

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Twenty Seventh Meeting of the Africa-Indian Ocean Planning and Implementation Regional Group (APIRG/27)

5 to 6 November 2024

Agenda Item 3: Implementation of air navigation goals, targets and indicators, including the priorities set in the Regional Air Navigation Plan

3.1 Outcomes of the Seventh meeting of the APIRG Airspace and Aerodrome Operations Sub-Group Meeting (AAO/SG7)

(Presented by AAO/SG Secretariat/Chairperson of the Subgroup)

Summary

This paper presents the outcomes of the Seventh Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO/SG7), held from 12 to 16 August 2024 in Nairobi, Kenya.

Following adoption of the proposed agenda and the work programme, the Sub-Group reviewed the status of implementation of APIRG/26 Conclusions/Decisions applicable to the AAO/SG. The meeting also discussed achievements and challenges in Airspace and Aerodrome operations and proposed follow-up actions. The meeting reviewed the status of implementation of ASBU elements as well as the specific projects adopted by APIRG. The meeting further reviewed the Status of Air Navigation Deficiencies and the AFI ANP. Finally, the meeting discussed matters related to the activities to be coordinated with the RASG-AFI SSTs and proposed recommendations/actions to be considered by ICAO HQ.

Action by the meeting is at paragraph 3.

REFRENCE(S):

- Doc 7300, Convention on International Civil Aviation, 1944
- Doc 9750, Global Air Navigation Plan
- Doc 7474, Air Navigation Plan Africa-Indian Ocean Region
- APIRG Reports
- AAO/SG6 Report
- AAO/SG ToR

Strategic Objective(s): This working paper relates to the Strategic Objectives: **A** – Safety, **B** – Air Navigation Capacity and Efficiency, **D** – Economic Development of Air Transport, and **E** - Environmental Protection.

1. Introduction

- 1.1 The meeting was attended by sixty-two (62) participants from States accredited to ICAO ESAF and WACAF Regional Offices as well as Regional/International Organizations. Regional Officers from the ICAO ESAF and WACAF Offices served as the Secretariat of the meeting.
- 1.2 Mr. Nathan Kaluba (Zambia), Chairperson, chaired the meeting partially due to constraints beyond his control. He was seconded by Ms. Suzan Nafuna (Uganda) who presided over as acting Chairperson from Day 2 to 5. Mr. Abibou Mbaye (Senegal) acted as Vice Chairperson in lieu of Mr. Sanogo Adama, who couldn't attend in-person due to unavoidable circumstances

2. DISCUSSION

- 2.1 The meeting discussed eleven (11) agenda items as reflected in the Report of the Meeting presented in Appendix 1 to this Working Paper.
- Twelve (12) draft Conclusions/Decisions were adopted by the AAO/SG7 meeting. This paper presents outcomes of the AAO/SG7 for consideration.

Review of the Conclusions and Decisions of the APIRG/26 meeting applicable to the AAO/SG

- 2.3 The meeting reviewed the APIRG Conclusions and Decisions applicable to the AAO/SG and noted that out of the two (2) Conclusions and six (6) Decisions of the APIRG/26, two (2) Conclusions and two (2) Decisions were fully implemented (100%), and four (4) Decisions were partially implemented (50%). The remaining 4 Conclusions which were partially implemented are scheduled to be completed by end of November 2024.
- 2.4 The updated status of implementation of APIRG Conclusions and Decisions is at Appendix 2 to this WP.
- 2.5 The meeting also reviewed the progress made on the updating of the status of implementation of the outstanding Conclusions and Decisions from APIRG/20 to APIRG/25 applicable to AAO/SG which had been converted into actions of the subgroup.

