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

FROM VISION TO DELIVERY: INDUSTRY SUPPORT TO ICAO PRIORITIES FOR FUTURE SKIES

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

SUMMARY	
This paper provides an update on the Complete Air Traffic System (CATS), a global industry think tank launched by CANSO in 2022 that brings together more than 80 organisations. Following the recognition of the CATS CONOPS for Future Skies at the 42nd ICAO Assembly, its focus has shifted from vision to implementation, in support of the Global Air Navigation Plan (GANP) and the Minimum Implementation Path (MIP). The paper presents information relevant to AFI planning decisions: • the outcomes of the CANSO Africa Conference 2026 on ATM modernisation priorities for the Region, including the digital foundation needed for global interoperability; • the need to review the 2018 Mombasa ATFM Roadmap ahead of the new ICAO ATFM provisions expected to apply from November 2030; and • CANSO's offer of practical implementation support to States of the AFI region, including two webinars in the first half of 2027. **Action by the Meeting: paragraph 6.**	
References	• CATS CONOPS for Future Skies • ICAO Strategic Plan 2026–2050 • ICAO Global Air Navigation Plan (GANP, Doc 9750) • ATConf/7 working paper 152: Enabling Aviation Growth Through Coordinated and Economically Sustainable ATM Modernisation
Strategic Goals	*A. Every Flight is Safe and Secure* *B. Aviation is Environmentally Sustainable* *C. Aviation Delivers Seamless, Accessible, and Reliable Mobility for All* *D. No Country is Left Behind*

1 INTRODUCTION

1.1 The Complete Air Traffic System (CATS) is a global think tank on the future of air traffic management (ATM), launched by CANSO in 2022. Its Global Council brings together more than 80 organisations, including ANSPs, airlines, airports, regulators, manufacturers, technology providers, academia and new airspace users, on the recognition that no single organisation can shape the future of ATM alone. Participation is open to States, ANSPs and other stakeholders from all regions, including Africa.

1.2 The CATS Concept of Operations (CONOPS) for Future Skies[1] sets out a phased pathway for the evolution of ATM: digital information sharing and infrastructure transformation; advanced automation and performance-based operations; and, in the long term, seamless and fully integrated airspace. It also recognises that highly automated ATM will require regulation focused on operational outcomes, including regulatory sandboxes in which new technologies can be tested under the supervision of a regulator. The 42nd Session of the ICAO Assembly recognised the CONOPS as a valuable industry contribution and encouraged ICAO to consider its concepts in the evolution of the Global Air Navigation Plan (GANP) and related frameworks. The Assembly also tasked ICAO with developing a Minimum Implementation Path (MIP) as part of the GANP. As a global concept, the CONOPS is intended to be implemented regionally, with local focus and pace. Figure 1 summarises its three phases.

