



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**REPORT OF
SEVENTH MEETINGS OF THE SOUTH ATLANTIC IMPLEMENTATION
MANAGEMENT GROUP (SAT IMG/07) AND THE SOUTH ATLANTIC SAFETY
OVERSIGHT GROUP (SAT SOG/07)**

Dakar, Senegal, 6-10 April 2026 (Hybrid)

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PART I: HISTORY OF THE MEETING

1. Format, duration and objective of the meeting

- 1.1 The seventh meetings of the South Atlantic Implementation Management Group (SAT IMG/07) and the South Atlantic Safety Oversight Group (SAT SOG/07) were held in Dakar, Senegal from 6 to 10 April 2026 in hybrid. The meetings aimed at reviewing and discussing progress achieved in safety oversight and implementation activities, as well as initiatives within the scope of the SAT.

2. Opening

- 2.1 The meeting opening was punctuated by the remarks delivered by Mr. Sanogo Adama, Chairperson of SAT IMG, Col. Jorge Avila, Chairperson of SAT SOG and by ICAO WACAF Deputy Regional Director, Mr. Nika Manzi Meheza.
- 2.2 Mr. Sanogo Adama expressed his gratitude to SAT IMG Members and to ICAO for the initiative undertaken to strengthen air navigation safety in the South Atlantic airspace. He recalled the ongoing key projects in the SAT that require the continued collaboration among SAT members to ensure their effective and timely implementation. He further reiterated the importance of continued commitment of all stakeholders with an interest in the SAT area, in particular States, ANSPs, and Airspace users. He concluded his remarks by calling for fruitful deliberations and effective recommendations to guide future implementation in the SAT area.
- 2.3 Col. Jorge Avila in his remarks, thanked the participants for their dedication to SAT business. He went on highlighting some key points pertaining to safety such as progress on SAT safety projects as well as RVSM monitoring activities in the SAT.
- 2.4 The opening remarks were made by Mr. Nika Manzi Meheza, Deputy Regional Director, ICAO WACAF. He thanked States and Organizations for facilitating the participation of their delegates in the meeting. He highlighted the SAT framework as a strong example of interregional cooperation, bringing together multiple participants from ICAO regions (AFI, EUR, NAT, SAM, NACC) to ensure a harmonized and efficient air traffic services (ATS) system aligned with global and regional aviation plans.

He commended the significant work done so far by the SAG IMG and SAT SOG through their project teams. He thanked ASA S.A Cabo Verde for sponsoring the logistics for the meeting. He concluded by wishing all participants fruitful deliberation.

3. Organization, Secretariat and attendance

3.1 The SAT IMG/7 and SAT SOG/7 meetings were chaired by Mr. Sanogo Adama and Col. Jorge Avila respectively.

3.2 Mr. Serge Guy Tchanda, Regional Officer, Air Traffic Management, ICAO WACAF coordinated with the ESAF office as the Secretary of the meeting, supported by:

- Mr. Nika Meheza Manzi, Deputy Regional Director of the ICAO WACAF;
- Mr. Elkhana Nahmadov, Deputy Regional Director, ICAO EURNAT;
- Ms. Sandrine Gnassou, Regional Officer, Communication, Navigation and Surveillance, ICAO WACAF;
- Mr. Javier Vittor, Regional Officer, Communication, Navigation and Surveillance, ICAO SAM;
- Mr. Fernando Hermoza, Regional Officer, Air Traffic Management, ICAO SAM (online);
- Dr. Bedan Thendu, Regional Officer, Air Traffic Management, ICAO ESAF (online);
- Mr. Harvey Gabriel, Regional Officer, Communication, Navigation and Surveillance, ICAO ESAF (online); and
- Mr. Antonio Arias, Field Operation officer – Montreal ICAO HQ (online).

3.3 The meeting was attended by Sixty-four (64) participants from SAT member States, Organizations and Observers. The list of participants is presented in **Appendix A**.

4. Working languages

4.1 The meeting was conducted in English, and the documentation was presented in this language.

5. Agenda of the meeting

5.1 The meeting adopted the following agenda and discussed its items following the order of business during the plenary.

Agenda Item 1	Opening and review of latest developments
Agenda Item 2	Planning and implementation programmes (IMG only)
Agenda Item 3	Airspace and ATS Route improvements (IMG only)
Agenda Item 4	SOG working plan (SOG only)
Agenda Item 5	SAT SOG Project Teams update (SOG only)
Agenda Item 6	SAT Collision Risk Assessments (CRA) (SOG only)
Agenda Item 7	SAT documentation
Agenda Item 8	Coordination between SAT IMG and SAT SOG
Agenda Item 9	Any Other Business and Closing

Part II: REPORT ON THE AGENDA ITEMS

AGENDA ITEM 1. ADOPTION OF THE AGENDA AND WORK PROGRAMME

1. The meeting agenda and work programme were adopted as proposed (IP01A).
2. Latest significant international aviation developments

2.1.1 ICAO SAT update (IP01B)

The paper provided information concerning updates affecting ICAO documentation and documents issued by, or on behalf of, the South Atlantic Group. Also provided information concerning ICAO-related activities that may be of interest to the Group. The meeting took note of the information provided.

2.1.2 Outcomes of Third Meeting of SAT Steering Group (WP01A)

This working paper provided a summary the outcomes of the Third Meeting of the South Atlantic Steering Group (SAT SG/3), held virtually from 8–10 December 2026, which reviewed progress in the implementation of air traffic services (ATS) improvements, governance matters, and activities of SAT contributory bodies, including the Implementation Management Group (IMG) and Safety Oversight Group (SOG). The meeting confirmed full implementation of all SAT SG/1 actions, while several conclusions and decisions from SAT SG/2 remain pending.

It emphasized the need to enhance AIDC implementation through a workshop coordinated by ASECNA and to develop a prototype Annual Safety Report. Global and regional developments, including outcomes of the 42nd ICAO Assembly and updates from AFI, EUR, NAT, and SAM regions, were discussed, alongside proposed expansion of the SAT mandate to additional ANS areas, pending further input. Governance updates included endorsement of new leadership for IMG and SOG, adjustments to secretariat responsibilities, and procedural improvements for documentation approval.

The meeting supported the establishment of a CNS Working Group, ongoing review of the SAT DMO framework, and revision of the SAT Handbook, with adoption planned for 2026, while urging members to note the outcomes and implement recommended actions.

2.1.3 Review of SAT IMG pending decisions and action item lists (WP01D)

The Meeting reviewed the status of pending SAT IMG decisions and follow-up actions. In particular, it was noted that SAT IMG Action 02-06 and Action 05-02 had been transferred to SAT CNS WG follow up and implementation.

2.1.4 Review outcome of other meetings which are of relevance to the SAT SOG (WP01C)

The working paper recalled that the Sixth Meeting (virtual) of the South Atlantic Safety Oversight Group (SAT SOG/06) was held from 18 to 21 November 2025. Forty-four delegates from SAT states, organizations, ANSPs and RMAs attended the virtual meeting. The Group reviewed the status of valid decisions and action items and agreed to 03 new actions. Consequently, the SAT SOG/06 meeting updated the decisions and follow-up action list, which are an integral part of the SAT SOG reports. Complete SAT SOG meetings documentation and summaries are available on the ICAO Secure Portal <https://portallogin.icao.int/> , Group name SATSOG (all caps, no space).

2.1.5 Review of SAT SOG pending decisions and action item lists (WP01E)

The updated Action items and Decisions Table, including these adopted in the present meeting, is provided in **Appendix C**.

AGENDA ITEM 2. PLANNING AND IMPLEMENTATION PROGRAMMES (IMG only)

2.2 States/ANSP updates including traffic figures

2.2.1 Update Ghana/Accra (WP02A1)

Ghana presented a paper on the operational status and ongoing implementation of air traffic management concepts within the Accra Oceanic FIR. The presentation featured traffic statistics, forecasts, and equipage levels derived from data for 2022, 2023, 2024, and 2025. The presentation provided insights into the progress of key initiatives, including AIDC, Free Route Airspace (FRA), the ADS-C/CPDLC, Contingency Plan, Performance-Based Communication and Surveillance (PBCS), and the deployment of Space-Based ADS-B. The air traffic in Accra's airspace has steadily increased since the COVID-19 pandemic. A VHF antenna has been installed in São Tomé, extending VHF coverage to approximately half of the oceanic airspace within the Accra FIR. Flight-plannable Direct Route operations have been implemented in the Accra FIR above FL290 since April 2022. Free Route Airspace was introduced within the continental Airspace of the Accra FIR between latitudes 2°N and 11°N on January 25, 2024.

2.2.2 Update Atlantico FIR (WP02A2)

Brazil presented an update on operational performance in the Atlântico FIR (SBAO), highlighting sustained traffic growth, positive forecasts, and strong fleet readiness to support Performance-based Communication and Surveillance (PBCS) implementation.

The presentation noted that traffic movements in 2025 grew by approximately 7.8 percent compared with 2024, exceeding forecasts and confirming a continued growth trajectory through 2030 under all forecast scenarios. It also emphasized the sustained reliability of operations within the FIR and the use of traffic data and performance indicators to support planning and capacity assessment. A high level of PBCS equipage in the EUR–SAM corridor was reported in the presentation, with a significant proportion of flights meeting RNP 10, RCP 240, RSP 180 and RNP 4 capabilities,

demonstrating readiness to support reduced separation minima and broader PBCS implementation in line with ICAO provisions. In addition, Brazil provided an update on adjustments to AIDC requirements to enable coordination with Dakar, aligned with PBCS implementation, reinforcing ongoing efforts to improve interoperability, operational efficiency, and support growing demand within the Atlântico FIR.

2.2.3 Update Cabo Verde (WP02A3)

Cabo Verde provided an update on air traffic trends and ongoing Air Traffic Management (ATM) and Communication, Navigation, and Surveillance (CNS) projects within Sal Flight Information Region (FIR), following SAT IMG/06.

It was noted that in 2025, the overall traffic increased by about 15%, reflecting recovery and expanding aviation activity.

The Meeting also noted some significant achievements by the State such as ADS-B Surveillance 100% FIR coverage through a combination of ground-based and space-based ADS-B systems which is pending regulatory approval for full operational use. Work is ongoing to fully implement Performance-Based Communication and Surveillance (PBCS) in the whole of Sal FIR in line with the EUR–SAM plan. Update on AIDC Implementation was also provided with significant progress on the operationalization of connectivity with Dakar (testing completed and pending activation) and Santa Maria (coordination is near to completion and pending final validation).

The State is planning to deploy Free Route Airspace (FRA) by end of 2026. This will enable more direct, fuel-efficient routing and align with ICAO modernization goals. The report demonstrates Cabo Verde's strong commitment to enhancing airspace efficiency, safety, and capacity through modernization initiatives, while responding to rapidly growing traffic demand. It also emphasizes the importance of regional coordination, particularly with neighboring FIRs.

2.2.4 Update Canarias FIR (IP02A4)

Spain presented the latest updates on traffic, systems, and ATM implementation activities in Canarias FIR. Air traffic in the EUR/SAM corridor within Canarias FIR increased by about 12% in 2025, showing sustained growth. Fleet capability levels remained stable overall, with minor evolution mainly related to PBCS requirements. The State reported no major updates made to the OLDI/AIDC coordination systems, which remain unchanged. The Meeting noted that around 88.3% of FANS-equipped aircraft connect to the ground system, but only 55.3% of total traffic uses data link services. ADS-C data quality is high, with 98.3% of messages meeting acceptable accuracy standards.

