PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ELECTION OF CHAIRPERSONS AND ADOPTION OF THE PROVISIONAL AGENDA

- 1.1 The meeting congratulated Eng. Ibrahim Faraj, Director of CNS, Civil Aviation Regulatory Commission, Jordan who was elected as the Chairperson and Eng. Abdulla Alsayed, Senior CNS Inspector, General Civil Aviation Authority, UAE, who was elected as the Vice Chairperson of the CNS SG, respectively.
- 1.2 The subject was addressed in WP/1 presented by the Secretariat. The meeting reviewed and adopted the Provisional Agenda as at paragraph 6 of the History of the Meeting.

REPORT ON AGENDA ITEM 2: REVIEW THE OUTCOME OF CNS SG/13 AND MIDANPIRG/22 RELATED TO CNS

2.1 The subject was addressed in WP/2 presented by the Secretariat. The meeting recalled the Conclusions and Decisions, as at **Appendix 2A**, adopted by the MIDANPIRG/22 meeting in relation to CNS field and agreed to revise some of them notably those related to technical matters. Based on global and regional developments, the meeting agreed to propose, as deemed necessary, Draft Conclusions and Decisions to be presented to the MIDANPIRG/23 meeting for endorsement.



REPORT ON AGENDA ITEM 3: CNS PLANNING AND IMPLEMENTATION FRAMEWORK

GNSS Radio Frequency Interference (GNSS RFI)

- 3.1 The subject was addressed in:
 - WP/27 presented by the Secretariat;
 - WP/5 and WP/7 presented by the United Arab Emirates;
 - WP/9 presented by Oman, and
 - WP/29 presented by Saudi Arabia.
- 3.2 The meeting recalled the outcome of the MIDANPIRG/22–RASG-MID/12 and the 42nd ICAO Assembly, which recognized GNSS interference (RFI) as a major operational and safety concern and recalled the MID Region Regional Approach to GNSS RFI Management through PIRG/RASG Conclusion 2 and Decision 22/20 establishing the MID NAV-MON Action Group. The meeting noted that GNSS interference incidents have increased globally and regionally, with safety implications for navigation, surveillance, and communication systems.
- 3.3 The meeting highlighted that Assembly Resolution A42-24/3 emphasised on ensuring the resilience of CNS/ATM systems and the introduction of the Resilient Navigation Operational Network (NAV RON) concept, which evolves from the NAV-MON approach by integrating ground- and space-based infrastructures to ensure service continuity in case of GNSS degradation. The meeting reaffirmed the importance of maintaining a network of conventional aids (VOR/DME/ILS) as part of regional navigation resilience, enhancing civil-military coordination, and sharing operational data through ICAO mechanisms.
- 3.4 The meeting noted the UAE national best practices for detecting, investigating, and mitigating GNSS interference and spoofing within the surveillance data processing system (SDPS). The meeting noted that the operational workflow applied to preserve surveillance data integrity, the use of multisensor validation (radar, ADS-B, multilateration), and the coordination with the national Telecommunications Regulatory Authority. The meeting supported the UAE proposal for regional cooperation and data exchange on interference events to strengthen collective situational awareness and resilience which is in line with the endorsed MID Region Regional Approach to GNSS RFI Management
- 3.5 The meeting noted UAE experience in mitigating GNSS and ADS-B vulnerabilities through regional radar data sharing and the development of a Surveillance Data Governance Framework. The meeting underlined that ADS-B dependency introduces cybersecurity risks and recommended establishing bilateral or multilateral radar-sharing arrangements based on EUROCONTROL's guidelines that been noted with appreciation during the previous CNS SG/13 meeting. In addition, the meeting noted a Service-Oriented Architecture (SOA) would also ensure encrypted, authenticated, and redundant data exchange. The meeting agreed that radar sharing constitutes a practical means of enhancing regional surveillance resilience and continuity.
- 3.6 The meeting noted the operational importance of multi-constellation GNSS and multi-source time synchronization for preserving both positional and temporal integrity within CNS systems. The meeting encouraged States to adopt Complementary PNT (C-PNT) architectures integrating atomic clocks, terrestrial time networks, and cross-validation among ANSP servers.
- 3.7 The meeting further recalled that GNSS vulnerabilities at international, regional, and national levels. The meeting noted Oman initiative including the issuance of a Civil Aviation Safety Bulletin 2024-01 on GNSS outages and alternative navigation procedures. The meeting proposed to explore

