

INTERNATIONAL CIVIL AVIATION ORGANIZATION

First Meeting of the Africa - Indian Ocean Aviation System Planning and Implementation Group (AASPG/1)

Libreville, 3 - 7 November 2025

Agenda Item 4: Implementation of air navigation goals, targets and indicators, including the priorities set in the regional air navigation plan

4.2. Outcome of the Eighth meeting of the Infrastructure and Information Management Sub-Group (IIM/SG8)

Presented by the Secretariat

SUMMARY

This paper presents the outcomes of the Eighth Meeting of the AASPG Infrastructure and Information Management Sub-group (IIM/SG8), held in Nairobi, Kenya, from 4 to 8 August 2025.

The Sub-Group reviewed the status of implementation of the Conclusions and Decisions of the APIRG/27 and RASG-AFI/10 meetings relevant to the IIM/SG and discussed the status of implementation of regional projects adopted by APIRG.

The meeting also discussed the status of the Basic Building Blocks (BBBs), the implementation status of ASBU elements, the update of the AFI eANP and the management of air navigation deficiencies.

Action by the Meeting is provided in paragraph 3.

REFERENCES

- AASPG Procedural Handbook
- The Global Air Navigation Plan
- APIRG/27 Report
- IIM/SG7 Report

| Strategic | A – Safety, B – Air Navigation Capacity and Efficiency, D – Economic |
|------------|--|
| Objectives | Development of Air Transport, and E – Environmental Protection. |

1 INTRODUCTION

- 1.1. The meeting was attended by ninety-five (95) participants from twenty-two (22) ESAF and WACAF States, and six (6) Organizations.
- 1.2. It was chaired by Mr. Issoufou Abdulaye (Niger), Chairperson of the Sub-group. ESAF and WACAF Regional Offices served as the Secretariat of the meeting.

2 DISCUSSIONS

- 2.1. Ten (10) agenda items were discussed as reflected in the Report of the Meeting presented in the **Appendix 2B1** to this Working Paper and available at https://www.icao.int/WACAF/Pages/IIM-SG-8.aspx
- 2.2. The meeting deliberated on fourteen (14) draft Conclusions/Decisions, and this paper presents draft Conclusions and Decisions that call for the attention of the PRCC and AASPG.

Election of the Chairperson and Vice-Chairperson of the Sub-Group

2.3. The meeting elected Eng. Mukuka Besa, Senior Inspector, AIS/ PANS-OPS, from Zambia and Ms. Joyce Asante, Director, Air Traffic Safety Engineering, from Ghana as Chairperson and Vice Chairperson of IIM Sub-Group respectively. The following draft Decision was formulated accordingly:

| Draft AASPG/1 Decision 1/xx: Election of the Chairperson and Vice-Chairperson of the Sub-Group | | | | | | | |
|--|--|--|--|--|--|--|--|
| Why: | That, in order to guide the activities of the IIM Sub-Group, | | | | | | |
| What: | The following Officials were elected: Eng. Mukuka Besa, Senior Inspector – AIS/ PANS-OPS, Zambia Civil Aviation Authority as Chairperson; and Ms. Joyce Asante, Director Air Traffic Safety Engineering, Ghana Civil Aviation Authority as Vice-Chairperson. | | | | | | |
| Who: | AASPG/1 | | | | | | |
| When: | 7 Novembre 2025 | | | | | | |
| Implementation followi | Implementation following-up | | | | | | |
| Follow-up required | Yes □ Not applicable No ⋈ Metrics Not applicable Means to collect Not applicable | | | | | | |

Review of the Conclusions and Decisions of the Joint Session APIRG/27 & RASG/AFI 10, and APIRG/27 Meetings applicable to the Sub-group

2.4. The meeting reviewed the status of Conclusions and Decisions of the Joint Sessions of the APIRG/27 & RASG-AFI/10 meeting, as well as the APIRG/27 meeting applicable to the IIM/SG, and noted that of seventeen 17 Conclusions and/or Decisions pertaining to the Subgroup, 20% were completed and 80% were 'in progress' as presented in **Appendix 2B2** to this working paper. The meeting urged States and organizations to expedite the pending actions.