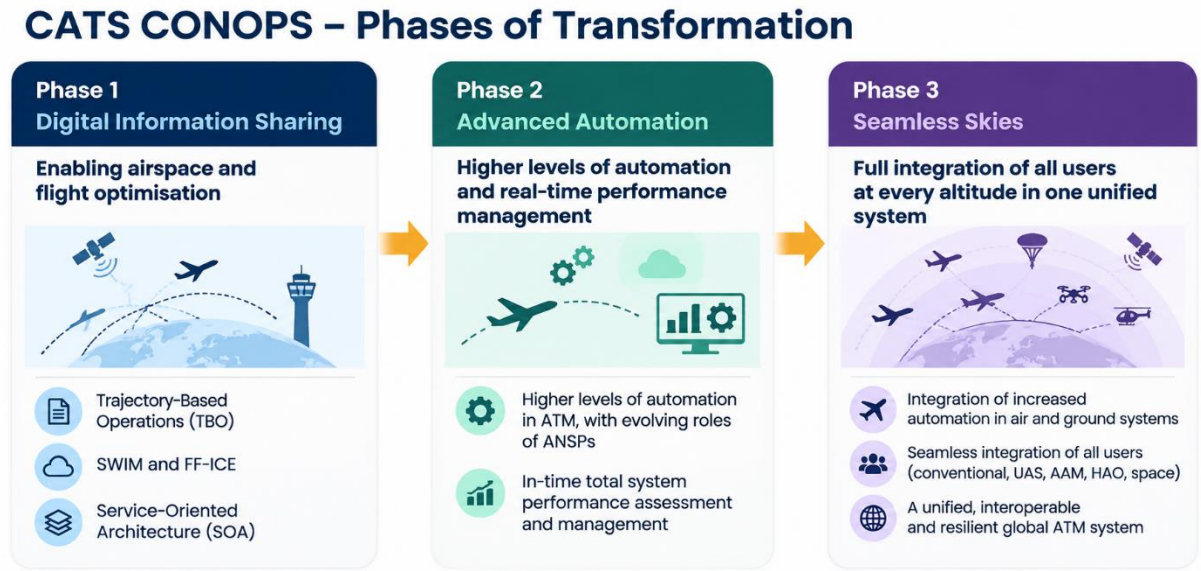


Figure 1. CATS CONOPS phases of transformation

1.3 This paper summarises the CATS Work Programme and presents information relevant to AASPG decisions on implementation priorities: regional views on ATM modernisation priorities, the implementation of air traffic flow management (ATFM) by 2030, and practical support that CANSO can offer to the Region.

2 THE CATS WORK PROGRAMME 2026–2028

2.1 The CATS Work Programme 2026–2028, "Skies in Transition", shifts the focus from defining a vision to supporting its implementation through existing ICAO mechanisms, rather than parallel frameworks. Its main areas of work are:

a) roadmap for implementation: industry input to the MIP and guidance for regional implementation roadmaps adapted to local operational, institutional and investment contexts;

b) Elevating Safety: a transition towards predictive, data-driven safety management, including in-time safety management systems, shared safety intelligence, integrated risk management and safety-by-design, in support of ICAO's evolution of Annex 19 and of regional safety activities in the AFI Region, including data-driven safety planning and regional safety intelligence;

c) higher airspace and space operations, including High-Altitude Platform Systems (HAPS), which are of growing relevance to connectivity in remote areas of Africa;

[1] https://futureskyvision.com/cats-conops/

d) automation and artificial intelligence in ATM, including human-machine teaming and the assurance of AI-enabled systems; and

e) Think Papers on key enablers: Service-Oriented and Open Architecture; True North; and Orchestrating Transformation in Our Skies[2], on people-centred change management, developed with the Global ATC Alliance, IFATCA, IFATSEA and IFAIMA.

2.2 Across all areas, CANSO stresses the human dimension. Training, competency development and change management should start at the beginning of modernisation programmes, and attracting the next generation of aviation professionals is central to Africa's readiness, in support of the ICAO Next Generation of Aviation Professionals (NGAP) programme. Regional cooperation among ANSPs, aviation academies, universities, regulators and industry can strengthen access to specialist skills, and CANSO would welcome closer cooperation with States of the AFI region, ICAO and training organisations in this area.

2.3 To reflect the diversity of operational, institutional and investment realities, CANSO has held regional workshops and engagement activities in Africa, Latin America, Europe and Asia-Pacific. They gather regional priorities and constraints, identify region-specific implementation barriers and strengthen alignment between industry initiatives and ICAO regional planning mechanisms.

3 ATM MODERNISATION PRIORITIES: AFI PERSPECTIVES

3.1 The 42nd Session of the ICAO Assembly, through Resolution A42-6, called for a roadmap of minimum capabilities necessary for the evolution of the air navigation system and timelines for global implementation. ICAO is developing the MIP in response, as part of the evolution of the GANP. This work is still in progress and will be subject to formal consultation in due course. CANSO, through the CATS Global Council, is contributing industry input.

3.2 The CANSO Africa Conference 2026 was held in Nairobi, Kenya, from 13 to 15 October 2026, under the theme "Practical Implementation Pathways – ATM Transformation and the ANSP Changing Landscape", building on the CATS workshop held in Nairobi in 2025. The Director General of ASECNA, Mr Prosper Zo'o Minto'o, was recognised as CATS Champion for Africa. A dedicated session discussed how a common baseline of essential capabilities could support ATM modernisation in Africa. Participants broadly agreed that a common digital foundation – digital aeronautical and meteorological information, System Wide Information Management (SWIM) and Flight and Flow Information for a Collaborative Environment (FF-ICE) – reflects the Region's implementation needs and priorities.