Agenda Item 3: Achievements in Airspace and Aerodrome Operations

Status of implementation of ASBU Elements

- 2.6 The meeting was informed that based on information collected by the Regional Offices, the status of implementation of ASBU elements in the region was low. The meeting also noted slow progress in the reporting of ASBU elements implementation. The meeting further discussed issues that were hindering the effective feedback from States such as the lack of awareness regarding ASBU framework and called for more sensitization by the ICAO Regional Offices.
- 2.7 The meeting was informed that, as called for by APIRG/26 meeting, there was an ASBU reporting online tool which was in development as part of the AFI Air Navigation Deficiencies Database (AANDD) and would be rolled out once ready for use.
- 2.8 The meeting was also informed that the ESAF Regional office had developed an ASBU reporting online dashboard which is domiciled on ISTARs, aimed at enhancing the reporting of ESAF

States. The tool became operational in September 2024 following a successful launch and sensitization workshop conducted for ESAF States in July 2024.

Participation in Project Teams activities

2.9 The meeting noted that some States and Organizations had responded to the call for more experts to participate in the AAO/SG Project teams but called for more experts given the increase needs related to project team activities.

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

- 2.10 The meeting was informed on the need for continuous improvement and adaptation of essential aspects of FRA management to address evolving operational needs, optimize airspace utilization, and enhance efficiency and safety in the AFI region.
- 2.11 The meeting noted the progress and challenges of the FRA PMT. The meeting also encouraged States to take relevant actions to build the capacity of aviation professionals involved in FRA. The importance of establishment of a regional list of FRA indicators provided as Appendix 3 to this WP and amendment of FRA Terms of Reference Project team at Appendix 4 to this WP was discussed at length which led to the formulation of the following draft decision:

Draft APIRG 2	7 Decisio	on 27/xx: N	Aeasurement of	f the impact	of FRA implementation in AFI	
Why:	That, to enhance the implementation of FRA in the region and effectively measure the impact of FRA implementation on airspace operations, flight operations and environmental protection					
What:		.,				
Who:	a)	and b) API	RG			
When:	a)	and b) : 15	November 202	4		
Implementation	followir	ıg-up				
Follow-up required	Yes ⊠ No □	Metrics	Metric 1: FRA KPIs list endorsed Metric 2: Endorsed TORs	Means to collect data	Mean 1: APIRG/27 Report Mean 2: PMT annual report and the annual air navigation report	

AAMP PMT Activities Report

2.12 In line with the APIRG/24 Conclusion 24/05, the meeting was informed that the AAMP PMT had evolved to include experts from the IIM/SG in MET, CNS and AIM areas. The inclusion of experts from IIM/SG required the revision of the Terms of Reference (ToRs) of the project team. The AAMP PMT revised ToRs as well as list of members is provided at Appendix 5 to this WP. The meeting therefore agreed on the following:

Draft APIRG 27 Decision 27/xx: Update of the AFI ATM Master Plan							
Why:	That, to	That, to facilitate the finalization of the ATM Master plan,					
What:	the revis	the revised Terms of Reference and list of members of the AAMP PMT is endorsed.					
Who:	APIRG	APIRG					
When:	8 Novem	ber 2024					
Implementation	followin	g-up					
Follow-up required	Yes ⊠ No □	Metrics	Metric 1: Contributions from AIM, CNS, MET	Means to collect data	Mean 1: AAMP PMT Report		

Reporting on planning and implementation by States and Stakeholders

Flight and Flow Information for a collaborative Environment (FF-ICE)

2.13 The meeting recalled the APIRG/26 Decision 26/17 which called on establishment of the FF-ICE task force through the nomination of the State's focal points as well as the development of a project document and terms of reference of the project team provided as Appendices 6 and 7 to this WP. The meeting was informed that the task force was established on 19 April 2024 with specific terms of reference. The meeting therefore proposed the following Draft Decision.

Draft APIRG/2	Draft APIRG/27 Decision 27/xx: FF-ICE Project					
Why:		That, to enhance the implementation of flight and flow information for a collaborative environment concept in the AFI region				
What:		The project of the pr				
Who:	_ ′					
When:	a) b)					
Implementation	followir	ng-up				
Follow-up required	Yes ⊠ No □	Metrics	Metric 1: Endorsed TORs Metric 2: Endorsed TORs	Means to collect data	Mean 1: APIRG 27 Report	

Air Traffic Flow Management

- 2.14 The meeting was briefed on the outcomes of the workshop on the implementation of the air traffic control (ATC) and airport capacity assessment in the AFI region. The outcomes of the workshop included identified challenges and recommendations aiming at facilitating the establishment of a regional framework for the step-by-step implementation of the air traffic flow management.
- 2.15 The meeting also noted the need for regional and inclusive approach to the implementation of ATFM in the AFI region. The meeting recalled the Conclusion 24/43 of APIRG/24 related to the Mombasa roadmap and agreed to establish a project team that will leverage on the CANSO initiative and other similar ATFM initiatives in other regions. The meeting developed Terms of Reference and a project document of the ATFM Project Team which are provided respectively as Appendices 8 and 9 to this WP. The following draft conclusion was proposed.