Status of implementation of Basic Building Blocks (BBBs) related to AIM, CNS and MET areas

- 2.5. The meeting discussed the status of BBBs in the region and expressed concerns regarding the low level of BBBs safety oversight, as provided in **Appendix 2B3** to this working paper.
- 2.6. It also emphasized the need to have a clear picture of the actual implementation status of BBBs by Air Navigation Service Providers (ANSPs) in the Region.
- 2.7. In view of the above, the meeting recommended exploring alternative mechanism to collect reliable data on BBBs implementation by ANSPs. Accordingly, the following draft Decision was formulated:

| Draft AASPG Decision 1/xx: Effective reporting on the implementation of the Basic Building Blocks (BBBs) | | | | | | |
|---|--|---------|--|------------------|--|--|
| Why: That, considering the low level of information on the implementation of the Basic Building Blocks (BBBs) in the AFI region, | | | | | | |
| What: | the Secretariat to propose a mechanism to assist States in monitoring and reporting on the implementation of the BBBs. | | | | | |
| Who: | Secretariat | | | | | |
| When: | 31 December 2026 | | | | | |
| Implementation following | ng-up | | | | | |
| Follow-up required | Yes ⊠ No □ | Metrics | Monitoring and reporting tool in place | Means to collect | Report on the implementation of BBBs monitoring and reporting tool | |

Actions taken on APIRG/27 Conclusions 27/16 and 27/17

- 2.8. The meeting discussed the actions taken on the APIRG/27 Conclusion 27/16 Monitoring of ASBU planning and implementation in the AFI Region and on the APIRG/27 Conclusion 27/17 Establishment of National Air Navigation Coordination Committees.
- 2.9. It recalled the workshops and webinars organized since 2023 to support State focal points in managing air navigation deficiencies but noted persistent challenges, including limited reporting, inactive or ineffective coordination committees, insufficient awareness among focal points, and delays in replacing departed focal points.
- 2.10. The meeting further noted that the new ASBU monitoring module on the AANDD platform remains unfamiliar to many focal points and welcomed the ICAO Regional Offices' training workshop on managing deficiencies and monitoring ASBU implementation, scheduled from 15 to 18 September 2025. States and Organizations were strongly encouraged to participate.

Status of ASBU elements in CNS, AIM and MET fields

2.11. The meeting noted the low levels of ASBU implementation for some elements, expressed concerns regarding the accuracy of data due to limited ANSP involvement, and

encouraged States to strengthen coordination with service providers in line with APIRG Conclusion 27/17.

Revision of applicable ASBU elements in the Volume III of the AFI eANP

- 2.12. The meeting recalled the endorsement by APIRG/25 of ASBU Elements identified in the areas of AOP, ATM, SAR, CNS, AIM and MET, through the Decision 25/10; and emphasized the importance of aligning the AFI Regional Air Navigation Plan to ensure consistency between eANP Volume III, the AFI ATM Master Plan, the AFI ATM Vision 2045, and future Concept of Operations (CONOPS).
- 2.13. The meeting therefore recommended that the IIM and AAO Subgroups, in line with their mandates, revise the ASBU elements applicable to the AFI Region. The revised elements will inform the next update of eANP Volume III for submission to AASPG. Accordingly, the meeting formulated the following draft Decision:

| Draft AASPG/1 Decision | on 1/xx: Revision of A | SBU elements in Volun | ne III of AFI | eANP | |
|------------------------|---|--|------------------|---|--|
| Why: | That, to ensure the alignment of the volume III of the eANP with the vision and performance objectives contained in the AFI ATM Master plan and the AFI ATM Vision 2045 and future CONOPS strategic documents under finalization by the AFI ATM Master Plan Project Team, | | | | |
| What: | The Secretariat to: a) Coordinate with the AAO Subgroup Secretariat and the AFI ATM Master Plan Project Team, to undertake a revision of the ASBU elements applicable in the AFI Region; and b) Propose a subsequent amendment of Volume III of eANP, for submission to the AASPG. Secretariat | | | | |
| When: | .a), b) 30 August 2026 | | | | |
| Implementation followi | ng-up | | | | |
| Follow-up required | Yes ⊠ No □ Metrics | Revised ASBU applicable elements completed Draft update of Vol II of eANP submitted | Means to collect | Report on the Revision of ASBU elements in Volume III of AFI eANP | |

Implementation of ASBU elements and achievements of APIRG IIM Projects

2.14. The meeting provided updates on IIM Projects, highlighting achievements and challenges in implementing ICAO SARPs and ASBU elements in CNS, AIM, and MET fields.

For Communication, Navigation and Surveillance related Projects

2.14.1. Six (6) of eight (8) CNS projects provide progress reports. The four (4) Projects in Communications field and the two (2) Surveillance and Spectrum projects made significant progress but some challenges are still to be addressed. No progress reports

submitted for COM and NAV projects, highlighting issues in monitoring and implementation follow-up.

For Aeronautical Information Management related Projects

2.14.2. The meeting was updated on the actions taken for the launching the AIM Projects 4 and 5 under IIM/SG to enhance monitoring of aeronautical information quality, improve NOTAMs, and support the implementation of aerodrome mapping and instrument flight procedure data sets as adopted by APIRG/25. Based on the selection criteria endorsed by IIM/SG7 meeting, the two project teams of experts were established, and activities were officially launched via a webinar on 30 July 2025. The meeting commended the Secretariat for operationalizing these projects, acknowledged the contributions of States and Organizations in nominating experts, and encouraged the project teams to begin their work.