3.3 Participants stressed that any global roadmap will succeed in the Region only if it is practical and achievable, and if technology choices, financing, regional coordination, cybersecurity and workforce preparation are addressed. Alignment around common capabilities also reduces costs and avoids fragmented investment. This message is reflected in a working paper to the Seventh Worldwide Air Transport Conference (ATConf/7) presented by CANSO with Brazil, ACI, ASA World, ICCAIA, IFALPA and IFATCA. The paper invites the Conference to:

a) recognise that sustained investment in modern ATM and airspace infrastructure is essential to support the growth, resilience, sustainability and competitiveness of international air transport;

b) urge States to recognise ATM as strategic national infrastructure and to integrate its modernisation into national infrastructure and economic development strategies;

c) encourage transparent and economically sustainable investment and financing approaches that take account of beneficiaries and system-wide benefits; and

[2] https://canso.org/publication/white-paper-orchestrating-transformation-in-our-skies/

d) support ICAO's efforts to strengthen globally coordinated and interoperable implementation, including through the evolution of the GANP and the development of the MIP.

3.4 The digital foundation capabilities described in paragraph 3.2 are already part of the GANP framework. States and ANSPs of the AFI region can therefore progress them now in regional and national planning, which will also prepare the Region for future global implementation milestones.

4 ATFM IMPLEMENTATION IN THE AFI REGION BY 2030

4.1 The CANSO Africa Conference 2026 also reviewed ATFM implementation, building on the 2018 Mombasa ATFM Roadmap. With new ICAO ATFM provisions expected to apply from November 2030, the focus is now on implementation. Participants reviewed progress since 2018 and questioned whether the Mombasa priorities still fit the Region today.

4.2 CANSO is developing an ATFM Levels of Implementation reference, which helps each ANSP determine the level of ATFM it needs based on its own operational environment, rather than assuming a single solution for all. The CANSO Operational Messaging Platform for ATFM Sharing and Synchronisation (COMPASS) also supports regional operational collaboration.

4.3 A review of the Mombasa Roadmap against the new provisions, drawing on these tools, would give AFI States a clear and realistic path to implementation by 2030. CANSO stands ready to support such a review.

5 CANSO SUPPORT TO AFI IMPLEMENTATION

5.1 CANSO proposes to organise two AFI-focused webinars in the first half of 2027 on practical aspects of digitalisation, including SWIM, FF-ICE and ATFM, and on implementation approaches aligned with the evolving GANP. CANSO would seek the support of the Director General of ASECNA as CATS Champion for Africa, and would agree the topics and arrangements with the ICAO Regional Offices and regional partners.

5.2 CANSO will continue to share regional insights with ICAO and to work with the ICAO Regional Offices, States, AFCAC and industry stakeholders so that they inform implementation frameworks and guidance material.

6 ACTION BY THE MEETING

6.1 The meeting is invited to:

a) note the CATS Work Programme 2026–2028 and its alignment with the GANP and the MIP;

b) note the outcomes of the CANSO Africa Conference 2026 on ATM modernisation priorities for the AFI Region;

c) encourage AFI States and ANSPs to progress, in regional and national air navigation planning, the digital foundation capabilities already contained in the GANP, including SWIM, FF-ICE and digital aeronautical and meteorological information;

d) support that the 2018 Mombasa ATFM Roadmap be reviewed against the new ICAO ATFM provisions expected to apply from November 2030, through the appropriate AASPG mechanism, and invite CANSO to support this review, including through its ATFM Levels of Implementation reference;

e) support CANSO's offer to organise two AFI-focused webinars, on CATS and related topics, in the first half of 2027, in coordination with the ICAO Regional Offices and regional partners; and

f) encourage States of the AFI region and stakeholders to participate in CATS activities.

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