Draft APIRG 27	Conclusio	on 27/xx Est	tablishment of an	Air Traffic	Flow Management
implementation p	roject tea	m			
Why:	That, to	support the i	mplementation of	f Air traffic F	Flow Management (ATFM)
	in the re	gion,			
What:	a) 1	the establish	hment of the A	TFM Projec	ct Team is endorsed with
	(CANSO, AS	ECNA, ATNS, K	CAA, NAM	A, RVA, Roberts FIR and
	j	IATA as core	e members.		
	b) 1	the Terms o	of Reference and	d the projec	ct document of the ATFM
	j	Project Tean	n are endorsed; a	nd	
	c) S	States and C	Organizations to 1	nominate exp	perts from all relevant ANS
	(areas to supp	port the developm	ent of the pr	oject.
Who:	a) a	and b) APIR	G		
	c) .	States, Core	members, Secreto	ariat	
When:		,	vember 2024		
	c) 31 January 2025				
Implementation for	ollowing-	up			
			Metric 1:		Mean 1: APIRG/27
			Endorsed		Report
Follow-up	Yes ⊠		TORs	Means to	Mean 2: Correspondences
required	No □	Metrics	Metric 2:	collect	for nomination of experts
required	140 🗀		Project team	data	Mean 3: Secretariat report
			establishment		

Search and Rescue

2.16 The meeting was briefed on the outcome of the AFI interregional search and rescue workshop held in Luanda, Angola from 17 to 21 June 2024. The workshop raised some challenges which included insufficient high-level commitment that prevents appropriate provision of effective SAR framework, funding as well as the signing of SAR agreements between States. The meeting noted

the need to incorporate high level decision makers and called on ICAO to consider high-level interaction with States on SAR.

AFI ANS Summit

- 2.17 The meeting was informed of the WORK@Lab format meeting which was held in June 2024 in South Africa to develop the initial vision, objectives and expected outputs in each ANS area which was hosted by ATNS in South Africa with a participation of thirty-one delegates from States and Organizations.
- 2.18 Although the status report shows good progress towards the Summit, the meeting noted that some outstanding challenges needed to be addressed such as time resource constraint, the low participation of States, the need for alignment with the APIRG procedural handbook provisions, the need to incorporate the outcomes of the ongoing Africa aviation gap analysis, the need for clarification on the roles of stakeholders as well as the objectives of the Summit. The meeting therefore agreed on the following draft conclusion:

Draft APIRG 27	Decision	27/xx: Pre	paration of the A	ir Navigatio	n Services Summit	
Why:	That, to	That, to improve the preparation of the AFI Air Navigation Service Summit.				
What:	<i>b</i>)	.,				
Who:	a) .	a) APIRG				
When:	/	.,				
Implementation f	ollowing-	-up				
Follow-up required	Yes ⊠ No □	Metrics	Metric 1: Deliverables for the Summit Metric 2: ANS summit TORs reviewed Metric 3: Established expert teams Metric 4: ANS Master plan endorsed	Means to collect data	Mean 1: APIRG/27 report Mean 2: Summit TORs Mean 3: Summit reports Mean 4: ANS Master plan Document	

Development in the South Atlantic Area

2.19 The meeting noted the latest developments in the South Atlantic area (SAT) regarding achievements, ongoing activities and issues to be brought to the attention of APIRG.