For Aeronautical Meteorology related Projects

2.14.3. Of the five MET projects, only two, namely MET 3 and 4 reported progresses. MET 3 has delivered revised cost estimates and workshops, and is currently developing a Concept of Operations for Space Weather Services. MET 4 completed a competency survey and workshop. Key challenges remain low participation, limited training, and weak regulatory adoption, requiring stronger State commitment, funding, and expert support.

Reframing AASPG IIM projects

- 2.15. The meeting recalled APIRG/20 and APIRG/21, which established a consolidated catalogue of projects to support States in implementing ICAO SARPs and ASBU elements. While these projects have achieved notable progress, the AFI Region continues to face persistent challenges in CNS, AIM, and MET. Low performance results from several factors related to the design of these projects, including vague objectives, unclear deliverables, poor monitoring and evaluation, limited ownership, lack of coordination, and uncontrolled timelines.
- 2.16. In view of these issues, the meeting reached consensus on adopting results-based management (RBM) to define clear outcomes, strengthen monitoring, and ensure alignment with the ICAO GANP and AFI Regional ANP. Existing projects were therefore reviewed and reframed into RBM-based proposals: Appendices 2B4–2B8 (CNS), 2B9–2B10 (AIM), and 2B11–2B14 (MET). The following draft Decision was formulated.

| Draft AASPG | 'I Decision 1/xx: Endorsement of the restructured IIM-SG projects in CNS, AIM and MET |
|-------------|--|
| Why: | That, to effectively enhance the support to States in implementing ICAO SARPs and ASBU elements through the project management approach, |
| What: | a) The proposed results-based projects derived from the restructuring of previous CNS, AIM and MET projects, as presented in Appendices 2B4 to 2B14 to this report, are endorsed; and |
| | b) Considering that the results-based IIM projects stem from the restructuring of the previous IIM projects, the activities of the previous projects listed in Appendix 2B15 are dissolved. |

| Who: | AASPG | | | | | |
|-----------------------------|-----------------|---------|----------------|------------------|----------------|--|
| When: | 7 November 2025 | | | | | |
| Implementation following-up | | | | | | |
| Follow-up required | Yes □ No ⊠ | Metrics | Not applicable | Means to collect | Not applicable | |

Project on the Implementation of Competency-Based Training Standards for AIS personnel

2.17. The meeting recalled that the global ATM system's reliance on digital aeronautical data requires AIS personnel to be competent in information systems, data models, exchange formats, and computer literacy. In line with Annex 15, which defines required competencies and training, the meeting reviewed a draft project on "Implementation of Competency-Based Training Standards for AIS Personnel in the AFI Region," acknowledged its relevance, and provided guidance for its finalization and submission to the AASPG through the PRCC. The meeting then formulated the following draft Decision.

| Draft AASPG/1 Decision 1/xx: Endorsement of the AIM project on the Implementation of Competency-Based Training Standards for AIS personnel | | | | | | |
|--|---|--|--|--|--|--|
| Why: | That, to assist States in implementing ICAO provisions in respect of competencies, knowledge, skills and abilities required for AIS functions, through a competency model and specific regulatory requirements on qualifications and training of AIS personnel, | | | | | |
| What: | The project on "the Implementation of Competency-Based Training Standards for AIS personnel (AIM-CBTS)", as presented in Appendix 2B16 to this paper, is endorsed. | | | | | |
| Who: | AASPG | | | | | |
| When: | 7 November 2025 | | | | | |
| Implementation following up | | | | | | |
| Follow-up required | Yes □ Not applicable Means to collect Not applicable | | | | | |

Calibration of surface-based meteorological instruments and Strengthening Wind Shear Warning Capabilities for Safer Aviation Operations in the AFI Region

- 2.18. The meeting discussed challenges in calibrating MET surface-based instruments and providing wind shear information at airports. Annex 3 requires integrated automatic systems with calibrated displays at Air Traffic Units, traceable data, and regular maintenance, as well as WS warnings at aerodromes where conditions warrant. Many States in the AFI region remain non-compliant, lacking certified reference instruments, documented procedures, regular traceable calibration, WS detection systems, trained personnel, and coordinated procedures.
- 2.19. To support States, the meeting reviewed two draft projects: **AFI-METCAL**, targeting calibration and control of MET instruments, and **AFI-WARN**, enhancing wind shear warning capabilities. Both were recognized as critical, and the Secretariat was tasked to finalize and submit them to the PRCC. The following draft Decision was formulated.