the need the revision the ICAO MID Doc. 011 to incorporate the latest developments from ICAO Annex 10, the RASG-MID Safety Advisory 14 (RSA-14), and the 2024 EUR/MID Radio Navigation Symposium recommendations. The meeting agreed that CNS focal points to go through the aforementioned provisions and provide their proposal for the amendment of the ICAO MID Doc. 011, as deemed necessary.

- 3.8 The meeting expressed appreciation to the UAE and Oman for their valuable contributions and best practices and encourage MID Stats to proactively contribute to the development of a regional GNSS RFI management and resilience framework and support the collaboration between the NAV-MON Action Group, the Frequency Management Working Group (FM WG), and relevant MIDANPIRG Subgroups.
- 3.9 The meeting noted Saudi Arabia feedback about the DME/DME network which plays a critical role in providing backup navigation capability. The meeting agreed that the resilience of the MID navigation infrastructure should be addressed through improved DME coverage and optimization rather than expansion of legacy systems.
- 3.10 The meeting acknowledged Saudi Arabia's proposal to further analyze operational aspects of NAV RON and to engage the MID NAV-MON Action Group in reviewing data on ATS route structures and existing ground-based aids to support regional GNSS RFI resilience planning.
- 3.11 The meeting also noted that the upcoming GNSS Inter-Regional Workshop in Doha, Qatar (18–20 November 2025), jointly organized by ICAO MID and EUR/NAT Offices, will focus on GNSS RFI resilience, and will provide a great platform and opportunity to address related operational navigation continuity measures, including the emerging NAV RON concept and regional coordination requirements.

ANS Cybersecurity

- 3.12 The subject was addressed in WP/6, presented by the UAE.
- 3.13 The meeting noted the growing cybersecurity threats to Communication, Navigation and Surveillance (CNS) systems resulting from increased interconnectivity, digitalization, and the migration to IP-based architectures.
- 3.14 The meeting outlined that the main vulnerabilities affecting CNS systems, including weak access controls, insufficient network segmentation, insecure remote connections, and lack of continuous monitoring, noting that such deficiencies may expose Air Navigation Services (ANS) infrastructure to network intrusions, data manipulation, or service disruption.
- The meeting noted with appreciation the UAE's National Civil Aviation Cybersecurity Framework, developed by the General Civil Aviation Authority (GCAA) in alignment with the UAE National Cybersecurity Strategy. The framework includes a Civil Aviation Cybersecurity Policy, Guidelines, and the Reporting of Security Breaches (ROSB) mechanism, providing a structured model for threat reporting, coordination with national authorities, and incident response. The meeting noted the best practice of ROSB mechanism to ensure a secure and confidential cybersecurity incident reporting and encouraged other MID States to consider establishing similar systems.
- 3.16 The meeting further emphasized that, in line with ICAO's Cybersecurity Action Plan (CyAP) and Assembly Resolution A40-10, States should integrate CNS cybersecurity governance within their national civil aviation cybersecurity strategies and safety oversight frameworks. The meeting encouraged the adoption of security-by-design and defense-in-depth principles across CNS infrastructure,

including the implementation of identity and access management (IAM), network segregation between operational and maintenance systems, intrusion detection and prevention systems (IDS/IPS), secure remote access, and regular vulnerability assessments.