2.20 The meeting noted that the three SAT bodies held several meetings which brought some issues that require the close attention of APIRG. These included the domains of responsibilities and applicability in the SAT area which appear to be crucial for both safety oversight and the harmonization of implementation projects. The pressing need for the establishment of an air traffic services safety events scrutiny group, which requires involvement of subject matter experts from SAT member States and organizations was noted as of concern. The meeting consequently formulated the following draft Conclusion and Draft Decision:

Why:	That, to support the scrutiny of ATS events in the SAT area				
What:	 a) the inclusion of RSOOs (AAMAC, BAGASOO, SASO) as members of SAT, for scrutiny of ATS events, is endorsed. b) ARMA to amend the Collision Risk Assessment output to include separate Collision Risk Estimate results against the Target Level of Safety (TLS) for ATS event scrutiny involving six of the SAT States in the AFI Region. 				
Who:	a) APIRG b) ARMA				
When:	a) 8 November 2024 b) 30 October 2025				
Implementation	following	-up			
Follow-up required	Yes ⊠ No □	Metrics	Metric 1: SAT Handbook amended Metric 2: ATS Scrutiny events conducted Metric 3: AFI CRA area of applicability amended	Means to collect data	Mean 1: SAT SOG report Mean 2: APIRG report on SAT Mean 3: ARMA reports

Draft APIRG 27 Decision 27/xx: Monitoring of activities in the SAT					
Why:	That to ensure the timely follow up of the potential impact, on APIRG projects activities,				
What:	the Secretariat to monitor and report on the ongoing SAT area delineation project to ensure that applicable oversight and implementation projects on SAT are consistently coordinated with similar initiatives in the AFI region.				
Who:	Secretariat				
When:	31 October 2025				
Implementation f	Collowing-up				

Follow-up	Yes ⊠	Metrics	Metric 1: SAT activities	Means to	Mean 1: SAT contributory bodies reports
required	No □			data	Mean 2: Secretariat report

Runway Safety Activities

- 2.21 The meeting was informed of the latest development related to Runway Safety, particularly the publication of the 2nd edition of the Global Runway Safety Action Plan (GRSAP) and the 1st edition of the Regional Aviation Safety Programme (RASP). The meeting requested the RST PT to review its Terms of Reference (ToR) to integrate provisions from the RASP and the GRSAP that have not yet been considered.
- 2.22 The meeting was also informed that some RST PT members had participated in Runway Safety Go Team activities in Mozambique from 1 to 3 July 2024 and that a similar mission was scheduled to take place on from 24 to 26 September 2024 in Eswatini. The meeting was also informed that a webinar on the operational performance of RST is planned for the WACAF States at a date to be determined.

A-CDM Project Team Activities Report

2.23 The Airport Collaborative Decision Making (A-CDM) project team presented the progress made in drafting the Project document which includes a proposed approach for the implementation of A-CDM in the region. The approach includes criteria for prioritizing airports to assist in the implementation of A-CDM based on traffic density data available from ICAO iSTARS, and a proposed A-CDM implementation guide.

The meeting suggested to conduct a validation workshop by out to review the developed documents.

Aerodrome Certification Project Team Activities Report

- The meeting was informed that the aerodrome certification rate had improved from 38% to 43% in the region. The project team further informed the meeting that they had proposed strengthening the virtual peer support mechanism to support States that had not made progress in Certification. The meeting noted that these would only work to address challenges related to documentation. The other challenges related to certification still need high level intervention, to engage States towards aerodrome certification.
- 2.25 The meeting further urged regional organizations to facilitate the sharing of expertise and resources among member States, fostering a collaborative approach to aviation safety oversight, specifically for aerodrome certification. The meeting was informed that the Project team is committed to the completion of the aerodrome certification Project document.

Training and Qualification Project Team Activities Report.

2.26 The meeting noted that in revising the project document as guided by the AAO/SG6 meeting, the team had considered the main challenges raised by the States regarding training which included insufficient funds to train the aerodrome inspectors and operators, lack of specialized training within the region in English and French languages, few training centres within the AFI Region, lack of

in-house instructors in the States, and high cost of foreign training, including cost of travel to destinations with the required training courses. The Project team mentioned that the Project document will be submitted to secretariat for consideration by APCC.