| Draft AASPG/1 Decision 1/xx: MET projects on calibration of surface-based meteorological sensors and instruments and on Strengthening Wind Shear Warning Capacity for Safer Aviation Operations in the AFI Region | | | | | | | |
|---|--|--|--|--|--|--|--|
| Why: | That, to assist States in strengthening the accuracy, traceability, and reliability of meteorological observations, as well as in enhancing Warning and Reporting Wind Shear events in the AFI Region, | | | | | | |
| What: | The projects on Calibration of surface-based meteorological sensors and instruments (AFI-METCAL) and on Strengthening Wind Shear Warning Capacity for Safer Aviation Operations in the AFI Region (AFI-WRN) as presented in Appendices 2B17 and 2B18 are endorsed. | | | | | | |
| Who: | AASPG/1 | | | | | | |
| When: | 7 November 2025 | | | | | | |
| Implementation following-up | | | | | | | |
| Follow-up required | Yes □ Not applicable Means to collect Not applicable | | | | | | |

Update on the implementation of the IWXXM in the AFI region

- 2.20. The meeting received an update on the global and regional implementation of **IWXXM**, which enables the digital exchange of aeronautical meteorological information. It recalled that Annex 3, since Amendment 78, mandates the gradual transition from TAC to IWXXM, and that Amendment 82 (effective November 2025) restructures Annex 3 to support a shift from a "product-centric" to an "information-based" environment under SWIM, in line with the GANP.
- 2.21. The meeting expressed concern over the lack of IWXXM messages on SADIS in the AFI region, while commending South Africa's successful migration from AFTN to AMHS. It also noted the absence of an AMHS link between the Dakar and Pretoria RODBs/IROGs. To address these gaps, a dedicated consultation set up established between South Africa, Senegal, and ASECNA came up with short, medium, and long-term solutions for IWXXM implementation in the region. The meeting then formulated the following Conclusion based on this consultation.

| Draft AASPG/1 | Conclusion 1/xx: Implementation of the IWXXM in the AFI region |
|---------------|--|
| Why: | That, considering the lack of the implementation of the ICAO Meteorological Information Exchange Model (IWXXM) in the AFI region as well as the need for transitioning to the exchange of the operational meteorological data in digital format, |
| What: | a) The Inter-Regional OPMET Gateways (IROGs) of Dakar and Pretoria are urged to coordinate the interconnexion of the network by June 2026; b) IROG Dakar to migrate from asynchronous protocols to the internet protocol (IP); c) ASECNA is urged to: i). upgrade the Air Traffic Services (ATS) Message Handling System (AMHS) of Dakar to the File Transfer Body Part (FTBP) capability; ii). expedite the implementation of the Regional OPMET Data Bank (RODB) IWXXM capability; and |

| Who: | Da. d) Senegal of databases FTBP and e) AFI MET and open exchanges f) The Secre i). Coofea. cap ii). org | retariat to: coordinate with ASECNA and SAM Region to assess the assibility of installing REDIGII Node in Dakar to enhance CNS apability across the AFI Region; and againze a workshop/seminar on AMHS. | | | |
|--------------------------|--|---|--|--|--|
| wno: | . a) and b) IROGs Dakar and Pretoria . c) ASECNA . d) Senegal and South Africa . e) BCCs States . f) Secretariat | | | | |
| When: | . a), b), c), d) 30 June 2026 . e) 31 December 2026 . f) Secretariat: 30 November 2026 | | | | |
| Implementation following | | | | | |
| Follow-up required | Ves 🛛 | • AFI Region IWXXM capability implemented • Assessment of feasibility of REDIGII Node installation in Dakar completed • Workshop on the AMHS organized • Report on the testing of IWXXM capability. • Report on the assessment of feasibility of REDIGII Node installation in Dakar • Report on the testing of IWXXM capability. • Report on the assessment of feasibility of REDIGII Node installation in Dakar • Report on the testing of IWXXM capability. | | | |

Other Air Navigation initiatives

Progress Report of RBIS Project

2.22. The meeting reviewed the progress made by the AIM RBIS project and noted that since its extension in 2023, eleven (11) States (Benin, Côte d'Ivoire, DRC, Gabon, Guinea, Mauritania, Nigeria, Liberia, Senegal, Sierra Leone, and Togo), were supported with the implementation of QMS, AIXM, eAIP, and TOD. The meeting commended the achievements and encouraged States to pursue full implementation of their action plans.

Update on the progress of the CODEVMET-AFI Project

2.23. The meeting was briefed on the progress made by the CODEVMET project and noted that since the resuming of project activities in 2021, nine (9) States (Botswana, Cameroon, Cabo Verde, Côte d'Ivoire, Gabon, Gambia, Senegal, Sierra Leone and Togo) were assisted with the enhancement of their MET Safety Oversight Capacity, and eight (8) States (Cameroon, Cabo Verde, Côte d'Ivoire, Gabon, Gambia, Senegal, Sierra Leone and Togo) were supported in the implementation of QMS for aeronautical meteorological services. Furthermore, six (6) States (Botswana, Cabo Verde, Côte d'Ivoire, Niger, Nigeria and Senegal) and ASECNA were assisted with the situational assessment of AMET-B1 elements status at international airports. Gaps analysis is underway with the view of assisting in developing an Action Plan for implementing AMET-B1 elements.