State's Medium-term projects include ADS-B/VHF deployment in Nouadhibou and ATM upgrades (MTCD), though some delays exist. Furthermore, satellite-based ADS-B implementation is planned for 2026, with further ATM system upgrades (SACTA-iTEC 5) by 2028–2029. The Meeting also noted that ENAIRE is progressing with PBCS monitoring and implementation, aligned with SAT and regional guidance. No significant issues were reported regarding GNSS interference or aeronautical frequency vulnerabilities.

2.2.5 Update Dakar FIR (WP02A5)

ASECNA presented an update on the Dakar Oceanic FIR highlighting sustained traffic growth, strong aircraft equipage levels, and continued progress in implementing advanced ATM initiatives across the SAT airspace. The presentation showed that traffic has transitioned into a mature high-density environment with stable growth patterns, while route analyses highlighted both progress and continuing challenges in optimizing traffic distribution, particularly within the EUR/SAM corridor. High levels of CNS and PBN equipage, including significant growth in PBCS-eligible aircraft, together with strong communication and surveillance performance results, demonstrated Dakar FIR's readiness to support reduced separation minima, increased throughput, and implementation of advanced concepts such as PBCS and ASEPS.

Notably, operations are dominated by modern long-haul wide-body fleets concentrated in optimal cruise flight levels, reinforcing the need for ongoing capacity and airspace management enhancements. The presentation also provided updates on implementation activities, including bidirectional operations on UN866, progress on AIDC coordination with neighboring FIRs, use of space-based ADS-B for situational awareness, and preparations for future ASEPS implementation. Progress on the PBCS roadmap was featured, with Phase 1 implementation planned for November 2026 and aligned with ESCIT activities.

The report pointed towards Dakar Oceanic FIR's continued modernization efforts, operational readiness, and commitment to supporting regional harmonization, improved interoperability, and enhanced safety and efficiency in the SAT Area.

2.2.6 Update Johannesburg Oceanic WP02A7

South Africa presented its state report on performance within the SAT-AORRA portion of the Johannesburg Oceanic FIR (FAJO), highlighting generally stable traffic levels, long-term growth projections, and continued progress in ATM and CNS modernization initiatives. The presentation noted sustained recovery and growth in air traffic movements following the COVID-19 period, with only a slight reduction in 2025 movements compared with 2024, while forecasts continue to project moderate growth through 2030. It also indicated the operational benefits achieved through the implementation of space-based ADS-B, including enhanced surveillance coverage, improved situational awareness, and increased safety and efficiency, supported by strong availability performance of surveillance and datalink services.

Updates were also provided on infrastructure enhancements such as Wide Area Multilateration deployment and ongoing maintenance of ATM contingency arrangements. The paper further addressed progress and challenges related to interoperability initiatives, particularly AIDC and AMHS implementation with neighboring FIRs, where telecommunications infrastructure constraints continue to affect timelines, notably with Angola. Coordination failures remain an area of focus, with modernization efforts expected to improve performance over time.

This presentation emphasized South Africa's continued commitment to strengthening surveillance capabilities, advancing regional connectivity, improving coordination, and supporting the implementation of SAT regional initiatives to enhance safety, capacity and operational resilience.

2.2.7 Update Montevideo (WP02A9)

Uruguay presented an update on ADS/CPDLC capabilities and oceanic operations within the Montevideo FIR, highlighting the operational reliance on ADS/CPDLC as the primary means of communication in its Class G oceanic airspace and the challenges associated with providing services in the AORRA environment. The presentation outlined the current operational framework, including CPDLC procedures, traffic characteristics, and the continued use of voice coordination with adjacent FIRs due to the absence of AIDC. It identified key challenges related to limited staffing, lack of backup infrastructure, absence of HF capability, inconsistent CPDLC log-on by operators, and limitations in system automation, while noting ongoing efforts to strengthen human resources, improve contingency arrangements, promote greater CPDLC use, advance AIDC implementation, and publish English guidance material for wider accessibility.

Through this presentation, Uruguay demonstrated commitment to improving the safety and efficiency of oceanic operations through closer collaboration with neighboring FIRs and support from the SAT Group, particularly in areas such as contingency planning, technical cooperation, and capability development. While separation minima are not currently constrained due to the uncontrolled airspace classification, the presentation stressed the importance of developing clearer transition procedures for flight crews and strengthening operational support mechanisms to enhance resilience and support more mature oceanic ATS capabilities in the Montevideo FIR.

2.2.8 Update Piarco FIR (WP02A10)

Trinidad and Tobago presented an update on planning and implementation programmes within the Piarco FIR/CTA/UTA, highlighting continued progress in modernizing airspace management, surveillance, and communications capabilities to improve safety, efficiency and capacity. The presentation covered ongoing initiatives in airspace

optimization, transition toward Free Route Airspace, implementation of reduced separation minima, ATFM, CPDLC, ADS-C, ground-based and space-based ADS-B, and AIDC. Progress was reported in advancing reduced lateral separation in the oceanic sector, expanding surveillance redundancy through ADS-B and multilateration, and strengthening regional interoperability through AIDC coordination, including full implementation with New York ARTCC and planned expansion with other neighboring FIRs.

These initiatives were presented as supporting more efficient use of airspace, improved traffic flow management, and readiness to accommodate continued traffic growth. The paper also accentuated Trinidad and Tobago’s response to increasing space launch activities and the operational challenges these pose for ATS, using recent launch disruptions as a case study to emphasize the need for harmonized procedures, standardized terminology, and stronger collaborative decision-making among ANSPs, operators and space stakeholders.

The presentation underscored that both modernization programmes and coordinated approaches to emerging challenges such as space operations are central to enhancing resilience, minimizing disruptions, and supporting safe and efficient operations within the Piarco FIR and across the wider region.

The Meeting, while commending States for the comprehensive and informative reports, noted the significant discrepancies in the reports provided by the States. Discussions of the issue led to the conclusion that a common report template should be developed in support of more harmonized and comprehensive reporting. The meeting issued the following decision

SAT-IMG/07 Decision 01: Harmonization of State report	
Why	<i>To ensure harmonization and consistency in the reporting of States activities</i>
What	<i>ESCIT to develop a State Report template by SAT IMG 8 Meeting</i>
Who	<i>ESCIT</i>
When	<i>SAT IMG 8</i>

2.2.9 Airspace user update

2.2.10 Establishment of SAT CNS WG

2.2.11 Establishment of SAT CNS WG (WP02C)

The Secretariat presented an update on the establishment and operationalization of the SAT Communications, Navigation and Surveillance Working Group (SAT CNS WG), created under the SAT Implementation Group following SAT Steering Group Conclusion 3/11. The presentation focused on the Working Group's role as a technical coordination platform to support planning and implementation of CNS initiatives in the SAT Region, enhance interoperability between adjacent FIRs, monitor and address CNS-related operational and technical issues, and provide technical advice to the SAT IMG and SAT SOG. It also noted ongoing refinement of the Working Group's Terms of Reference to define its scope, responsibilities and deliverables.

The paper further outlined progress toward operationalizing the group, including the issuance of an ICAO State Letter inviting States and organizations to nominate qualified CNS experts, and described next steps such as consolidating nominations, convening the first SAT CNS WG meeting, and finalizing the Terms of Reference for endorsement. The presentation emphasized the Working Group as an important mechanism to support regional coordination, strengthen safety and interoperability, and advance implementation of CNS priorities across the SAT Area.

2.2.12 AIDC implementation updates

2.2.13 EUR/NAT updates on AIDC (PPT02D)

EUR/NAT made a presentation on an ICAO Inter-Regional Civil-Military Airspace Cooperation (CMAC) and Flexible Use of Airspace (FUA) workshop held in 2026. The workshop brought together over 110 participants from civil aviation authorities, ANSPs, military partners, and international organizations across the Asia-Pacific and European regions. The workshop combined ICAO guidance updates, experience sharing, and practical exposure, including a visit to joint civil-military Airspace Management Cell and EUROCONTROL-led exercises on airspace design and the three phases of airspace management. Discussions highlighted the continued evolution of FUA, its integration with Free Route Airspace, and the need to accommodate emerging airspace users such as UAS, high-altitude operations, and space transport activities.

It was noted that this workshop stressed that effective FUA implementation requires strong civil-military cooperation, robust regulatory frameworks, and scalable application tailored to national contexts. Key enablers include efficient data sharing, system interoperability, and continuous performance monitoring. Recommendations focused on aligning regional practices with updated ICAO provisions, developing standardized airspace use planning tools, and strengthening institutional arrangements such as national coordination bodies and joint Airspace Management Cells. ICAO was urged to continue providing targeted implementation support and to promote harmonized, data-driven approaches, particularly for States with limited FUA maturity, to enhance safety, efficiency, and overall airspace capacity.

SAT-IMG/07 Action 01: Civil Military Cooperation and Flexible Use of Airspace (FUA) guidance material	
Why	<i>To support the effective implementation of Civil Military Cooperation and Flexible Use of Airspace (FUA) in the SAT area,</i>
What	<i>Coordinate the development of guidance material such as Airspace Use Plan (AUP) and Updated Use Plan (UUP) templates, NOTAM template for FUA activation, FUA manual</i>
Who	<i>Secretariat</i>
When	<i>by SAT IMG 10 Meeting</i>

2.2.14 FFICE implementation

2.2.15 EUR/NAT updates on FF-ICE (PPT02E)

EUR/NAT provided an overview of ICAO FF-ICE provisions and technical document guidance. Recalled the requirement for the appropriate ATS unit to designate at least on FF-ICE services unit when it has been determined that FF-ICE services will be provided. The presentation expounded on the relationship between FF-ICE, ATFM, SWIM and TBO and further acknowledged that FF-ICE lay the groundwork for collaboration, airspace users were recommended to use Trial before any eFPL or eFPL Update submission. It also noted that Transition from FPL2012 to FF-ICE (Mixed-mode operation) can be challenging and makes architecture more complicated as systems have to be able to process both - FFICE and FPL2012 messages. IATA supports not only the implementation of FF-ICE but also the cessation of FPL2012 by 2034, as FF-ICE is a key enabler for TBO and effectively addresses the shortcomings of FPL2012. It was noted that the Secretariat would continue facilitating future workshops on FF-ICE, SWIM and AMHS implementation.

SAT-IMG/07 Action 02: FF-ICE / SWIM awareness	
Why	<i>That to support the effective implementation of FFICE in the SAT area.</i>
What	<i>Facilitate FF-ICE, SWIM and AMHS workshops for SAT States</i>
Who	<i>Secretariat</i>
When	

2.2.16 GNSS RFI issues

2.2.17 EUR/NAT updates on GNSS RFI issues (PPT02H)

The ICAO EUR/NAT office furnished the meeting with a briefing on Global Navigation Satellite System Radio Frequency Interference (GNSS RFI), focusing on the growing risks posed by jamming and spoofing to aviation safety and the coordinated international response to address them. The presentation outlined definitions and operational impacts of GNSS interference, highlighted ICAO, ITU and State-level provisions to improve resilience, preserve conventional navigation infrastructure, strengthen detection and reporting, and enhance civil-military coordination. The presentation also reviewed ongoing ICAO global initiatives, including updates to the GNSS Manual, development of complementary PNT solutions, authentication technologies, interference reporting mechanisms, and implementation support packages aimed at mitigating GNSS vulnerabilities.

