INTERNATIONAL CIVIL AVIATION ORGANIZATION

Second Meeting of the Africa - Indian Ocean Aviation System Planning and Implementation Group (AASPG/2)

Livingstone, Zambia, 2 - 6 November 2026

Agenda Item 4: Implementation of safety and air navigation goals, targets and indicators, including priorities set in the Regional Aviation Safety and Air Navigation Plans

REGIONAL ADOPTION OF THE CANSO OPERATIONAL MESSAGING PLATFORM FOR ATFM SHARING AND SYNCHRONISATION (COMPASS)

(Presented by the Civil Air Navigation Services Organisation - CANSO)

SUMMARY
This working paper proposes regional support for the implementation of the CANSO Operational Messaging Platform for ATFM Sharing and Synchronization (COMPASS) as a common coordination environment for participating African Air Navigation Service Providers (ANSPs) and stakeholders. Developed by Metron Aviation in cooperation with CANSO, COMPASS builds on the operational experience of the CANSO ATFM Data Exchange Network for the Americas (CADENA) and supports shared visibility of air traffic flow management (ATFM) measures, operational constraints and regional coordination activities. Engagement across the Americas, Asia-Pacific, Euro-Asia and Africa has reinforced the importance of practical, scalable information-sharing arrangements that complement existing regional ATFM mechanisms. With a global rollout targeted for the end of 2026, CANSO invites the meeting to support submission to AASPG of a coordinated approach to COMPASS adoption in the AFI Region, consistent with APIRG/26 Conclusion 26/09. The proposed Conclusion in Section 4 encourages adoption and sets out implementation and reporting actions. **REFERENCE(S):** APIRG/26 Conclusion 26/09; APIRG/27 WP/03A1, Status Report on UPR Trials to Support FRA Implementation in the Continental AFI Airspace (2024).

Strategic Goals	• No Country Left Behind • Every Flight is Safe and Secure • Aviation delivers seamless Air mobility

1. INTRODUCTION

1.1. Growing traffic demand, regional traffic flows and disruptions affecting multiple flight information regions (FIRs) require timely exchange of operational information among ANSPs, airspace users and other stakeholders. Although regional coordination arrangements exist, information is often distributed through emails, teleconferences, messaging platforms and local documents, making a common operational picture difficult to maintain.

1.2. Metron Aviation, in cooperation with CANSO, developed COMPASS to provide a structured operational environment for sharing traffic management measures (TMMs), ATFM daily plans, advisories, constraints and related coordination information.

1.3. The new COMPASS platform is planned to launch in late 2026, replacing the existing CADENA platform and supporting broader regional participation.

1.4. This paper builds on the information presented to AAO/SG9 in July 2026. It seeks regional support for adoption of COMPASS through the proposed Conclusion in Section 4.

2. DISCUSSION

2.1 The experience from CADENA in Latin America and the Caribbean (LAC) demonstrates the value of an established coordination community for cross-border traffic management. CANSO's Year in Review 2023 describes how CADENA's contingency protocol supported coordination during airspace closure. Through regional coordination conferences, participating ANSPs agreed to increase sector availability, with advanced coordination enabling additional staffing to accommodate changes in traffic demand. Airlines also adjusted their flights and schedules. This example illustrates how shared operational information and established coordination procedures help stakeholders prepare a coordinated response to disruptions. This experience informs the design of COMPASS while allowing each region to determine its own coordination priorities and procedures.

2.2 CANSO engagement in Asia-Pacific, Euro-Asia and Africa has highlighted a common need for accessible operational information-sharing, stronger cross-border situational awareness and collaborative decision-making. Regional requirements, ATFM maturity and existing mechanisms differ; COMPASS is intended to support these arrangements, not replace established regional governance or operational responsibilities.

2.3 For Africa, the potential value is particularly relevant to the progressive implementation of regional ATFM and free route airspace (FRA) initiatives. Common visibility of planned and active measures, operational constraints and demand can support coordination across adjacent FIRs, including during weather, capacity constraints and other disruptions. Further regional engagement will be needed to validate operational use cases and implementation priorities. AFRAA's report to APIRG/27 (WP/03A1, paragraphs 2.2–2.4) identified missed coordination between adjacent FIRs and limited sharing of post-trial reports during African user-preferred route trials. These findings provide a practical basis for testing whether COMPASS can improve the availability of coordination information and records.