Update on support initiatives for States with persistent OPMET availability issues

2.24. The meeting received an update on support provided to States facing persistent OPMET availability issues. Assessments of MET infrastructure and services were conducted by Senior CNS and MET Experts at the international airports of Liberia, Sierra Leone, and Guinea. Key gaps identified included automatic observations and data dissemination, sensor calibration, equipment serviceability, forecasting tools, infrastructure, and staff competency. Recommendations included prioritizing sensor calibration (especially pressure sensors), acquiring spare barometers and control tools, procuring digital instruments for accurate data collection, and implementing the SADIS API for access to WAFS and aeronautical data. The meeting also urged the Secretariat to develop dedicated projects to help States address OPMET quality and availability challenges, as highlighted in the assessment reports.

Progress Report on the Update of the AMBEX System and Supporting Procedures

- 2.25. The meeting was informed of the ongoing work to update the AFI AMBEX Handbook, the primary reference for OPMET exchange. The current edition (2014, Amendment 4) is outdated, while Annexes 3 and 10 have since undergone significant revisions. Persistent challenges in OPMET exchange remain in the AFI region, including unavailability, delays, and poor quality of data, particularly SIGMETs.
- 2.26. The meeting commended the Secretariat for initiating the review and update of the AMBEX system and its procedures and emphasized the urgent need to modernize them to ensure timely, reliable, and globally compliant OPMET information exchange in the AFI region. The following Draft Conclusion was formulated:

| Draft AASPG/1 Conclusion 1/xx: Effective Implementation of the AFI AMBEX System and Procedures | | | | | |
|---|--|--|--|--|--|
| Why: That, to enhance the implementation and monitoring of the performance of the AFI AMBEX System, | | | | | |
| What: | the Secretariat, to a) support the ongoing update of the AFI AMBEX System and Procedures, in coordination with the NOCs, BCCs and IROGs/RODBs; b) circulate the draft Update of AMBEX Handbook to States and stakeholders for their review and contributions; c) organize a validation workshop on the Updated AMBEX System and procedures; and | | | | |

| | d) submit the consolidated draft Update AMBEX Handbook to the IIM/SG9 Meeting. | | | | | |
|-----------------------------|---|---------|---|---|------------------|--|
| Who: | Secretar | iat | | | | |
| When: Implementation follow | .a), b) 31 October 2025 .c) 30 June 2026 .d) IIM/SG9 Meeting | | | | | |
| Follow-up required | Yes ⊠ No □ | Metrics | • | Draft Update of AMBEX Handbook circulated to States and stakeholders Validation workshop conducted Consolidated Draft Update of AMBEX Handbook submitted to AASPG/2 | Means to collect | SLs to States and Stakeholders Report of the validation workshop Report of the IIM/SG9 |

Minimizing GNSS RFI occurrence through effective regulatory measures and enforcement

- 2.27. The meeting was briefed on the ACAO/ICAO Radio Navigation Workshop (Morocco, 24–26 February 2025), which addressed GNSS RFI mitigation, flight crew support, PBN strengthening, and long-term C-PNT development to enhance safety and efficiency in the AFI Region.
- 2.28. The meeting acknowledged the outcomes of the workshop, and encouraged support to States, Air Navigation Service Providers (ANSPs) and aviation stakeholders in identifying, assessing and mitigating the risks associated with Radio Frequency Interference (RFI) affecting GNSS. The following draft Decision was formulated accordingly.

| Draft AASPG/1 Decision 1/xx: Improvement of the GNSS RFI Risk Management | | | | | |
|--|---|---------|--|------------------|--|
| Why: | That, to support States, Air Navigation Service Providers (ANSPs) and aviation stakeholders in identifying, assessing and mitigating the risks associated with Radio Frequency Interference (RFI) affecting GNSS, | | | | |
| What: | the Secretariat to organise a workshop on Radio Navigation. | | | | |
| Who: | Secretariat | | | | |
| When: | 31 December 2026 | | | | |
| Implementation following | Implementation following-up | | | | |
| Follow-up required | Yes ⊠ No □ | Metrics | Workshop on Radio Navigation conducted | Means to collect | Report of workshop on Radio Navigation conducted |

Outcomes of the Workshop on the provision of information on volcanic eruptions and ash clouds