The ICAO EUR/NAT encapsulated regional activities across the EUR and NAT regions, including workshops, reporting mechanisms, development of Minimum Operational Networks, and North Atlantic procedures to manage operational impacts of GNSS interference. It emphasized a layered strategy combining immediate mitigation actions with longer-term solutions to strengthen navigation resilience, while encouraging harmonized regional implementation, information sharing, and coordinated action among States, regulators, service providers, and industry stakeholders.

SAT-IMG/07 Action 03: GNSS interference reporting	
Why	<i>To support situational awareness and resilience</i>
What	<i>Include GNSS interference events as part of regular State updates</i>
Who	<i>States and ANSPs</i>
When	

2.2.18 Other issues (i.e. HAO/STO, flight planning issues, Space weather)

2.2.19 ICAO EUR Region Space Transport Operations (STO) Project Team - (PPT02I)

The presentation provided an update on the ICAO EUR Region Space Transport Operations (STO) Project Team established by EASPG to develop harmonized regional guidance for the safe integration of space launch and re-entry activities within European airspace. It highlighted the multidisciplinary nature of the project, involving aviation and space experts from multiple States and organizations, and outlined progress toward completion of the STO EUR guidance document by June 2026. The guidance is being developed in alignment with relevant ICAO provisions, regional documents, and international space law, and is intended to support coordinated planning, risk assessment, airspace management, aeronautical information publication, operational execution, and post-operation review for STO activities while preserving State sovereignty and supporting cross-border cooperation.

The presentation emphasized the guidance’s strong focus on airspace coordination, collaborative decision-making, flexible use of airspace principles, and civil-military coordination to safely integrate growing space transport activities while minimizing disruption to conventional air traffic. It also outlined key aspects such as hazard area management, aviation impact and safety risk assessments, information exchange among stakeholders, tactical coordination during operations, and timely release of airspace following operations. Overall, the STO EUR guidance was presented as a significant step toward establishing a harmonized framework that supports safe, efficient, and sustainable growth of space transport operations while protecting air traffic management resilience and network performance in the EUR Region.

SAT-IMG/07 Decision 02: Operationalization of the Space Transport Operations (STO) Task Force	
Why	<i>That to support the effective coordination of launching and recovery of space vehicles through SAT airspace</i>
What	<i>Coordinate the expeditious implementation of the SAT STO Task Force</i>
Who	<i>Secretariat</i>
When	<i>by SAT IMG 8</i>

2.2.20 Flight Planning Issues

No papers were presented on this subject

2.2.21 NAT Space Weather Exercise (PPT02J)

The Meeting noted an update on the NAT Space weather exercises and future planned activities.

2.2.22 SAT SDR (WP02K)

The Meeting noted that no progress was reported so far on this subject and further discussions would take place at the next meeting.

AGENDA ITEM 3. AIRSPACE AND ATS ROUTE IMPROVEMENTS (IMG only)

3.1 EUR/SAM corridor improvements

3.1.1 Unified and Standardized Aeronautical Information Circular (AIC) for PBCS implementation in EUR/SAM Corridor (WP03A).

This presentation proposed a harmonized and standardized Aeronautical Information Circular (AIC) format for implementing Performance-Based Communication and Surveillance (PBCS) across SAT States in the EUR/SAM Corridor, using Brazil's November 2025 AIC as a reference model. The objective is to improve consistency, interoperability and operator understanding by providing a common framework aligned with ICAO provisions, while allowing States to adapt the template to their own operational environments. The proposed unified AIC would support clearer communication of PBCS requirements, implementation phases and separation minima, while simplifying future updates as ICAO guidance evolve.

The paper also accentuated a phased PBCS implementation roadmap from November 2026 to October 2027, including progressive reductions in lateral and longitudinal separation minima and the eventual introduction of ADS-C distance-based separation during climb and descent. The takeaway from this presentation was that a common AIC structure is a key enabler for coordinated PBCS implementation, supporting enhanced safety, capacity, efficiency and seamless operations across the EUR/SAM Corridor.

SAT-IMG/07 Decision 03 : PBCS implementation publication	
Why	<i>That to support the effective implementation of PBCS in EUR/SAM Corridor</i>
What	<i>Coordinate the timely publication of AIC pertaining to the implementation of PBCS phase I at least 2 AIRAC Cycles before the effective date</i>
Who	<i>Secretariat</i>
When	<i>Always before the effective AIRAC date</i>

3.1.2 EUR-SAM Corridor PBCS IT Report (WP03B)

This report was an update from ENAIRE, on behalf of ESCIT, regarding the progress of the EUR/SAM Corridor Performance-Based Communication and Surveillance (PBCS) Implementation Team. The update highlighted continued efforts to maintain and refine a harmonized implementation checklist and to ensure coordinated, safe, and efficient preparation for the phased introduction of PBCS operations. In line with previous decisions, the Implementation Team is actively updating the checklist and associated implementation plan, which will remain under review at future SAT IMG meetings. The first phase of PBCS implementation is planned for November 2026.

Progress across the implementation workstreams indicates that several foundational elements, including RCP/RSP specifications, implementation planning, and aircraft operator readiness, have largely been completed. However, a number of activities remain ongoing, particularly in areas such as national policy alignment, ATC training, operational procedures, automation system updates, and stakeholder awareness. Key deliverables—including safety assessments, letters of agreement, operational manuals, and contingency arrangements—are at various stages of completion, with most targeted for finalization in advance of the implementation date. Post-implementation monitoring frameworks are also under development to support continuous oversight once operations commence.

3.1.3 AORRA developments

The Meeting discussed the status of implementation of projects for the improvement of air traffic services in the AORRA as well as coordination issues. It was noted that while significant progress was observed in the improvement of ATS in the EURSAM corridor through various projects such as PBCS, there was no clear vision nor roadmap on the implementation of similar initiatives in the AORRA part of SAT.

Furthermore, some discrepancies are noted in the development and implementation of ATS contingency plan in different AORRA FIR.

The Meeting noted these issues as risks to the harmonious conduct of ATS operations in the SAT. It was identified that the observed imbalance and unharmony between EURSAM corridor and AORRA and between FIRs in AORRA can be attributed to lack of coordination. The Meeting was recalled of the existence of the AORRA Implementation Team (AOIT) which went dormant after the restructuring of the SAT in 2021. AOIT is a SAT IMG working group that was established to cater for ATS implementation matters pertaining to AORRA.

The Meeting reached consensus on the need to reinstate the AOIT to ensure coordinated and harmonious implementation of ATS in AORRA. The following decision was made in support of the discussion on AORRA.

SAT-IMG/07 Decision 04: Restart of the AORRA Implementation Team (AOIT)	
Why	<i>That to support ATS implementation matters pertaining to AORRA</i>
What	<i>a) AOIT to restart its activities with core members ATNS, ASA S.A, ASECNA, DECEA, DSNA, ENNA, GCAA, TTCAA, IATA</i> <i>b) ATNS to act as the Team coordinator, and</i> <i>b) Secretariat to coordinate the nomination of focal points</i>
Who	<ul style="list-style-type: none"> • <i>ATNS</i> • <i>Secretariat</i>
When	

3.2 Other airspace or ATS Route improvement activities

3.3 South American Digital Network (REDDIG) - (IP03D)

This information paper presented the status, operational experience, and evolution of the South American Digital Network (REDDIG), a key regional infrastructure supporting CNS/ATM services across the South American Region. Implemented within an ICAO Technical Cooperation framework, REDDIG operates as a resilient multiservice network integrating voice, data, surveillance, and meteorological communications through hybrid IP/MPLS and satellite architecture. The network interconnects multiple States within and outside the region and is supported by a robust ICAO-led governance structure through the REDDIG Coordination Committee.

REDDIG supports critical services such as AMHS, AIDC, ATS voice, surveillance data exchange, and meteorological information sharing, ensuring operational continuity, interoperability, and regional coordination.

The paper further highlighted the ongoing transition towards REDDIG III, envisaged as a more flexible, scalable, and service-oriented architecture aligned with ICAO’s ATN/IPS concept, incorporating enhanced resilience, cybersecurity, and traffic management capabilities. In parallel, it highlighted opportunities for strengthening interregional cooperation between the SAM and WACAF Regions through expanded interconnections aimed at improving redundancy, route diversity, and contingency preparedness. The potential deployment of additional connectivity capabilities, including in West Africa, was identified as a means to complement existing systems without duplicating infrastructure. Overall, REDDIG was presented as a successful regional cooperation model with significant potential to enhance global interoperability, resilience, and efficiency in aeronautical telecommunications.

SAT-IMG/07 Action 04: CNS coordination and activities	
Why	<i>That to support CNS coordination and activities</i>
What	<i>Include discussions on REDDIG III and support coordination of CNS-related initiatives, including AIDC implementation and associated technical workshops</i>
Who	<i>Secretariat</i>
When	<i>2026–2027 work programme</i>

- 3.4 Operational Impact of Space launch activities on Dakar Oceanic FIR - Coordination Measures and Lessons Learned – (WP03E). ASECNA presented this working paper on the operational impact of recent commercial space launch activities on the Dakar Oceanic FIR. It was pointed up that three launch events between May 2025 and February 2026 generated hazard areas and debris risk corridors extending into or near the FIR, necessitating enhanced coordination, issuance of NOTAMs, and implementation of Traffic Management Initiatives (TMIs). These activities were managed through multinational coordination frameworks, including CANSO and CADENA, supported by real-time communication mechanisms and pre-launch stakeholder engagement. While no pre-emptive closures were required within Dakar Oceanic FIR, the events demonstrated increasing interaction between space operations and civil aviation.

As per the presentation, key lessons were outlined as learnt, including the importance of timely and stable notification of launch activities, the need for standardized terminology between the aviation and space sectors, and the operational challenges posed by concurrent launches and extended malfunction closure periods.

It also emphasized the value of traffic pre-analysis, structured contingency planning, and formal coordination arrangements. The meeting was invited to note the experiences shared and consider proposed actions, including the development of regional guidance, standardized procedures, and enhanced coordination frameworks to support the safe integration of space transport operations within the SAT region.

AGENDA ITEM 4. SOG working plan (SOG only)

4.1 SAT SOG WORK PROGRAMME PROPOSAL FOR 2027-2028 (WP04A)

The SAT SOG Work Programme for 2026–2028 provides a structured approach to managing safety initiatives in the South Atlantic region, building on the evaluation of 2025 activities and strengthening risk mitigation, coordination, and regulatory compliance.

It promotes improved stakeholder engagement through pre-scheduled (preferably semester-based) meetings and emphasizes the need for flexibility to adapt to emerging safety issues via periodic updates. The Programme SAT SOG is a kind of minimum framework. Any other meetings must be convened as needed, by coordinators or Secretariat. IATA raised the deadline November 2026 for PBCS implementation. Meetings on that matter are needed. SATMA commented about difficulty of two simultaneous meetings, therefore, the Secretariat will reinforce coordination between IMG and SOG, attempting 2 weeks separation between meetings. The 2026 programme has already been endorsed, while the proposed 2027–2028 plan will be submitted for approval at Fourth SAT Steering Group meeting – SAT SG/4. (See **Appendix E**).

AGENDA ITEM 5. SAT SOG Project Teams update (SOG only)

5.1 RMA H/S PT Report to the SOG (WP05A)

The SAT SOG Regional Monitoring Agency Harmonization and Standardization Project Team identified a set of recommended deliverables, shown in table below.

