12 in WACAF	
13	Develop SAR legislation & Regulation for promulgation	B	APIRG Conclusions (20/10)	50% AFI Plan covering 12 States in ESAF and 12 in WACAF	

**Notes:**

- 1. RPO means Regional Performance Objective (Implementation Programme other than ASBU)**
- 2. Where a project has not started, the percentage of implementation indicated in the table is an estimate status of implementation (in the States) in the area concerned.**

**APPENDIX 3B - AERODROME OPERATIONS (SAFETY, CAPACITY AND EFFICIENCY) – PRIORITY PROJECTS**

	<b>PROPOSED PROJECTS</b>	<b>PRIORITY</b>	<b>RELATED ASBU MODULES/RPO</b>	<b>STATUS OF IMPLEMENTATION</b>	<b>CONSTRAINTS</b>
1	Training and qualification of Technical staff (Regulators & Airport operators)	B	APIRG Conclusions 18/07 and 19/08	Not started (10%)	
2	Aerodrome Rescue and Firefighting Services (RFFS)	U	APIRG Conclusion 17/8	Not started	Resources
3	Aerodrome Emergency Planning (AEP), including Public Health emergencies	A	APIRG Conclusion 20/03	Not started	
4	Aerodrome data management (determination, reliability and publication)	A	Non applicable	Not started	
5	Wildlife/ Environmental/ Land use Management/ obstacle control	A	Non applicable	Not started	
6	Implementation of Runway safety programmes at Aerodromes	A	APIRG Conclusion 19/11	Ongoing through RST (around 30%) implementation activities	
7	Aerodrome Maintenance and Runway conditions reporting	A	Non applicable	Not started	
8	Establishment and implementation of A-CDM	2E	B0-ACDM	Not started	
9	Aerodrome Certification (SMS, regulatory framework, procedures and manuals, ...)	A	APIRG Conclusion 20/01	Ongoing under the AFI Plan aerodrome certification Project	

**Notes:**

1. *RPO means Regional Performance Objective (Implementation Programme other than ASBU)*
2. *Where a project has not started, the percentage of implementation indicated in the table is an estimate status of implementation (in the States) in the area concerned.*



## APPENDIX 4A - ASBU MODULES: AFI AIR NAVIGATION SYSTEM IMPLEMENTATION PLAN

### AFI Air Navigation System Implementation Plan (APIRG Conclusion 19/06) APIRG Prioritization of ASBU Modules & Regional Performance Objectives

#### *Categorization*

- **Essential (E):** These are the ASBU modules that provide substantial contribution towards global interoperability, safety or regularity. The nine (9) Modules for all States of the AFI Region are: ACAS, APTA, ACDM, AMET, CCO, CDO, DATM, FICE, and FRTO.
- **Desirable (D):** These are the ASBU modules that, because of their strong business and/or safety case, are recommended for implementation almost everywhere. The four (4) Modules for all States of the AFI Region are NOPS, ASUR, SNET, and TBO.
- **Specific (S):** These are the ASBU modules that are recommended for implementation to address a particular operational environment in specific countries of the AFI Region (for example South Africa). The three (3) modules are OPFL, ASEP and WAKE (*elements and targets to be developed by APIRG*).
- **Optional (O):** These are the ASBU modules that address particular operational requirements in specific countries of AFI region and provide additional benefits that may not be common everywhere. The two (2) Modules are SURF and RSEQ.

#### *Prioritization*

##### *Criteria for priority allocation of resources*

- **Priority 1** = Immediate Implementation
- **Priority 2** = Recommended Implementation

### REGIONAL PERFORMANCE OBJECTIVES (RPOs)

With respect to regional performance objectives, the Uniform methodology for the identification, assessment and reporting of air navigation deficiencies as approved by the Council on 30 November 2001 provides that there are three levels of priority organized on the basis of safety, regularity and efficiency assessment as follows:

- **“U” priority** = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.
- Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.
- **“A” priority** = Top priority requirements necessary for air navigation safety. Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.
- **“B” priority** = Intermediate requirements necessary for air navigation regularity and efficiency. Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