COMPASS capabilities and implementation approach

2.4 COMPASS provides a shared workspace in which participating ANSPs may publish operational advisories, traffic management measures (TMMs), ATFM daily plans and other information. It can also use standard air traffic services (ATS) flight-messages through the aeronautical fixed telecommunication network (AFTN) to produce flight lists associated with airports or FIRs, supporting visibility of demand affecting operational resources where relevant information is available.

2.5 Participation is undertaken through a web browser with internet access, without a new system-to-system interface. Flight-list functionality requires arrangements to send the relevant ATS messages. This supports participation by organizations at different stages of ATFM implementation and allows for progressive introduction of more advanced exchange capabilities, subject to applicable arrangements.

2.6 CANSO and Metron facilitates the COMPASS Workgroup (CWG), through which participating ANSPs and stakeholders provide operational feedback and help identify priorities. Metron Aviation develops and maintains the technical environment. The baseline coordination functions are intended to support accessible regional participation, with optional advanced capabilities addressed separately.

AFI rollout and alignment with existing regional decisions

2.7 CANSO is targeting a broader COMPASS rollout by the end of 2026 and proposes focused engagement with AFI States, ANSPs and relevant regional bodies to identify initial participants, demonstrate the platform, confirm coordination use cases and establish an implementation pathway. Regional onboarding will proceed in phases according to participant readiness and agreed implementation arrangements.

2.8 APIRG/26 Conclusion 26/09 supports continued user-preferred route trials and collection of operational data for the AFI FRA Project. Building on this work and the earlier CADENA coordination environment, CANSO proposes that relevant stakeholders assess how COMPASS can support information exchange and coordination for AFI FRA and ATFM implementation.

2.9 A practical initial phase could comprise a regional briefing and demonstration; identification of ANSP focal points; confirmation of information-sharing and operational requirements; voluntary onboarding of interested participants; and review of lessons learned through the CWG and relevant AFI coordination mechanisms. Adoption would remain subject to participating organizations' applicable approvals and arrangements.

Operational Benefits

2.10 By providing a shared coordination environment that combines operational coordination information with data-supported visibility of traffic demand, COMPASS is intended to support several operational objectives relevant to regional ATFM coordination, including:

- Improved data-supported visibility of traffic demand affecting selected operational resources such as an airport or FIR
- Improved network situational awareness among participating ANSPs
- Improved visibility of regional TMMs
- Reduced reliance on fragmented coordination channels and improved support for collaborative decision-making during regional traffic management activities
- A coordination environment that allows optional expansion of operational capabilities as regional ATFM practices evolve.

3. NEXT STEPS

3.1. The new COMPASS platform is scheduled to launch in late 2026, replacing the existing CADENA platform. CANSO and Metron Aviation will support participating organizations through demonstrations, training and phased onboarding. In the AFI region, CANSO will work with ANSPs and airspace users to identify initial participants and agree on priority coordination activities.

3.2. Building on APIRG/26 Conclusion 26/09 concerning user preferred route trials and operational data collection for the AFI Free Route Airspace (FRA) implementation, this engagement will assess how COMPASS can support information exchange and coordination among participation organizations.

3.3. Operational feedback gathered through demonstrations, initial use and CWG meetings will guide further improvements and help identify requirements for wider regional adoption.

4. ACTION BY THE MEETING

4.1. The meeting is invited to:

a) note the regional coordination needs, observations and planned COMPASS rollout described in this paper.

b) encourage States and ANSPs, in collaboration with airspace users, to adopt COMPASS for regional operational information sharing and coordination.

c) encourage States, ANSPs and airspace users to engage with CANSO through the CWG meetings and provide operational input on phased adoption; and

d) encourage States and ANSPs in the AFI region to engage with the CWG to share operational requirements, provide feedback and help guide regional implementation.