#	Deliverable	Target Date	Status
1	SAT RMA H/S PT SAT SG Contributing Bodies Communication and Collaboration Plan (ref. SAT SOG/1 SOD, Appendix I)	SAT SOG/02	Complete
2	Standardized SAT-specific traffic sample data collection template (Ref. SAT/SOG/1-WP/3.3, SAT/SOG/1-WP/3.4)	Final draft TBD*	First draft complete Final version in progress
3	Know Your Airspace Analysis for the South Atlantic Area (ref. SAT/SOG/1-WP/2.80, Action SOG01-05)	Final draft TBD*	First draft complete
4	Action plan for recommended SAT SOG future actions supporting standardization and harmonization of data collection, processing, and dissemination among the three SAT RMAs (Ref. SAT/SOG/1-WP/3.3, SAT/SOG/1-WP/3.4)	TBD*	
5	Standardized collision risk assessment methodology (ref. SAT/SOG/1-WP/5.7)	As needed	Two workshops completed
6	Action plan for conducting workshops to promote implementation of standardized data collection and collision risk assessment methodology among the SAT RMAs. (ref. SAT/SOG/1-WP/5.7)	30 Mar 2024	Complete
7	Data field and format requirements for developing a centralized SAT RMA database for collection of LHDs, LLDs, LLEs	TBD*	In Progress

**Dependent on SAT Delineation*

5.2 SAT SOG RMA HSPT Recommended Deliverables

The project team held two meetings since SAT SOG/06. The eleventh meeting of the SAT RMA HS PT was held on 22 January 2026 with a follow-up meeting held in February. The meeting welcomed several new members representing the ARMA, CARSAMMA, and SATMA RMAs.

During SAT SOG/06, differences in collision risk data presented by SAT RMAs—such as traffic counts, large height deviations, and resulting estimates—were observed and initially raised concerns about possible variations in methodology. It was later clarified that these differences stem from each RMA reporting on its designated FIR area of responsibility within the SAT Region, rather than from inconsistent analytical approaches, as all RMAs apply the same collision risk methodology.

Building on this understanding, the meeting agreed on the need to generate a single, unified collision risk estimate for airspace portions with similar operational characteristics, notably the EURSAM Corridor, and to establish coordinated mechanisms and standardized data collection practices across RMAs. Progress toward this objective includes development of a common SAT-specific traffic data template and a broader collaborative framework.

In parallel, work is ongoing to define SAT airspace segments with homogeneous characteristics, supported by a Know Your Airspace (KYA) study initiated in November 2023, which examines operational patterns, traffic, and key parameters for safety assessment and monitoring. Additionally, the role of RMAs in supporting the PBCS monitoring program was clarified, emphasizing that while ANSPs retain responsibility for pre- and post-implementation safety assessments, including the analysis of large lateral and longitudinal deviations for horizontal collision risk, RMAs remain primarily responsible for monitoring vertical performance within the RVSM environment, while contributing to broader surveillance and communication performance oversight.

Collecting and assessing LLDs and LLEs could be added to an RMA's list of duties and responsibilities; however, this should be coordinated with and agreed by the appropriate regional planning group and all stakeholders involved.

It is recommended that:

- a) If it is agreed that the SAT RMAs will collect and assess LLDs and LLEs, then their TORs should be amended by the appropriate PIRG; and
- b) Mechanisms be established to begin collecting LLDs and LLEs as soon as practical

The meeting adopted the following Action:

SAT-SOG/07 Action 05: Secretariat coordination with PIRGs for assessing LLDs and LLEs.	
Why	<i>To define the processes, as needed, for amendment of Terms of Reference to allow RMAs collecting and assessing LLDs and LLEs.</i>
What	<i>To coordinate and submit to the respective PIRGs an amendment of Terms of Reference, to include mandate for collecting and assessing LLDs and LLEs.</i>
Who	<i>Secretariat WACAF/ESAF Secretariat SAM</i>
When	<i>2026–2027 work programme</i>

5.3 ASR PT update to the SOG

Coordinator of Annual Safety report PT provided status of the project. It was mentioned that CRA of CARSAMMA has already received, but only for SBAO. Also, the Coordinator stated the information supplied by SATMA during the meeting is satisfactory and will be processed in the Report. For additional information is Planning to invite SATMA to the ASR PT meeting not later than early June 2026.

5.4 SAT SCRUTINY GROUP DISCUSSIONS (WP05C)

The paper described how the SAT Safety Oversight Group (SAT SOG) is working to establish a regional “scrutiny” process for safety analysis in the South Atlantic. This follows the restructuring of the SAT framework, where SAT SOG is responsible for monitoring safety performance, ensuring proper use of occurrence data, and providing statistical analysis and advice to the SAT Steering Group. A key point is that this regional scrutiny should not duplicate the work of Regional Monitoring Agencies. RMAs already analyze individual safety events, so SAT SOG is expected to operate at a higher level by reviewing aggregated results and identifying regional trends and systemic risks.

The intended workflow is that RMAs collect and analyze data, then share their results with SAT SOG, which uses them to detect performance issues and, if needed, issue recommendations to service providers, operators, or regulators. These findings also support regional safety reporting.

However, implementation remains challenging. The main issues include lack of standardized data, gaps in parts of the AFI region, and the need for stronger analytical contributions and coordination among RMAs and ICAO offices. Brazil's support for the organization of the Scrutiny Activities was commended by the meeting, which will present further progress for the SAT SG/8 meeting

AGENDA ITEM 6. SAT Collision Risk Assessments (CRA) (SOG only)

6.1 ARMA ACTIVITIES (IP06A)

This paper addressed ARMA's work supporting Collision Risk Assessment in the SAT region by collecting and verifying air traffic data over the Atlantic from selected AFI FIRs, specifically Luanda, Accra, and Johannesburg Oceanic. The data must include all required parameters defined in Doc 9937 to enable accurate calculation of flight hours and risk levels. The analysis helps identify potential safety issues where the Target Level of Safety could be exceeded and supports the development of mitigation measures. The meeting took note of the information presented.

6.2 CARSAMMA ACTIVITIES (WP06B)

The paper exposed that from January to December 2025, three LHD reports involving the Atlântico FIR were received and processed. The Table Below summarizes the LHD reports, highlighting the involved FIRs, event locations, LHD durations, event codes, and assigned risk values.

Risk value calculation: The risk value is calculated following a method consistent with the Safety Management System (SMS) framework outlined in Doc 9859. Values between 1 and 20 represent a low risk and are colored green. The medium risk, represented in yellow, ranges between the values 21 and 75, while high risk, between 76 and 100, is represented in red.

LHD Code Definitions as per CARSAMMA categorization:

- a) E1 stands for Poor coordination; and
- b) E2 stands for Lack of coordination.

Table - Summary of LHD reports involving the Atlântico area.

Report number	Reporting FIR	FIR of occurrence	Position of risk	Duration (sec)	LHD code	Risk value
171	ATLÂNTICO	RECIFE	GARUP	60	E1	18
178	ATLÂNTICO	MONTEVIDEO	3412S 03410W	60	E2	22
383	ATLÂNTICO	ABDJAN	0621S 01525W	60	E2	17
384	ATLÂNTICO	ABDJAN	1000S 01000W	60	E2	17

The LHD reports from 2025 highlight ongoing coordination issues in the Atlântico FIR. With all events classified as medium risk, the FIRs involved in the report will address these issues at the next GREPECAS Scrutiny Group (GTE) meeting.

6.3 SATMA ACTIVITIES (WP06C)

SATMA recalled that, in the ICAO context, assessments are conducted to analyse the conditions for the safe application of RVSM and RNP 10 in the EUR/SAM Corridor, covering the ACCs within the Spain/Canarias FIR, Cabo Verde/Sal Oceanic FIR and Senegal/Dakar Oceanic FIR. Data from the Brazil/Atlantico FIR have been excluded from the scope of this paper, as this portion of the corridor is analysed separately by CARSAMMA.

SATMA has already provided SAT States in previous SOG meetings regarding data and usage of SLOP procedures to be included in the methodology of Collision Risk Assessment (EUR/SAM Corridor). The assumption is that obtained SLOP Data in Canarias FIR will be assumed for the rest of the EUR/SAM Corridor. Next table shows the SLOP Data per analyzed year. Although the distribution is similar, the total figures using SLOP is higher in 2025.

	Centerline	1-Mile Right Offset	2-Mile Right Offset
2023	60.6%	27.3%	12.1%
2024	60.3%	27.9%	11.9%
2025	53.8%	34.4%	11.8%

Table 1.- SLOP distributions

The updated methodology defines the total vertical collision risk as the sum of the technical and operational risk components. It is assumed that a common collision risk model is applicable to all contributing components. The parameter N represents the number of fatal accidents per flight hour resulting from a loss of planned vertical (azimuth) separation. Accordingly, the total vertical risk is expressed as:

$$N_{az}^{total} = N_{az}^{tech} + N_{az}^{wl} + N_{az}^{(cl/d)}$$

where the terms correspond respectively to the technical risk, the risk associated with incorrect flight level (wrong level), and the risk related to climb or descent deviations.

As an example, the vertical collision risk associated with an incorrect flight level assignment is evaluated using the same collision risk modelling framework applied to the other components, ensuring methodological consistency across all elements of the assessment.

The final term, which applies to all technical risk components, is evaluated specifically at airway crossing points. This evaluation considers only planned or strategic crossings and does not take into account crossings that are executed tactically during operations. As such, the CRA includes only predefined and structured airway crossing points in the technical risk calculation. The total lateral collision risk is defined as the combination of technical and operational risk components.

However, in the absence of Performance-Based Communication and Surveillance (PBCS) implementation, the lateral collision risk is currently assumed to be limited to the technical component. Nevertheless, the methodology has been structured in such a way that it can incorporate operational risk contributions in the future, particularly those derived from Large Lateral Error (LLE) or Large Longitudinal Deviation (LLD) once sufficient data becomes available.

SATMA intends to initiate the calculation of the Altimetry System Error (ASE) using ADS-B data provided by ENAIRE within the Canarias FIR, with the analysis limited to traffic operating along the EUR/SAM Corridor. The initial dataset required for this activity has already been obtained. This work is being carried out in coordination with the Federal Aviation Administration (FAA) under the framework of the SAT RMA Harmonization and Standardization Project Team.

Once the ASE evaluation is completed, several key parameters used in the Collision Risk Assessment will be updated, resulting in improved accuracy of the risk estimates. Consequently, the CRA results for the year 2025 should be considered provisional until the ASE analysis and corresponding model refinements have been fully finalized.

The Vertical collision Risk estimation (Naz) and the Lateral collision Risk estimation (Nay) are presented in the Tables Below. All the values are below TLS.