----END----

**APPENDIX 4B – LINKAGE OF PROJECTS UNDER AAO/SG**

<b>AIRSPACE AND AERODROME OPERATIONS PROJECTS</b>		
<b>Project No.</b>	<b>Project</b>	<b>Priority</b>
<b>AIRSPACE OPERATIONS RELATED PROJECTS</b>		
A1	PBN Airspace Concept (Airspace Design)	1A
A2	AFI Optimized Route Trajectories and Airspace (AORTA)	1A
A3	AFI SSR Code Allocation and Assignment Review (ASCAA)	1A
A4	ATS Competency Study	1A
A5	Contingency Planning and Operational Coordination (CPOC)	1
A6	Assistance on State Safety Programme Implementation (ASSPI)	2
A7	Operational Requirements for CNS (OPREC)	1A
A8	NAVSPEC and Separation Minima Transition (NASMIT)	1
A9	Civil/Military Cooperation & FUA Seminar/Workshops	2
A10	RVSM & Operational Safety in ATS	1A
A11	Estimation, Reporting and Monitoring of Benefits from Operational Improvements (ERMBOI)	2
A12	Development of SAR plans for RCC/JRCC/RSC	2
A13	Develop SAR legislation & Regulation for promulgation	2
<b>AERODROME OPERATIONS RELATED PROJECTS</b>		
G1	Training and qualification of Technical staff (Regulators & Airport operators)	B
G2	Aerodrome data management (determination, reliability and publication)	A
G3	Aerodrome Rescue and Firefighting Services (RFFS)	U
G4	Aerodrome Emergency Planning (AEP), including Public Health Emergencies	A
G5	Wildlife, Environmental & Land use Management/ Obstacle Control	A
G6	Implementation of Runway safety programmes at aerodromes	A
G7	Aerodrome Maintenance and Runway Conditions Reporting	A
G8	Aerodrome Certification (SMS implementation, regulatory framework and operator documentation)	A
G9	Establishment and implementation of A-CDM	2E

	AIRSPACE OPERATIONSNS PROJECTS	Airspace Design	AORTA	ASCAA	ATS Competence	CPOC	ASSPI	OPREC	NASMIT	Civi/Mil FUA	RVSM & OPR Safety	Reporting of Benefits (EMBOI)	SAR Plans for RCCs	SAR Regulations
AERODROME OPERATIONS PROJECTS		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13
Training & Qualification	G1	X			X	X	X	X	X	X		X	X	X
ADR Data	G2	X			X			X		X		X		
RFFS	G3							X		X			X	X
AEP & Public Health	G4				X	X				X			X	X
Wild Life Control	G5	X			X					X				
Runway Safety	G6	X			X		X	X		X		X		
ADR Maintenance	G7						X	X		X		X		
ADR Cert & SMS	G8	X			X		X			X		X		
ACDM	G9	X			X			X	X	X		X	X	

**APPENDIX 4C – (PLACE HOLDER) – LINKING – AAO IIM PROJECTS**

**UNDER DEVELOPMENT TO BE COMPLETED DURING THE IIM SG MEETING**

## **APPENDIX 7A – TERMS OF REFERENCE – AAO SG**

### **1. Terms of Reference**

1.1 The AAO/SG is established and mandated by APIRG to support the implementation of ICAO Standards and Recommended Practices (SARPs) and carry out specific activities aimed to enable APIRG to discharge its functions and responsibilities in the areas of AOP and ATM.

### **2. Key Functions**

2.1 To carry out its functions, the Sub-Group shall, as guided by APIRG:

- a) Foster the implementation of specific Modules of the ICAO Aviation Systems Block Upgrades (ASBUs) assigned by APIRG;
- b) Carry out implementation projects in support of States, related to the areas of AOP and ATM/SAR in accordance with the ASBUs methodology and as guided by the Regional performance objectives, to support States in the implementation of SARPs and regional requirements;
- c) Take necessary action to enable coherent planning and implementation of AOP and ATM/SAR systems in the AFI Region, to facilitate the objective of achieving seamlessness in the air navigation system, interoperability and harmonization within the Region and with other Regions;
- d) Keep under review the adequacy of requirements in the areas of AOP and ATM/SAR taking into account changes in user requirements, the evolution in operational requirements and technological developments in accordance with the ASBUs methodology;
- e) Ensure AOP environmental initiatives are consistently identified and progressed, and report outcomes from AOP environmental initiatives; and
- f) Identify and collect, State by State, information on deficiencies in the areas of AOP and ATM/SAR in accordance with the Uniform Methodology approved by Council and the APIRG guidance; analyze and propose solution; report on progress and obstacles beyond the capacity of the sub-group.