Update of AFI eANP

- 2.27 The meeting was informed that in April and May 2024, ICAO conducted two awareness workshops on the ANP Volume I and II as well as the PfA of ANP. States were expected to provide accurate and consistent information in the relevant sections of the two volumes to enable the effective management of PfAs. However, it was noted that many States have not provided their information as expected or that information provided was either incomplete or inconsistent with the content of their AIPs.
- 2.28 The meeting urged States which have not yet done so to actively provide their information to enable the finalization and submission of the PfAs on the ANP Volume I and II by 31 October 2024.

Annual Air Navigation Report

- 2.29 The meeting was informed that the first edition of the AFI Annual Air Navigation Report had been released and hard copies of the report also printed and circulated during the ninth AFI aviation week held in July 2024 in Libreville, Gabon.
- 2.30 The meeting was informed that the second edition of the annual air navigation report is being developed. It was highlighted that the second edition will focus on ASBU implementation in the AFI region, and States and organizations were urged to contribute to the report.

Air Navigation Deficiencies

- 2.31 The meeting noted with concern that although the AANDD platform had been operational since 2023, no State or organization has reported a deficiency on the platform. The meeting also noted that two workshops on the air navigation deficiencies and the management of AANDD were conducted back-to-back in April and May 2024 at ICAO Dakar Office to train focal points on the use of the platform.
- 2.32 The meeting encouraged States and organizations to make effective use of the many benefits provided by the AANDD platform as a national reporting tool and as a decision-making reference material.

Activities to be coordinated with the RASG-AFI SSTs

2.33 The meeting was informed of ongoing activities carried out by ARMA for the AFI region. It was noted that ARMA has developed a RVSM guidance material for the Africa Indian Ocean which would be beneficial for regional adoption. The meeting was informed that the guidance material was available for States to review and provide their contributions to improve the document. The meeting therefore agreed on the following draft Conclusions.

RVSM Airspace						
Why:	That, to e	enhance the S	State's capability of	of monitoring of R	VSM airspace above	
	their terr	their territory,				
What:	,	States to re naterial; and	•	e contribution to	the draft guidance	
	b) A	ARMA to sul		· ·	rsion of the guidance	
Who:	a) S	a) States				
When:	a) 30 March 2025 b) 30 July 2025					
Implementation foll	owing-up					
			Metric 1: State's feedback received		Mean 1: State's response letter Mean 2: AAO/SG 8 Report	
Follow-up required	Yes ⊠ No □	Metrics	Metric 2: guidance material finalized	Means to collect		

Draft APIRG 27	Conclusion	27/xx: AD	S-B Height monit	oring implementa	tion in RVSM	
airspace						
Why:	That, to	That, to enable an effective height keeping monitoring of all aircraft in the AFI				
	RVSM A	irspace,				
What:	a) A	ARMA to con	nduct a survey on	the rate of aircraf	t equipped with ADS-	
	1	B 1090Mhz I	Extended Squitter.			
	b) S	States to res	schedule the pub	lication of the mo	andatory carriage of	
	A	ADS-B out fo	or new aircraft o _l	perating in the Sta	te's RVSM Airspace:	
	· ·	and				
	c) 1	Non-ADS-B	equipped aircraft	t operating in AF	I RVSM Airspace to	
	(comply with	mandatory carria	ge of ADS-B.		
Who:	a) A	ARMA				
	b) S	b) States				
	c) A	c) Airspace users				
When:	a) 3	30 March 20	25			
	b) 3	31 December	r 2026			
	c) 3	31 December	r 2028			
Implementation for	ollowing-up)				
			Metric 1:		Mean 1: Survey	
Follow-up	Yes ⊠		Survey		report	
required	No □	Metrics	conducted	Means to collect		
required	INO L		Metric 2:		Mean 2: Record of	
			State's AIC		State's AIC	

Published on	
ADS-B	Mean 3: ARMA
Mandate	Report
Metric 3: Non-	
ADS B aircraft	
retrofitted	

Magnetic North and True North.