2025			
EUR/SAM Corridor*	Vertical Collision Risk Estimation (Naz)		
	TOTAL	Tech	Ope
Naz (SLOP)	1.36E-10	1.26E-14	1.36E-10
Naz (Not SLOP)	3.10E-10	4.35E-14	3.10E-10
Target Level of Safety (TLS)	5.00E-09	2.50E-09	5.00E-09
* See scope of this analysis			

Table - N_{az} for 2025

2025			
EUR/SAM Corridor*	Lateral Collision Risk Estimation (Nay)		
	TOTAL	Tech	Ope
Nay (SLOP)	2.26E-10	2.26E-10	
Nay (Not SLOP)	2.14E-10	2.14E-10	
Target Level of Safety (TLS)	5.00E-09	2.50E-09	5.00E-09
* See scope of this analysis			

Table - N_{ay} for 2025

SATMA informed that forthcoming Working Papers on Collision Risk Assessment will incorporate a defined set of Safety Key Performance Indicators (KPIs), as outlined in Table below. The meeting took note of the detailed information.

sKPI	Description	2025	2024
SAT.SKI.01	Number of accidents	0	0
SAT.SPKI.02a	Number of LHD events divided by number of flight hours flown in the COVERED SAT AREA	7.82E-05	8.91E-05
SAT.SPKI.02b	Overall time of LHDs at unprotected flight level divided by total duration of flights in minutes	8.28E-04	1.01E-03
SAT.SPKI.03a	Number of Lateral deviations divided by number of flight hours flown in the COVERED SAT AREA	0	0
SAT.SPKI.03b	Overall time of lateral deviations on an unprotected profile divided by total duration of flights in minutes	0	0
SAT.SKPI.04	Number of losses of separation events divided by number of flight hours flown in the COVERED SAT AREA	0	0
SAT.SKPI.05a	Number of coordination errors divided by number of flight hours flown in the COVERED	5.06E-05	7.86E-05
SAT.SKPI.05b	Overall time of coordination errors spent at unprotected profile divided by total duration of flights in minutes	4.97E-02	5.66E-02
SAT.SKPI.06a	Collision Risk Estimate (CRE) in the vertical dimension	1.36E-10	1.57E-09
SAT.SKPI.06B	Collision Risk Estimate (CRE) in the lateral dimension	2.26E-10	4.19E-10

Table 1.- SKPI EUR/SAM Corridor

6.4 MONITORING AND SAFETY EVETS REPORTING

6.5 LHD REPORTS FROM FIRS MONITORED BY ARMA (IP08B)

The paper reports 19 Large Height Deviations in 2025, mainly caused by coordination failures between ATS units. A key issue is the intermittent coordination link between Johannesburg and Luanda, which sometimes forces message relay through third ATS units, increasing the risk of errors or missed coordination. ATNS is working on resolving the technical problem. The meeting took note, without proposing specific actions.

6.6 LHD REPORTS – THE EUR/SAM CORRIDOR 2025 (IP06B)

The paper elaborated by *LHD Reporting Team – The EUR/SAM Corridor* analyzed Large Height Deviations (LHDs) in the EUR/SAM Corridor for 2025, used as input for collision risk assessment by SATMA. A total of 25 LHD reports were received, of which 23 were considered relevant after excluding those outside RVSM airspace.

The overall safety performance of the corridor is assessed as stable, with no significant variation in the number of reported LHD events compared to 2024. The analysis shows that deviations are not confined to specific locations, and only about 58.8% occurred over established airways, indicating that such events are geographically dispersed and not necessarily tied to structured routes.

From an operational perspective, the most frequent cause of LHDs was related to coordination errors between air traffic control units during the transfer of responsibility, accounting for about 65% of cases. Another notable category involved flight crews climbing or descending without clearance, which, although fewer in number, can significantly affect safety depending on their duration and magnitude. Mitigation measures such as ADS-C and CPDLC have been identified as key tools to reduce both types of errors by improving situational awareness and communication.

The study highlights that the contribution of LHDs to overall collision risk remains controlled, with reduced impact compared to previous years, indicating that mitigation strategies are effective. It also notes the importance of continued improvements in communication systems and operational procedures, particularly in environments without mandatory data link usage.

To further enhance safety, several recommendations are proposed, including reinforcing the use of ADS-C and CPDLC, maintaining strategic lateral offset procedures (SLOP), and avoiding flight level changes near boundary areas when communication is uncertain. The report also stresses the importance of comprehensive reporting and investigation of all large deviations, as well as strengthening training for both controllers and flight crews to improve awareness and prevent recurrence.

Finally, the document outlines future actions, including the development of standardized procedures for reporting not only LHDs but also lateral and longitudinal deviations, aligning with ICAO guidance. The paper concluded that safety in the EUR/SAM Corridor remains stable but requires continued vigilance, improved reporting, and enhanced use of modern communication technologies to sustain and further reduce collision risk.

6.7 AFI ATS Event Analysis 2023-2024 – AAMAC / AEAG (WP06D)

AFI ATS Events Analysis Group (AEAG) identified that ATS safety exposure in the AFI/SAT context is dominated by operational occurrences during en-route phases, with relatively limited and uneven data preventing robust trend analysis. In the 2023 -2024 period 321 events for 2023 and 134 for 2024 were analyzed, but from only 16 of 31 FIRs of the AFI Region, meaning the dataset is not regionally representative. Within the SAT area, Dakar and Sal FIRs account for a significant portion of reports, with some events occurring in oceanic sectors and involving issues such as unauthorized climb or descent and ATC coordination errors. The analysis identifies a clear concentration of risk drivers linked to coordination failures, procedural non-compliance, human performance limitations and monitoring weaknesses.

Human factors include reduced situational awareness, insufficient traffic monitoring and errors in judgement, pointing to workload and cognitive constraints in procedural environments. Despite these insights, the main limitation identified is the inconsistency and insufficiency of reporting across FIRs and between years, which constrains the ability to identify trends, prioritize mitigation measures and support evidence-based regional decisions. The paper therefore stresses that improving consistency, completeness and regularity of safety data submission is essential to enable effective safety analysis and enhance operational safety in the SAT region.

In view of the analysis and information presented under Agenda Item 6, the meeting adopted the following Action:

SAT-SOG/07 Action 06: Safety data exchange for CRA	
Why	<i>That to support SAT collision risk assessment activities</i>
What	<i>To ensure timely sharing of AFI safety scrutiny data to support SAT collision risk assessment activities</i>
Who	<i>ARMA, in coordination with SATMA</i>
When	<i>Report progress in SAT SG/4</i>

AGENDA ITEM 7. SAT Documentation

7.1 Proposed amendments to EUR/SAM corridor Contingency Plan (SAT DOC 002) in the Canarias FIR. (WP07A)

ENAIRES presented a proposal to amend SAT Doc 002, Contingency Plan for the EUR/SAM Corridor, in order to improve alignment with adjacent units within the Canarias FIR and ensure consistency with current operational practices. It was noted that an existing inconsistency in the document affects coordination, particularly regarding contingency routing along airway UN857. The proposed amendment clarifies the routing by reflecting actual operations, whereby flights proceed to point LZR before joining airway N871 and exiting the Canarias FIR via KORAL. This change is intended to enhance clarity, coordination, and interoperability during contingency situations. In addition, the meeting was informed of the need to update SAT Doc 002 to reflect changes in waypoint nomenclature introduced through AIRAC 10/2025, which are already in operational use. Specifically, the replacement of NORED with ERONI on UN741 and USOTI with YORGI on UN866 was highlighted. These updates are necessary to ensure the document accurately reflects the current operational environment. The meeting was invited to review and amend the document accordingly and provide further guidance as necessary.

7.2 Amendment to the SAT Handbook (SAT DOC 001). (WP07B)

The paper submitted by SAT DMO proposed the Second Edition (2026) of the SAT Handbook, aimed at modernizing SAT governance.

It introduces an updated organizational structure with the SAT Steering Group, SAT Implementation Management Group, and SAT Safety Oversight Group, strengthens roles, and formalizes document management. It also establishes a clear framework for document approval, including distinctions between editions and revisions and a fast-track process for operational and technical changes. Overall, it consolidates stakeholder inputs and aligns SAT with ICAO global plans, improving coordination, safety, and efficiency in the South Atlantic.

The DMO presented the consolidation of all contributions received by the end of January 2026 from SAT Members and Observers. This new draft version of the SAT DOC 001 - Second Edition was made available by DMO (*Appendix VV – Separate FILE*), to be appreciated at an extraordinary meeting of the SAT SG to ensure that this edition reflects a consensus view of the SAT Group's mode of operation, based on the feedback received. Comments were made by the meeting regarding the importance of this new draft version maintaining Spain and Portugal as SAT Member States.

7.3 Contingency Plan Proposal for Amendment (SAT DOC 002) (WP07C)

ASECNA proposed amendments to the South Atlantic ATM contingency plan based on operational experience and feedback from States and air navigation service providers. Its aim is to improve safety, efficiency, and continuity of operations, particularly within the EUR/SAM corridor. See the proposed changes described in the *Appendix KK in Separate File*. The current contingency route structure shows limitations in terms of efficiency, predictability, and adaptability, especially in the EUR/SAM corridor. The present configuration forces upstream air traffic service units to reorganize traffic using contingency flight levels while downstream units must subsequently restore aircraft to their normal levels. This creates additional workload for both controllers and flight crews, increases the risk of coordination errors, and may lead to conflicts. It also generates suboptimal flight profiles, resulting in higher fuel consumption, longer flight times, and reduced operational performance.

A major structural issue is the absence of a contingency route linking Cayenne FIR with Dakar Oceanic FIR. This gap weakens connectivity between regions and reduces the ability to maintain continuity of services during disruptions. The record of amendments in the current document lacks sufficient detail to ensure proper traceability of changes. In addition, the amendment process is considered too rigid for an operational guidance document. The proposal advocates a more flexible approach, simplifying update procedures, avoiding unnecessary formal exchanges, and treating the document as non-binding guidance to better support timely updates.

The proposal recommends redesigning contingency routes to reduce repeated flight level changes and enable more stable and efficient flight profiles, minimizing deviations from optimal trajectories while aligning with ICAO principles of safety, efficiency, and environmental responsibility.

It also introduces a new contingency route between Cayenne FIR and Dakar Oceanic FIR to ensure continuity of service and strengthen inter-FIR connectivity. An example route includes MAVKO, GOGSO, NATAS, and ERNEK as a bi-directional connection. The proposed changes reduce workload for controllers and pilots and simplify coordination between air traffic service units. Safety is enhanced through reduced risk of errors and conflicts. Efficiency improves through more optimal trajectories, lower fuel consumption, and reduced delays. Network resilience is strengthened by ensuring continuity of service and improving the management of disruptions across FIR boundaries.

The meeting adopted the following Decisions:

SAT-IMG/07 Decision 05: Approval of PfA of SAT Doc002	
Why	<i>The proposed changes reduce workload for controllers and pilots and simplify coordination between air traffic service units. Safety is enhanced through reduced risk of errors and conflicts.</i>
What	<i>The proposed amendment of SAT Doc002 is approved. Dissemination of the new version by 30 June 2026</i>
Who	<i>-Secretariat -SAT DMO</i>
When	

SAT-IMG/07 Decision 06: Establishment of the SAT Contingency Technical Team	
Why	<i>That to ensure timely maintenance and harmonized implementation of contingency plan in the SAT area</i>
What	<i>a) To establish a SAT Contingency Technical Team (SCTT) b) SAT Contingency Technical Team (SCTT) is composed of all SAT ANSPs led by ASECNA; and c) Secretariat to coordinate the nomination of focal points for the SCTT d) SCTT to coordinate with relevant SAT bodies to ensure consistent implementation through AIPs and operational documentation.</i>
Who	<i>-Secretariat -SAT Contingency Technical Team (SCTT)</i>
When	

AGENDA ITEM 8. Coordination between SAT IMG and SAT SOG

8.1 Updates on Phase I Delineation Activities (WP08A)

Updates from the United States on the status of Phase I activities for the delineation of the South Atlantic (SAT) Area were presented, noting that the region remains undefined due to inconsistencies and gaps in data submitted by SAT member States. While States had responded to earlier tasking, the information provided contained errors, incomplete elements, and non-standardized formats, particularly in the submission of coordinates, vertical limits, and airspace classifications. These issues have made it difficult to accurately map and determine the boundaries of the SAT Area, with some coordinates appearing to overlap domestic airspace and others lacking clarity due to formatting variations and possible data entry errors.