### **3. Tasks**

- a) Coordinate and conduct meetings of the AAO Sub-Group;
- a) Oversee performance of Projects Teams under the AAO Sub-Group and provide guidance;
- b) Monitor implementation performance of relevant ASBU Modules in the PIA 1, 3 and 4;
- c) Coordinate with the IIM/SG on the implementation of all relevant Modules to ensure robust implementation relationship of operational requirements and supporting infrastructure and digital information;
- d) Review and update the list of deficiencies with regard to AGA, ATM and SAR fields, propose remedial actions;
- e) Carry our periodic review of the AFI ANP and update information relating to AGA, ATM and SAR;
- f) Review the severity of the wildlife management and the status of implementation of appropriate bird hazard strike reduction measures in the Region;

- g) Review the provision of rescue and firefighting services and emergency planning at international aerodromes in the AFI Region and monitor the switch over to the use of environmentally friendly materials for firefighting;
- h) Review and monitor the impact of the introduction of the NLAs in the AFI Region in particular the requirements with respect to alternate aerodromes;
- i) Review, assess and provide guidance on the impact of the operations of the new larger aeroplanes at aerodromes in the AFI Region;
- j) Review and monitor the implementation of certification of international aerodromes;
- k) Review and monitor the implementation of new approach and landing systems in order to ensure smooth transition and optimization of the performance of the systems implemented;
- l) Review and monitor the implementation of the requirement for aerodrome certification;
- m) Review and monitor the implementation of the requirement for safety management system at aerodromes and in ANSPs;
- n) Maintain and continually improve efficiency and safety of the ATS route network on a systematic basis with a view to achieving an optimum flow of air traffic while pursuing the progressive implementation of ASBU Modules B0-FRTO, B1-FRTO, B0-CCO and B0-CDO;
- o) Support progress in the implementation of PBN, prioritizing the development of airspace concepts in order to support systematic implementation, and giving particular attention to progressive widening implementation of B0-APTA;
- p) Monitor the maintenance and continuous improvement in the safety levels of RVSM operations, provide guidance and recommend remedial actions; support the functions of the ARMA;
- q) Monitor trends on unsatisfactory condition reports (UCR) including ATS incidents through the TAG, and AIAG, recommend remedial action as appropriate and monitor performance;
- r) Review the requirements and monitor the implementation of Search and Rescue Services;
- s) Promote and support States' efforts in the development of SAR agreements and Sub-regional SAR bodies to enhance SAR capabilities;
- t) Carry out comprehensive reviews and updates of all Conclusions and Decisions within the framework of APIRG that are applicable to the AAO Sub-Group in order to ensure continued relevance of the Conclusions and Decisions.

#### **4. Working Methods**

4.1 The Sub-Group shall convene at least once a year taking into consideration the schedule of other APIRG activities. It shall make use of available means of electronic communication including teleconferencing to prepare and progress its work in between meetings and keep its members up to date on issues of concern, as well as to discuss specific issues.

4.2 Taking into consideration that the SG will be representing the interests of the Region, and that not all APIRG member States will necessarily be represented in an SG, the participating State officials shall be expected to work more as experts in their respective

fields, as opposed to delegates attending only in the interests of their States. The SG shall, while exercising due professional care and without prejudice to States sovereignty and integrity, work with minimum formality in order to facilitate effective delivery.

## 5. Composition

<b>NO.</b>	<b>ESAF AREA</b>	<b>NO.</b>	<b>WACAF AREA</b>
1.	Botswana	1.	Cape Verde
2.	Ethiopia	2.	Cote d'Ivoire
3.	Kenya	3.	Gabon
4.	Namibia	4.	Gambia
5.	Seychelles	5.	Ghana
6.	South Africa	6.	Mauritania
7.	Uganda	7.	Nigeria
8.	Tanzania	8.	Sao tome and Principe
9.	Zimbabwe	9.	Senegal
ALL TEAMS – ACI, ASECNA, CANSO, IATA AND IFATCA			

## ATTACHMENT A – LIST OF PARTICIPANTS – AAO SG/1

N°	STATE	NAME	JOB TITLE ADDRESS	TELEPHONE – FAX E-MAIL
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