- 2.29. The meeting reviewed the outcomes of the workshop on volcanic eruptions and ash cloud information held in Yaoundé, Cameroon, in June 2025. The workshop aimed to strengthen understanding of volcanic hazards and their impact on aviation, improve coordination and communication, and build capacity for timely detection, forecasting, and dissemination of ash cloud information.
- 2.30. The meeting brought together 34 participants from six States (Angola, Cameroon, Côte d'Ivoire, DRC, Liberia, Senegal), ASECNA, and ROBERTS FIR. The report is provided in the Appendix 2B19. Key results included identifying challenges and priority actions, proposing an action plan for a Letter of Agreement (LoA) with a stakeholder template, mapping stakeholders, drafting SOPs, conducting a volcanic ash safety risk assessment, and preparing a national contingency plan template.
- 2.31. The meeting welcomed these outcomes and requested the Secretariat to organize a follow-up workshop to validate the developed materials for State deployment. The following draft Conclusion was proposed.

| Draft AASPG/1 Conclusion 1/xx: Improvement of the management of volcanic events in the AFI region | | | | | |
|---|--|---------|---|------------------|---|
| Why: | That, to assist States in enhancing their capability in the provision of information on volcanic activities in the AFI region, | | | | |
| What: | the Secretariat to organise a workshop for the development of generic materials on the management of information related to the Volcanic Eruptions and Ash Clouds. | | | | |
| Who: | Secretariat | | | | |
| When: | 31 December 2026 | | | | |
| Implementation followi | ng-up | | | | |
| Follow-up required | Yes ⊠ No □ | Metrics | Workshop on documentation of volcanic events management conducted | Means to collect | Report of the workshop on documentatio n of volcanic events management |

Update on the preparation of the AFI ANS SUMMIT

- 2.32. The meeting reviewed progress in the preparations for the AFI ANS Summit, mandated by APIRG to advance the implementation of a harmonized and seamless ATM system. Since early 2024, preparatory work has included IATA-led virtual coordination meetings, development of a roadmap and terms of reference, and the first WORK@Lab in June 2024. In line with APIRG/27, the Summit framework has been aligned with the AASPG Handbook to ensure structured and consolidated project development under a single AASPG-driven mechanism.
- 2.33. Challenges remain, including limited State participation, time constraints, shortage of qualified ANS experts, parallel and uncoordinated initiatives, and ongoing updates of key

reference documents such as the AFI ATM Master Plan and Africa Aviation Infrastructure Gap Analysis. To address these, Summit preparations will leverage AASPG project teams, reinforced with additional State and industry expertise. All outputs will be consolidated into a single AFI ANS Projects Catalogue, defining objectives, timelines, deliverables, resources, and risk management.

- 2.34. Political and financial support for the approved Projects Catalogue will be coordinated by AUC and AFCAC. Continued alignment with AASPG procedures and broad stakeholder engagement remain critical to ensure delivery of impactful projects that enhance seamless and interoperable ANS across Africa.
- 2.35. In view of regional priorities and the Africa Aviation Infrastructure Gap Analysis, the meeting identified CNS, AIS and MET projects for inclusion in the AFI ANS Projects Catalogue and formulated the following Decision.

| Draft draft 1 | Decision 1/xx: | Proposal of inclusion of CNS, MET and AIM Projects to the AFI ANS PROJECTS CATALOGUE |
|---------------|------------------|---|
| Why: | That, to foster | r the preparation of the AFI ANS Summit, |
| What: | | wing projects in the areas of CNS, AIM and MET are included in the SPROJECTS CATALOGUE. |
| | a) In the | e CNS area: |
| | i. | AFI-GGCOM AFI: Regional Ground Communication Modernization |
| | ii. | AFI NAVMOD AFI: Navigation Modernization Initiative |
| | iii. | AFI-SPEC: AFI Aviation Spectrum Coordination and Protection Initiative |
| | iv. | AFI SURVDATA: AFI Surveillance and Data Sharing Enhancement Initiative |
| | v. | AFI-IATI: AFI Integrated Aeronautical Telecommunication Infrastructure |
| | vi. | AFI-SWIM: Implementation of System Wide Information Management (SWIM) |
| | vii. | AFI-COMMOD : Modernization of Air-Ground Communication Infrastructure |
| | viii. | AFI-ATSEP: Capacity building and harmonization of training for ATSEP |
| | ix. | AFI-CYRES: AFI Cyber Resilience in CNS/ATM Systems |
| | b) In the | e AIM area: |
| | i. | AIM ADQ: Monitoring of the Aeronautical information quality and Improvement of NOTAM |
| | ii. | AIM AMDIFP: Implementation of Aerodrome mapping data sets and Instrument flight procedure data sets |
| | iii. | AIM CBTS: Implementation of Competency-Based Training Standards for AIS personnel in the AFI Region |
| | iv. | AIM AIXM: Implementation of the AIXM database and electronic AIP |