To address these challenges, a standardized template has been proposed to harmonize data collection and facilitate completion of Phase I delineation activities. The template includes clear guidance on coordinate formatting, sequencing, and required supporting information, and is intended to enable States to verify and correct previously submitted data. It was further recommended that each SAT member State designate a focal point for coordination, working in collaboration with the relevant ICAO Regional Offices to validate inputs, resolve outstanding issues, and ensure timely progress. The meeting was invited to review and approve the template, support enhanced coordination mechanisms, and provide additional guidance to advance the delineation process.

SAT-IMG/07 Action 07 (WP08A): SAT delineation project	
Why	<i>That to support safety monitoring and CRA activities</i>
What	<i>Secretariat to coordinate nomination of State focal points and States to review and validate submitted delineation data (including coordinates, formats and vertical limits).</i>
Who	<i>-Secretariat -States</i>
When	

8.2 PBCS Monitoring and Reporting Guidance Phase 1 (EUR/SAM CORRIDOR) – (WP08C)

The meeting also reviewed a working paper presented by SATMA on the development of PBCS Monitoring and Reporting Guidance for Phase 1 of the EUR/SAM Corridor within the South Atlantic Area. The guidance, adapted from NAT Doc 011 to suit the relatively less complex corridor environment, is intended to support mandatory post-implementation monitoring of PBCS operations. Draft versions of the guidance were provided, and the meeting was invited to review and endorse the material as an initial version ahead of PBCS implementation.

It was noted that the development of the guidance has been largely agreed with by Air Traffic Service Providers (ATSPs) and Regional Monitoring Agencies (RMAs), in line with previous SAT IMG decisions. However, a discrepancy was identified concerning the temporary responsibility for handling reports of non-compliance with RCP/RSP specifications. To address this, a revised version of the guidance was presented, removing the conflicting provision and clarifying that such arrangements would only apply during the initial implementation phase. The meeting was invited to amend, endorse the proposed material, and provide further direction as required.

Being given the need for additional coordination and validation before the target date of PBCS implementation in the EURSAM corridor, the meeting agreed to organize an extraordinary SAT IMG/SOG meeting in virtual mode by end of July 2026.

8.3 PBCS Monitoring Data Flow implementation in the Brazilian FIR (SBAO)- (WP08D)

Brazil and CARSAMMA presented a paper on PBCS monitoring data flow implementation in the Brazilian FIR (SBAO), outlining Brazil's approach to implementing a structured monitoring framework for Performance-based Communication and Surveillance (PBCS) using existing national and regional structures.

The presentation described a three-level monitoring model involving operational monitoring by CINDACTA III/TIOp Recife, national coordination by ASEGCEA, and regional oversight by CARSAMMA as the Regional Monitoring Agency. It spotlighted how communication and surveillance performance data, operational deviations, and compliance information flow through this structure to support data integrity, traceability, timely reporting, and corrective actions, in line with ICAO guidance and without creating new institutional arrangements.

The paper emphasized Brazil's strong implementation readiness, supported by established regulations, defined roles and responsibilities, standardized reporting processes, automated monitoring tools, and existing interfaces with the RMA. Brazil and CARSAMMA presented this framework as a practical implementation model and reference for harmonizing PBCS monitoring practices across the South Atlantic airspace, while inviting the meeting to note the proposed data flow, recognize the use of existing structures, and consider the approach as a regional best practice.

8.4 PBCS Monitoring Reports Developed by Brazil (WP08E)

The meeting was presented with a working paper by Brazil and CARSAMMA on the development of automated PBCS non-compliance monitoring forms to support the oversight of datalink performance within the Atlántico FIR. The initiative is aligned with ICAO Doc 9869 and aims to systematically collect, analyse, and evaluate CPDLC communication and ADS-C surveillance performance against required RCP and RSP standards. The automated reports consolidate operational data, including aircraft capabilities declared in flight plans, and enable the identification of potential performance degradations, thereby supporting safety assurance and the effective application of PBCS separation minima.

It was noted that Brazil has developed a comprehensive monitoring framework comprising a suite of main and complementary forms, including reports on datalink service availability, aircraft movements, and detailed RCP/RSP performance metrics by aircraft, operator, and communication type. These reports are generated within the CINDACTA III environment and support both local technical analysis and regional monitoring activities through data sharing with CARSAMMA.

This approach contributes to harmonized regional monitoring practices and enhances the ability to detect trends, support investigations, and implement mitigation measures. The meeting was invited to take note of the monitoring tools as a potential reference for broader application within the SAT.

SAT-IMG/07 Decision 07: Coordination between SAT IMG and SAT SOG on PBCS	
Why	<i>That to support PBCS implementation, monitoring and reporting,</i>
What	<i>Continue coordination activities related to PBCS implementation, monitoring and reporting</i>
Who	<i>SAT IMG and SAT SOG</i>
When	<i>until full implementation</i>

8.5 TRIALS PBCS REPORT - FEBRUARY 2026 (IP08C1)

SATMA reported on the results of the Local PBCS Monitoring and Reporting trials conducted in February 2026 within the EUR/SAM corridor by ENAIRE, ASA, ASECNA, and DECEA. Its main purpose is to capture the initial lessons learned from applying PBCS monitoring processes in an operational context, based on the ICAO Doc 9869 framework.

From a technical perspective, the trials confirm that implementing local PBCS monitoring is significantly more complex than the guidance alone suggests. While Doc 9869 defines the required performance metrics such as Actual Surveillance Performance (ASP) and Actual Communication Performance (ACP/ACTP), the practical application requires substantial data processing, coordination among air navigation service providers, and system-level adaptations.

Regarding CPDLC data, although ICAO guidance allows flexibility in handling certain message types, the participating providers agreed to retain contact instruction messages (UM117–UM123). This decision was made to preserve sufficient data volume for reliable performance analysis, particularly for operators with limited traffic samples. Each participating provider developed its own process for collecting and analysing performance data, producing monthly monitoring reports using agreed templates. These reports assess compliance against PBCS criteria, including end-to-end timing thresholds for surveillance and communications and performance targets such as 95 percent and 99.9 percent compliance levels.

This represents an initial attempt at harmonization, though not yet fully aligned with all provisions of Doc 9869. The results show that coordination among the providers involved was highly effective. All required data was shared in a timely and complete manner, and no additional follow-up actions were necessary to obtain missing information. This indicates that the cooperative framework established for the trials is functioning well and supports the objectives of the initial implementation phase. Several important gaps were identified. Key unresolved issues remain regarding monitoring and reporting scope, including defining the reporting period and deciding whether to report all operational data or only PBCS non-compliance events. These ambiguities highlight the need for formalized procedures and governance.

A major limitation is the lack of full data traceability, as some providers cannot yet track monitoring data end-to-end, affecting reliability and auditability. Ongoing system upgrades are expected to address this, indicating that remaining challenges are primarily operational and technical.

Furthermore, the trials were insufficient to support a comprehensive assessment of PBCS performance. From SATMA's perspective, current results are not robust enough to validate operational application, reflecting the early maturity of the monitoring framework.

Overall, the SATMA report concludes that monitoring activity is progressing well but remains some distance from full operational readiness. Achieving a mature PBCS environment will require further standardization, improved data quality, and consistent implementation across all providers.

The next step is the formal approval of the PBCS Monitoring and Reporting Guidance by the IMG and SOG. Once this framework is agreed, a new set of trials will be conducted under more standardized conditions, and the results will be presented at a future meeting. This step is considered essential to ensure the safe and consistent application of PBCS separations in the EUR/SAM corridor. The meeting took note of the information provided.

AGENDA ITEM 9. AOB AND CLOSING

Any Other Business (AOB)

9.1 No other business was discussed.

Date and venue of the next meetings

- 9.2** An extraordinary joint meeting of SAT IMG/SOG is scheduled in either June or July 2026.
- 9.3** The meeting discussed the dates of the IMG/8 and SOG /8. It was agreed that both meetings will be held from 19 to 21 October 2026 for SAT IMG/8 and from 28 to 30 October 2026 for SAT SOG/8, virtually.

Closing remarks

- 9.4** The closing session was marked by the remarks of the Chairpersons of the SAT IMG and SAT SOG followed by the closing remark of the ICAO WACAF Regional Director Mr. Romain Ekoto in the presence of Mr. Nika Manzi Meheza, ICAO WACAF Deputy Regional Director.

Appendix A
List of Participants

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Appendix B

SAT IMG ACTION ITEM AND DECISIONS LIST

B1-SAT IMG ACTIONS

ID #	ACTION	REMARKS	WHO	WHEN
R-01	Provide State/ANSP Reports including traffic figures and information on implementation activities.	SAT IMG/1 SoD,	All SAT IMG members	Every meeting
R-02	In accordance with the detailed AIDC implementation activity plan for the SAT Region (Appendix D) present updates on AIDC implementation to the SAT IMG	SAT IMG/1 SoD, para. 2.3	Secretariat SAT IMG members	Every meeting
R-04	Collect data on aeronautical mobile services frequency allocation and report to the SAT IMG at each of its sessions	SAT SG/01-03R	SAT IMG members	Every meeting as part of State ANSP report
R-05	Spain /SATMA presents traffic figures for the EUR/SAM corridor with traffic values from the past year (Y-1), the actual/current year (Y) and the next year (Y+1)	SAT IMG/3 SoD	SATMA	Every meeting with DDR data
01-07	Following the assessment of the current implementation activities, prepare a SAT Service Development Roadmap for the coordinated harmonised implementation of operational improvements from 2024 onwards	SAT IMG/1 SoD, Para. 2.12	Secretariat SAT IMG members	After SAT delineation
02-01 SG	Based on the SAT Area description in the Draft SAT Doc002, develop a map of the SAT Area (including EUR/SAM corridor and AORRA) The delineation of the SAT Area be coordinated between SAT IMG and SAT SOG relevant project teams	SAT IMG/2 SoD SAT SG	Secretariat SAT IMG members	<u>Nov 2025</u>
02-06	Collect all the information from State Reports & WPs and develop consolidated AMHS and AIDC implementation status tables	SAT IMG/2 SoD	<u>Volunteer from the group</u>	SAT IMG/07