- 2.34 The meeting was informed that South Africa is a member of the ICAO task force that is discussing matters related to the proposed change from use of Magnetic North to True North as a reference system for heading and tracking operations.
- 2.35 The meeting noted that a survey had been initiated by the panel; and States were required to forward the survey results to the ICAO task force by 31 October 2022 which was overdue. The outcomes of the survey may be used to assist ICAO in developing plans and strategies for migrating from magnetic to true north reference system for heading and tracking in air operations. The meeting noted the need for coordination between APIRG and RASG-AFI on the subject when the proposal matures for implementation.

Implementation challenges of the Sub-Group

- 2.36 The Aerodrome Operations and Planning (AOP) breakout session meeting discussed some of the implementation challenges especially related to the project's definition and drafting. The meeting noted that a webinar had been conducted on the subject but there was still need for further awareness to enhance the capacity of the project team members who were new. The meeting requested the Secretariat to conduct a virtual webinar on the subject to enhance capacity in the region.
- 2.37 The meeting noted that the number of experts supporting its activities in ATM/SAR projects has been diminishing in the recent past. This is due to natural attrition within the States without replacement as well as inadequate capacity by the experts within the States to support the Subgroup. Some of the experts are also engaged in State activities that may not allow them sufficient time to participate in the Group's activities. The meeting agreed on the following Draft Decisions.

Draft APIRG 27 Dec	Draft APIRG 27 Decision 27/xx: AAO Repository of experts				
Why:	That to enable an effective implementation of air navigation services and				
	facilities in the region,				
What:	the Secretariat to coordinate develop a dynamic repository of Airspace and				
	Aerodrome Operations experts to support the effectiveness and continuity of				
	APIRG projects.				
Who:	Secretariat				
When:	31 October 2025				
Implementation follo	owing-up				

Follow-up required Yes No	Metrics	Metric 1: Developed repository	Means to collect	Mean 1: APIRG Report
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The meeting noted the need to ensure a coordinated approach in the management of contingencies in the region and formulate the following Draft Decision:

Draft APIRG 27 Decision 27/xx: ATM contingency awareness							
Why:	That, to increase awareness of State's and organizations focal points on the ATM Contingency planning and management,						
What:	the Secretariat to conduct at least one air traffic management contingency planning and management awareness workshop for the AFI region.						
Who:	Secretariat						
When:	31 December 2024						
Implementation following-up							
Follow-up required	Yes ⊠ No □	Metrics	Metric 1: workshop conducted	Means to collect data	Mean 1: Secretariat report to AAOSG/8		

Proposed recommendations/actions to be taken by ICAO HQ

- 2.38 The meeting noted that some of the trainings developed by ICAO HQ are usually in English. There are States in ESAF and WACAF that speak English while others speak French as official languages. There are others that speak Portuguese and Spanish. The meeting recommended ICAO to consider developing training to meet the needs of the region by developing courses that are at least in both English and French languages.
- 2.39 The meeting was presented with information on the on-going work on the move from Magnetic North to True North for air navigation heading and tracking. The meeting noted with concern that a number of ongoing developments at the ANB panels were often carried out without representation from the AFI region and called for inclusion of the region in these activities.

Review of the Terms of Reference (TORs) and Work Programme of the Sub-Group Terms of Reference

2.40 The meeting presented the latest developments concerning the enhancement of the APIRG and RASG-AFI structure. The meeting was informed that the draft procedural handbook of the new structure was developed and will be circulated to States and Organizations for inputs. States and Organizations were encouraged to review the draft Procedural Handbook, which includes the AAO/SG terms of reference, and provide feedback as appropriate.

Work programme of the Sub-Group

2.41 The meeting agreed on proposed activities of the subgroup for 2024 / 2025 and proposed a work programme for consideration which are provided as Appendix 10 to this WP. The meeting agreed on the following Draft Decision.

Draft APIRG 27 Decision 27/xx: Future work programme of AAO Subgroup								
Why:	That, to enable the AAO Subgroup to effectively support APIRG in discharging							
	its responsibilities,							
What:	the future work programme of the subgroup is endorsed.							
Who:	APIRG							
When:	8 November 2024							
Implementation following-up								
Follow-up required	Yes □ No ⊠	Metrics	Metric 1: NA	Means to collect	NA			

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) Note the information in this paper; and
 - b) Take further action as appropriate.