| | v. | AIM TOD: | Implementation of Terr | ain and Obst | acle Data Set | | |
|-----------------------------|--|--|---|------------------|-------------------------------|--|--|
| | vi. AIM-MET QMS: Implementation of QMS for AIM and M | | | | | | |
| | c) In the MET area: | | | | | | |
| | | AFI-AMP-COMP: Strengthening Aeronautical Meteorological Personnel Competency Implementation in the AFI Region | | | | | |
| | | AFI-SPWX: Enhancing Space Weather Readiness and Service Provision in the AFI Region | | | | | |
| | | DISMET-AFI: Improving OPMET Delivery and MET Products Access in the AFI Region | | | | | |
| | | | | | | | |
| | | AFI-METCAL: Calibration and Control of Surface-based MET Sensors and Instruments | | | | | |
| | | AFI-WARN: Strengthening Wind Shear Warning Capabilities in the AFI Region | | | | | |
| | | AFI-SADIS: Implementation of the SADIS API system for the provision of WAFS gridded forecasts and datasets | | | | | |
| | | V-AFI: Implementation of aeronautical data link (D-VOLMET) and broadcasting (VOLMET) services | | | | | |
| | ix. A | ix. ATIS-AFI: Implementation of ATIS (voice-ATIS and D-ATIS) | | | | | |
| | 2) The Secretariat to pursue the coordination with States and all stakeholders to explore suitable additional projects as appropriate. | | | | | | |
| Who: | 1) AASPG 2) Secretariat | | | | | | |
| When: | / | | | | | | |
| Implementation following-up | | | | | | | |
| Follow-up required | Yes ⊠ No □ | Metrics | Coordination with States and all stakeholders completed | Means to collect | SL to States and stakeholders | | |

Air Navigation Deficiencies

2.36. The meeting reviewed the status of air navigation deficiencies in the AFI Air Navigation Deficiencies Database (AANDD). Despite the launch of the online platform and recent workshops, progress remains slow, with only about ten deficiencies reported, with six under review in AIM, CNS and MET. States were urged to actively improve timely identification, reporting and resolution of air navigation deficiencies.

Implementation challenges of the Sub-group

- 2.37. The meeting reviewed challenges faced by the Infrastructure and Information Management Sub-Group (IIM/SG), noting that its effectiveness is limited by insufficient funding and low expert participation.
- 2.38. To address these issues, it recommended engaging regional and international partners for updating project team rosters to retain active and qualified SMEs, as well as project funding,

- and holding regular progress meetings led by Project Team Coordinators (PTCs) with facilitators support.
- 2.39. The meeting urged the Secretariat, States, and stakeholders to collaborate in implementing these measures to ensure timely and effective delivery of AASPG projects.

Activities to be coordinated with the AASPG AAO and SMO Subgroups

Development of the AASPG Annual Report and implementation of the Basic Building Blocks

- 2.40. The meeting addressed coordination needs between the Airspace and Aerodrome Operations (AAO) and Safety Management and Oversight (SMO) subgroups under AASPG and identified the following:
 - AASPG Annual Report development, led by the AASPG Annual Report Team (AART), requires close collaboration among AAO, IIM and SMO subgroups.
 - Other activities requiring involvement of the three Subgroups include Support for implementing Basic Building Blocks (BBBs) in Communications, Navigation, Surveillance (CNS), Aeronautical Information Management (AIM) and Meteorology (MET)

Development in the South Atlantic Area

- 2.41. The meeting reviewed recent activities under the South Atlantic (SAT) framework, focusing on outcomes from the SAT Steering Group (SAT SG) and the joint SAT Safety Oversight and Implementation Management Groups (SAT SOG & SAT IMG).
- 2.42. Key points raised included concerns over radio frequency interference affecting ADS-B operations, a recommendation to expand the SAT Group's scope to AIM, MET, and SAR services, and endorsement of the SAT PBCS implementation plan for the EURSAM corridor with a tentative 2026 implementation. The meeting also supported reactivating the CAFSAT Network Monitoring Committee (CNMC) under the ICAO WACAF coordination. The following Conclusion was formulated.

| Draft AASPG/1 Conclusion 1/xx: Amendment of the SAT Mandate | | | | | |
|---|---|---------|--|------------------|---------------------------------------|
| Why: | That, to ensure comprehensive support in the implementation of Air Navigation Services in the SAT area, | | | | |
| What: | The SAT Group incorporates the AIS, MET and SAR areas in the scope of its activities by 30 November 2026. | | | | |
| Who: | SAT Group | | | | |
| When: | 30 November 2026 | | | | |
| Implementation following-up | | | | | |
| Follow-up required | Yes ⊠ No □ | Metrics | SAT Group mandate updated with regard to AIS, MET and SAR | Means to collect | Meeting report of the SAT Group |

Outcomes of the Fourth Meeting of the AFI Volcanic Ash Exercise Steering Group

2.43. The meeting noted the progress of the AFI Volcanic Ash Exercise Steering Group, established by APIRG/24, in coordinating regional volcanic ash preparedness. The meeting commended the successful exercises led by Cabo Verde (2021) and the Democratic Republic of the Congo (2023), reviewed and endorsed the objectives proposed by the fourth meeting of the Steering Group for the 2025 exercise to be led by Kenya, and encouraged all stakeholders concerned to support the organization of the third volcanic ash exercise.