ID #	ACTION	REMARKS	WHO	WHEN
03-06	SAT ANSPs are invited to provide data on the flight level allocation for flights within the EUR/SAM corridor	SAT IMG/3 SoD	SAT IMG members	SAT IMG/07
04-01	SAT ANSPs to collect data on GNSS Interference (jamming/spoofing) and share information at next SAT IMG	SAT IMG/4 SoD, Para.	SAT IMG members	SAT IMG/07
04-05	Support Côte d'Ivoire in the strenghtening of international SAR collaboration and signing of MoUs	SAT IMG/4 SoD, Para.	Secretariat States	SAT IMG/07
05-01	Continue the implementation of an AMHS link over AFIS NET between Dakar and Madrid	SAT IMG/5 para 2.81	States/ANSPs	SAT IMG/07
05-02	WACAF Secretariat coordinate a meeting of CNS experts, including REDDIG administrator	SAT IMG/5 para 2.84	WACAF	SAT IMG/07
06-01	SAT States are invited to nominate a candidate for the position of SAT IMG Vice-Chairperson before the SAT SG/03 meeting	SAT IMG/6 para x.x	States/ANSPs	SAT SG/03 December 2025
06-02	ANSPs share their experience on STO/HAO coordination and present a WP in line with the SAT SG/02 Decision to the next SAT IMG	SAT IMG/6 para x.x	States/ANSPs	SAT IMG/07
06-03	Coordinate and prepare an update to SAT Doc 002 based on the proposal from Brazil in WP05	SAT IMG/6 para x.x	Angola Brazil Côte d'Ivoire Senegal	SAT IMG/07
06-04	Present the latest developments from the different ICAO activities on GNSS RFI and discuss the operational impacts during a special session at the next SAT IMG	SAT IMG/6 para x.x	Secretariat States	SAT IMG/07
06-05	Present the interoperability issues from the ADS-C and CPDLC implementation in Trinidad and Tobago to the impacted SAT area States	SAT IMG/6 para x.x	Secretariat NACC	SAT IMG/07

Appendix B2- SAT IMG DECISIONS

Reference/Title	Description	Comments	Status
SAT IMG/03-1	That, in support of the various AIDC implementation activities, a technical expert meeting (virtual) be organized in May 2024 with participation of SMEs from the ATM System manufactures to discuss interoperability issues which currently prevent the successful implementation of AIDC between the involved ACCs/OACCs.	Invite all SMEs for a virtual meeting in 2025 Develop an AIDC follow up action plan Present updates at SAT IMG/05	Ongoing
SAT IMG/03-2	That the SAT IMG invites all identified ANSPs to collaboratively coordinate the conduct of AIDC pre-implementation assessments and to determine/develop a detailed AIDC implementation roadmap for the next SAT IMG meeting.	Develop a roadmap for AIDC implementation for the involved FIRs. Present results at SAT IMG/06	Ongoing
SAT IMG/03-3	That the SAT IMG support the creation of a seamless airspace data table containing information on capabilities of the oceanic flight information regions (FIRs) or portions of oceanic airspace for all States within the South Atlantic area.	Reference material for the SAT Service Development Roadmap Present a new version of the xls file at SAT IMG/06	Ongoing
SAT IMG/03-4	That the SAT IMG take the appropriate actions to include relevant elements from the IATA SAT operational strategy into the SAT service development roadmap.	Reference material for the SAT Service Development Roadmap Present an update at SAT IMG/06	Ongoing
SAT IMG/04-2	That the SAT IMG request SAT States to: a) confirm their FIR boundaries as outlined in the WP06 xls file, b) define an operational geographical line (LAT LONG coordinates) between domestic and oceanic airspace, c) provide vertical limits and airspace classifications for airspace to be included in the SAT Area.	- Individual messages to SAT States by 18 October 2024 - States to report back by 15 November 2024 - Initial update at SAT SG/02 - Discussions on phase 2 and PT at SAT IMG/05	Ongoing
SAT IMG/04-3	That the SAT IMG invite SATMA to develop PBCS Monitoring and Reporting Guidance Material (in accordance with the PBCS Manual and NAT Doc 011) for the	• Series of virtual expert meetings (led by SATMA) with SMEs from ANSPs, CAAs and	Ongoing

Reference/Title	Description	Comments	Status
	<p>EUR/SAM Corridor (phase 1) and coordinate the draft with the involved RMAs.</p>	<p>RMAs</p> <ul style="list-style-type: none"> • Drafting of a new SAT Doc 00X • Presentation of the SAT Doc 00X for discussion at SAT IMG/05. • Coordination of the new SAT Doc with SAT DMO 	
SAT IMG/04-4	<p>That SAT IMG invites the Secretariat to send out a State Letter to all SAT Area States urging them to use the available guidance material (in FR and EN languages) so that LHD reporting can be enhanced.</p> <p>That SAT IMG invites ARMA to conduct LHD reporting webinars for States in the SAT Area which are not in compliance with their reporting requirements.</p>	<ul style="list-style-type: none"> • State Letter with LHD guidance material to be sent before APIRG • Series of ARMA webinars for individual SAT States • Report back to SAT IMG/05 	Ongoing
SAT IMG/04-5	<p>That, in coordination with the SAT DMO, a new SAT Document with specific safety occurrence reporting guidance material (i.e. for LHDs, LLDs, and LLEs) for ANSPs and aircraft operators be developed.</p>	<ul style="list-style-type: none"> • Series of virtual expert meetings (led by the FAA) with SMEs • Drafting of a new SAT Doc 00X • Presentation of the SAT Doc 00X for discussion/approval at SAT IMG/05 	Ongoing

Appendix C

SAT SOG ACTION ITEM AND DECISIONS LIST

ID #	ACTION	WHO	WHEN	STATUS
SOG R-01 (RECURRENT)	The SAT SOG group Delegates were urged to prepare and address the working papers to the Secretariat within the deadlines defined in the convening letter.	All SAT members	Every meeting	RECURRENT
SOG01-06	Draft a fast track procedure for the SAT GROUP taking into account the best practices of the document NAT SPG HANDBOOK – DOC 001. The study must identify the differences between NAT and SAT in terms of structures and resources.	Secretariat		COMPLETED Fast track procedure was drafted in the Second Edition of SAT Handbook. Currently under approval process.
SOG01-14	Identify the training gaps in the SAT members states in order to define a programme that fulfil the members necessities. Survey on oceanic operation training needs.	Trinidad and Tobago Secretariat	Delayed	Not yet started
SOG02-05	SAT RMA H/S PT to continue with elaboration of the “Know your space” analysis, version 0.1.b (Technical edit) and 0.1 (Draft), in support to the delimitation of SAT airspace.	SAT RMA H/S PT SAT members Secretariat	SAT SOG /8	Ongoing
SOG03-04	Secretariat monitors the progress, outcomes and deliverables issued by SAT SOG RMA HS PT to timely communicate SAT States and ANSPs regarding upcoming requirements and infrastructure needs for collecting LLDs and LLEs.	Secretariat RMAs SAT Members	Report to SAT SOG/8	SUPERSEDED Collection of LLDs and LLEs are part of the PBCS implementation activities.

ID #	ACTION	WHO	WHEN	STATUS
SOG03-06	Secretariat to support the development of Decision SAT-SG/01 and Decision SAT SOG 02/01. To coordinate the implementation of an action plan with IATA, SAT States, ANSPs and concerned Regional Offices. Analysis to assess the impact of delineation to the AIPs information, Regional ANPs, Doc 7030, etc.	Secretariat SAT members	31 October 2024	Ongoing Delineation activities in progress. So far, no issues in AIPs have raised.
SOG03-09	RMA concerned in the SAT area (SATMA, ARMA, CARSAMMA), and SAT SOG members engage and support the activities needed for the adequate development of Item Actions SAT IMG /02-1 and SAT IMG /03-03. Secretariat to follow up and bring assistance.	SAT SOG RMA Secretariat	According to working plan derived from IMG actions and decisions.	Ongoing Follow up depends on progress of Action SAT IMG /02-1 and Decision SAT IMG/04-3 CARSAMMA are engaged to PBCS activities. Pending to confirm ARMA engagement on PBCS topics.
SOG03-11	Secretariat to gather and coordinate relative information to ensure that PIRG bodies and RSOOs are notified, and regional processes are identified to support processes timely transmission of LHD events information provided by RMA, needed to determine causal factors and subsequently, drive implementation of risk mitigations by ANSPs and States.	Secretariat RMA	SAT SOG 08	Ongoing Depends on Scrutiny activities
SOG04-02	a) The updated version of the Terms of Reference (ToRs) template for SAT SOG Project Teams is approved as shown in Appendix H. b) The SAT Document	Document Management Office—DMO	Before SAT SG/02 meeting	COMPLETED TORs Template was drafted in the Second Edition of SAT Handbook. Currently under approval

ID #	ACTION	WHO	WHEN	STATUS
	Management Office (DMO) is tasked to include the mentioned template in the next review of the SAT Handbook.			process.
SOG05-01	Secretariat, in coordination with ICAO Regional Offices, to submit State letters to SAT States, ANSPs, Airspace Users and Observers requesting update contact details of their focal points and submit the lists reflecting recent personnel changes.	Secretariat	Before SAT SOG/ 8	Not yet started Coordination among ESAF -EUR- NACC-SAM-
SOG05-02	a) Brazil to consider the challenges identified by the IMG/SOG/05 Combined meeting (in paragraph 5.9 of SoD), to implement an action plan to move forward the South Atlantic Airspace scrutiny activities' flow within the SAT SOG; and b) Secretariat to assist the work in progress and maintain communication with concerned SAT states, members, agencies and stakeholders.	Brazil Secretariat	SAT SOG/8	Ongoing
SOG05-03	a) RMAs and States to take note that external data requests concerning CAR/SAM FIRs must be directed to CARSAMMA, not individual FIRs; b) RMAs are encouraged to hold inter-agencies coordination as established in Doc 9937; and c) Secretariat to monitor the accomplishment of the 2 above recommendations	RMAs SAT States Secretariat		Ongoing SAT SOG/6: a) The proposal was followed by states in CAR SAM Region b) On going c) Secretariat Monitoring

ID #	ACTION	WHO	WHEN	STATUS
SOG05-04	<p>a) The DMO, in coordination with Secretariat, to process the amendment of Doc 002 - SAT contingency Plan as proposed by Brazil;</p> <p>b) States to implement updates to their Letters of Agreement (LoAs) in alignment with SAT DOC 002 as soon as practicable; and</p> <p>c) Secretariat to monitor progress of LoAs updating.</p>	DMO Secretariat	SAT SOG/8	<p>Ongoing</p> <p>Depending on Doc 002 updates.</p> <p>See Paper submitted in SAT IMG-SOG/7</p>
SOG06-01	<p>a) The ASR PT has included in the SAT SOG /6 SoD a sample of the format and defined deadlines to grant that the 2024 results are received by 23 January 2026.</p> <p>b) The ASR PT was tasked to finish and publish an ASR ‘prototype’ by SAT SOG/7 and then adjust the work of the PT to a timeline to be presented in SAT SOG/8, approved timely by Steering Group.</p>	ASR PT RMAs STATES Secretariat	SAT group needs to define a timeline for the ASR bulletin every year.	Ongoing
SOG06-02	<p>a) the SAT RMAs (ARMA, CARSAMMA, SATMA) to provide information and analysis obtained from their respective scrutiny groups for presentation at the SAT SOG/07 meeting; and</p> <p>b) Secretariat to assist the work in progress and maintain communication with concerned SAT states, members, agencies and stakeholders.</p>	Brazil CARSAMMA SATMA ARMA Secretariat	SAT SOG/8	Ongoing

ID #	ACTION	WHO	WHEN	STATUS
SOG06-03	a) The Secretariat to monitor the outcomes of SAT IMG Action 06/04, related to GNSS RFI. Considering these outcomes, Secretariat to coordinate a SAT OPS bulletin referred to GNSS RFI, taking as a reference the NAT OPS Bulletin “NAT GNSS Interference Procedures”- January 2025.	Secretariat States IATA	Advances for the SAT SOG/7	Ongoing Monitoring Action SAT IMG 06/04

SAT SOG 07 (NEW)

ID #	ACTION	WHO	WHEN	STATUS
SOG07-01	Secretariat to coordinate and submit to the respective PIRGs an amendment of Terms of Reference, to include mandate for collecting and assessing LLDs and LLEs.	Secretariat WACAF/ESAF Secretariat SAM	2026–2027 work programme	Approved by SAT SOG 07
SOG07-01	T B D			Approved by SAT SOG 07

SAT SOG DECISIONS

Reference / Title	Description	Notes	Status
SAT SOG Decision 01/02 – SAT annual safety report project team (SAT ASR PT)	That, a Project Team be established to elaborate the SAT annual safety report (SAT ASR) aimed at improving safety in the South Atlantic airspace. The project team will review the NAT ASR, compose a SAT ASR with relevant topics specific to the region, and will present the drafted document to the SAT SOG/2 to be validated.	State Letter to administrations, requesting the nomination of the designated focal points and/or the SME/members/leaders/coordinators of the PT	Ongoing SAT SOG/6: The deliverable ASR draft Report is in progress. A draft was presented to the SAT SOG/6.
SAT SOG Decision 02/01 - Support for the workplan of SAT SOG RMA H/S Pt	That, SAT SOG members are invited to: a) Support administrative delineation of some FIRs * for the purposes of data collection and submission to facilitate safety assessment, risk estimation, and metrics harmonization within the SAT; b) provide standardized data to help the RMAs achieve their objectives and deliverables, as well support comprehensive assessment of the SAT Region; and		Ongoing SAT SOG/6: The meeting agreed on the importance of bring support for delineation activities. The meeting agreed on the importance of bringing support for delineation activities. So far, the data from concerned AIPs is being available, and listed. SAT SOG members are going to support NAARMO

Reference / Title	Description	Notes	Status
	<p>c) endorse and support the activities of RMA H/S PT on delineation of SAT, according to planned phases 1, 2 and 3.</p> <p><i>* Specifically: Accra, Canaries, Comodoro Rivadavia, Ezeiza, Johannesburg, Luanda, Montevideo and Windhoek FIRs have portions of airspace designated to the SAT Area.</i></p>		experts on this matter.
<p>SAT SOG Decision 05/01- Maintenance and Coordination of the new editions of SAT OESB</p>	<p>That, to ensure the effective and timely publication, maintenance and availability of SAT OESB:</p> <p>a) the SAT SOG contributory bodies is responsible for supporting the analysis and gathering of safety matters and consolidating the contents for the next editions of the SAT OESB; and</p> <p>b) The SAT SOG Secretariat, in coordination with the SAT DMO, are tasked with the maintenance, archiving and dissemination of the Bulletins endorsed.</p> <p>b) SAT SOG adopted the update framework as indicated in WP 5.1 par. 2.1.</p>		<p>Ongoing</p> <p>SAT SOG/6: The two SAT OESB Bulletins are still available on the RO SAM website. The two SAT OESB Bulletins are still available on the RO SAM website. Coordination with SAT IMG will be carry out to define the delivery of a SAT OPS Bulleting regarding GNSS RFI.</p>

Appendix D

SAT IMG 2026 Work Programme

Activity	Participants	Frequency	Jan 2026	Feb 2026	Mar 2026	Apr 2026	May 2026	Jun 2026	Jul 2026	Aug 2026	Sep 2026	Oct 2026	Nov 2026	Dec 2026
Bi-Annual SAT-IMG meeting	SAT-IMG Members & Observers	Bi-annually				X						X		
ESCIT meeting	ESCIT members & Secretariat	Bi-annually			X					X				
Support the PBCS implementation in the EUR/SAM Corridor part 1	ESCIT Members					X								
Develop PBCS Monitoring and Reporting Guidance Material	SATMA Secretariat SAT IMG members	First draft at SAT IMG 07 & 08				X								
Develop a new SAT Document with specific safety occurrence reporting guidance material for ANSPs and airspace users	Secretariat SAT IMG members	Final draft at SAT IMG 07 & 08				X								
Share information on GNSS Interference and the operational impacts	Secretariat SAT IMG members	Planned for SAT IMG 07				X								

Activity	Participants	Frequency	Jan 2026	Feb 2026	Mar 2026	Apr 2026	May 2026	Jun 2026	Jul 2026	Aug 2026	Sep 2026	Oct 2026	Nov 2026	Dec 2026
Support the delineation activities and establish a PT for phase 2	Secretariat SAT IMG members	Follow up information at SAT IMG 07 & 08				X								
Review the impact on the SAT Area from the implementation of new concepts (e.g. TBO or 30/10 initiative) and/or new technologies (e.g. SB ADS-B or SB VHF)	Secretariat SAT IMG members	As needed												

Appendix E

SAT SOG WORK PROGRAMME (2026 – 2027 – 2028)

Note: X=Physical meeting, V=Virtual meeting, TBC= To be confirmed

Activity	Participants	Frequency	Jan 2026	Feb 2026	Mar 2026	Apr 2026	May 2026	Jun 2026	Jul 2026	Aug 2026	Sep 2026	Oct 2026	Nov 2026	Dec 2026
			SAT-SOG											
Biannual SAT SOG meeting (alternating in-person/virtual)	SAT SOG members	Biannually				X						V		
Coordinate/harmonize biannual working program with respective Regional Offices	Secretariat	As needed (likely after every SAT SOG meeting)					V							V
Collect and upload background documents and reports on previous SAT meetings to the portal	Secretariat	As needed	The secretariat will establish the frequency.											
Submit Report to SAT Steering Group (SG)	SAT-SOG Chairperson, Secretariat	TBC	SAT-SG meetings will establish the frequency											
Videoconference for coordination of SAT SOG actions and planning	SAT-SOG Chairperson, Secretariat	As needed	SAT-SOG will establish the frequency											
Participate in NAT SOG meetings as observers	SAT-SOG Chairperson	Biannually						V						V
Coordination of activities – RMA	SAT-SOG Chairperson, Secretariat, RMAs	As needed	SAT-SOG will establish the frequency											

Note: X=Physical meeting, V=Virtual meeting, TBC= To be confirmed

Activity	Participants	Frequency	Jan 2026	Feb 2026	Mar 2026	Apr 2026	May 2026	Jun 2026	Jul 2026	Aug 2026	Sep 2026	Oct 2026	Nov 2026	Dec 2026
SAT-SOG														
Coordination of implementation actions	SAT SOG and SAT IMG Chairperson, Secretariat	Quarterly		V			V			V			V	
Project team meetings: SAT Annual Safety Report Project Team (SAT ASR PT)	Project team	TBC	Monthly meeting dates shall be agreed on SAT SOG/06 (V)											
Project team meetings: SAT RMAS' Harmonization/Standardization Project Team (SAT RMA H/S PT)	Project team	TBC	Monthly meeting dates shall be agreed on SAT SOG/06 (V)											
SAT Area delineation	SAT SOG and SAT IMG	TBC	The team leader will establish the frequency (V)											

Note: X=Physical meeting, V=Virtual meeting, TBC= To be confirmed

Activity	Participants	Frequency	Jan 2027	Feb 2027	Mar 2027	Apr 2027	May 2027	Jun 2027	Jul 2027	Aug 2027	Sep 2027	Oct 2027	Nov 2027	Dec 2027
			SAT-SOG											
Biannual SAT SOG meeting (alternating in-person/virtual)	SAT SOG members	Biannually				X						V		
Coordinate/harmonize biannual working program with respective Regional Offices	Secretariat	As needed (likely after every SAT SOG meeting)					V							V
Collect and upload background documents and reports on previous SAT meetings to the portal	Secretariat	As needed	The secretariat will establish the frequency.											
Submit Report to SAT Steering Group (SG)	SAT-SOG Chairperson, Secretariat	TBC	SAT-SG meetings will establish the frequency											
Videoconference for coordination of SAT SOG actions and planning	SAT-SOG Chairperson, Secretariat	As needed	SAT-SOG will establish the frequency											
Participate in NAT SOG meetings as observers	SAT-SOG Chairperson	Biannually						V						V
Coordination of activities – RMA	SAT-SOG Chairperson, Secretariat, RMAs	As needed	SAT-SOG will establish the frequency											

Note: X=Physical meeting, V=Virtual meeting, TBC= To be confirmed

Activity	Participants	Frequency	Jan 2027	Feb 2027	Mar 2027	Apr 2027	May 2027	Jun 2027	Jul 2027	Aug 2027	Sep 2027	Oct 2027	Nov 2027	Dec 2027
			SAT-SOG											
Coordination of implementation actions	SAT SOG and SAT IMG Chairperson, Secretariat	Quarterly		V			V			V			V	
Project team meetings: SAT Annual Safety Report Project Team (SAT ASR PT)	Project team	TBC	Monthly meeting dates shall be agreed on SAT SOG/08 (V)											
Project team meetings: SAT RMAS' Harmonization/Standardization Project Team (SAT RMA H/S PT)	Project team	TBC	Monthly meeting dates shall be agreed on SAT SOG/08 (V)											
SAT Area delineation	SAT SOG and SAT IMG	TBC	The team leader will establish the frequency (V)											

Note: X=Physical meeting, V=Virtual meeting, TBC= To be confirmed

Activity	Participants	Frequency	Jan 2028	Feb 2028	Mar 2028	Apr 2028	May 2028	Jun 2028	Jul 2028	Aug 2028	Sep 2028	Oct 2028	Nov 2028	Dec 2028
			SAT-SOG											
Biannual SAT SOG meeting (alternating in-person/virtual)	SAT SOG members	Biannually				X						V		
Coordinate/harmonize biannual working program with respective Regional Offices	Secretariat	As needed (likely after every SAT SOG meeting)					V							V
Collect and upload background documents and reports on previous SAT meetings to the portal	Secretariat	As needed	The secretariat will establish the frequency.											
Submit Report to SAT Steering Group (SG)	SAT-SOG Chairperson, Secretariat	TBC	SAT-SG meetings will establish the frequency											
Videoconference for coordination of SAT SOG actions and planning	SAT-SOG Chairperson, Secretariat	As needed	SAT-SOG will establish the frequency											
Participate in NAT SOG meetings as observers	SAT-SOG Chairperson	Biannually						V						V
Coordination of activities – RMA	SAT-SOG Chairperson, Secretariat, RMAs	As needed	SAT-SOG will establish the frequency											

Note: X=Physical meeting, V=Virtual meeting, TBC= To be confirmed

Activity	Participants	Frequency	Jan 2028	Feb 2028	Mar 2028	Apr 2028	May 2028	Jun 2028	Jul 2028	Aug 2028	Sep 2028	Oct 2028	Nov 2028	Dec 2028
			SAT-SOG											
Coordination of implementation actions	SAT SOG and SAT IMG Chairperson, Secretariat	Quarterly		V			V			V			V	
Project team meetings: SAT Annual Safety Report Project Team (SAT ASR PT)	Project team	TBC	Monthly meeting dates shall be agreed on SAT SOG/08 (V)											
Project team meetings: SAT RMAS' Harmonization/Standardization Project Team (SAT RMA H/S PT)	Project team	TBC	Monthly meeting dates shall be agreed on SAT SOG/08 (V)											
SAT Area delineation	SAT SOG and SAT IMG	TBC	The team leader will establish the frequency (V)											