Implementation of System Wide Information Management in the AFI

- 2.44. The meeting reviewed the framework and rationale for initiating the implementation of ICAO System Wide Information Management (SWIM) in the AFI region. APIRG/26 Meeting endorsed the establishment of the FF-ICE Task Force to prepare the region for the transition to FF-ICE in 2034 (Decision 26/17).
- 2.45. The Task Force subsequently developed a Terms of Reference (ToR) and Project Document, which were later endorsed at APIRG/27 (East London, South Africa, 4–8 November 2024) through Decision 27/03.
- 2.46. Between IIM/SG7 and IIM/SG8, the FF-ICE Project Management Team (PMT) further developed the SWIM ToR and Project Document, recognizing SWIM as a key enabler for FF-ICE. The PMT was tasked with finalizing these documents for AASPG endorsement.
- 2.47. During the meeting, the proposed SWIM Project ToR and Project Document, as presented in **Appendices 2B20 and 2B21**, were reviewed, leading to the formulation of the following draft Decision.

| Draft AASPG/1 Decision 1/xx: Endorsement of the project on the Implementation of System Wide Information Management (SWIM) | | | | | |
|--|---|--|--|--|--|
| Why: | That, to support the timely and harmonized preparation and implementation of SWIM in the AFI region, | | | | |
| What: | the project on the "Implementation of System Wide Information Management (SWIM)", as presented in Appendix 2B21 to this report, is endorsed. | | | | |
| Who: | AASPG | | | | |
| When: | 7 November 2025 | | | | |
| Implementation following-up | | | | | |
| Follow-up required | Yes □ Not applicable Means to collect Not applicable | | | | |

Proposed recommendations/actions to be taken by ICAO HQ

2.48. The meeting noted, in its review of the status of the Conclusions and Decisions from the APIRG/27 meeting, that the implementation of Decision 27/12 remains outstanding.

APIRG/27 Decision 27/12 Implementation of RSP in ADS-B environment

That, to foster the global and regional implementation of PBCS, ICAO to analyse the relevance of RSP implementation and monitoring in an ADS-B environment and ensure that the related documents are duly amended and aligned as appropriate (e.g. PBCS Manual (Doc 9869), GOLD (Doc10037), etc.).

2.49. A thorough analysis revealed that this Decision necessitates close coordination with ICAO Headquarters (HQ), particularly with the Air Traffic Management Requirements and Performance Panel (ATM RPP), to ensure effective implementation.

Review of the Terms of Reference and the Work Programme of the Sub-Group

- 2.50. The meeting recalled that the Extraordinary Meeting of APIRG and RASG-AFI (APIRG&RASG-AFI/EO) endorsed the merger of both groups into the Africa–Indian Ocean Aviation System Planning and Implementation Group (AASPG) and its organizational structure (Decision EO/01).
- 2.51. It also noted that APIRG/27 & RASG-AFI/10 endorsed the First Edition of the AASPG Procedural Handbook (Decision 6/02) and approved the AASPG Future Work Programme and its Contributory Bodies (Decision 6/11).
- 2.52. Considering the above, the meeting reviewed the Terms of Reference (ToRs) of the IIM Sub-Group as provided in the AASPG Procedural Handbook with no specific amendment. The Sub-Group then updated its work programme as reflected in **Appendix 2B22** to this report. On this basis, the following draft Decision was formulated.

| Draft AASPG/1 Decision 1/xx: Future Work Programme of the IIM Subgroup | | | | | |
|--|---|----|----------------|------------------|----------------|
| Why: | That, to support the implementation of the Subgroup objectives, | | | | |
| What: | the Work Programme as provided in Appendix 2B22 is approved. | | | | |
| Who: | AASPG/1 | | | | |
| When: | 7 November 2025 | | | | |
| Implementation following-up | | | | | |
| Follow-up required | Yes □ No ⋈ Metric | es | Not applicable | Means to collect | Not applicable |

3. ACTION BY THE MEETING

- 3.1. The meeting is invited to:
 - a) Consider the information presented in this working paper, highlighting the work achieved by the Eight Meeting of the AASPG IIM SG; and
 - b) Provide further guidance as appropriate.