- 3.17 The meeting also recognized the importance of fostering cybersecurity culture and awareness through continuous training, drills, and exercises targeting technical and operational CNS personnel. The meeting agreed that regional cooperation on incident information-sharing, threat intelligence exchange, and harmonization of national cybersecurity frameworks would significantly strengthen collective resilience across the MID Region.
- 3.18 Accordingly, the meeting supported the UAE proposal to encourage MID State to share their cybersecurity resilience initiatives, under the framework of the CNS Sub-Group, to potentially establish a MID Regional Cybersecurity Awareness Toolkit for CNS systems, including role-based training modules and best practices adapted to CNS operations.



REPORT ON AGENDA ITEM 4: MID ATS MESSAGING MANAGEMENT CENTRE MATTERS INCLUDING AMHS-AMC AND SWIM INFRASTRUCTURE

Operational Inputs to AIDC-OLDI Applicability Area

- 4.1 The subject was addressed in WP/11, presented by the Secretariat.
- 4.2 The meeting reviewed the **Appendix 4A** and the proposal regarding the definition of the AIDC/OLDI applicability area for the MID Region, developed in coordination with the ATM SG. The meeting recalled that a high number of Large Height Deviations (LHDs) had been attributed to coordination failures between adjacent ACCs and reaffirmed that AIDC/OLDI implementation remains a Priority 1 requirement under the MID eANP.
- 4.3 The meeting endorsed the updated criteria for determining AIDC/OLDI priority interconnections, including traffic exchange exceeding 30 flights/hour, reduced longitudinal separations (≤10 NM), cross-border FRA implementation, or high LHD occurrence. The meeting supported the authorization for the ASM WG/3 to finalize and present the Proposal for Amendment (PfA) of the AIDC/OLDI Table to MIDANPIRG/23.

MIDAMC Progress Report

- The subject was addressed in PPT/10, presented by the MIDAMC.
- 4.5 The meeting noted the progress achieved under the MIDAMC mechanism, including the continuous expansion of AMHS inter-regional connections with the EUR, APAC, and AFI Regions. Updates included:
 - Nine AMHS links with the EUR Region (e.g., HECA–LGGG, OJAM–LCNC, OTBD–LCNC) and new connections with Oatar and Bahrain.
 - Five connections with APAC (OOMS-VABB, OKKK-OPKC, etc.), with Oman planning migration from AFTN to AMHS.
 - Calls for more AFI links to be migrated to AMHS to reduce asymmetric routing.
- 4.6 The meeting recalled that MIDANPIRG Decision 22/19 amended the MID AMC Steering Group ToRs to include SWIM transition oversight. The meeting requested MID States to update routing data, focal points, and AMHS configurations in the EUR AMC database and have a clear regional approach about the establishment of a Regional IP Network and decide about participation in the available IP network solutions (e.g. APAC CRV or EUROCONTROL New PENS).
- 4.7 The meeting agreed that the ICAO MID Office should coordinate with EUROCONTROL to organize a virtual meeting on the IP Network subject, to be scheduled at EUROCONTROL's convenience.

Update of The AMC Routing Directory and Network Inventory

4.8 The meeting noted that several operational problems had occurred due to delays in updating the AMHS addressee tables. The meeting emphasized that new addressee tables should be updated on Day 28 of each AIRAC cycle at 1100 UTC to ensure network synchronization and operational continuity.

- 4.9 The meeting also noted that several MIDAMC focal point contact details were outdated. The meeting encouraged States to ensure that their contact information is kept current in the Network Inventory.
- 4.10 The meeting agreed to the following Draft Decision regarding the periodic review and update of the AMC Routing Directory and Network Inventory:

DRAFT DECISION 14/XX: UPDATE OF THE AMC ROUTING DIRECTORY AND NETWORK INVENTORY

That, MID External COM Operators shall review and update the AMC Routing Directory and Network Inventory on each AIRAC cycle, in coordination with the MIDAMC Team, to ensure data accuracy and operational consistency across the MID Region.

Update of IWXXM Implementation Status

- 4.11 The meeting recalled that the implementation of the AMHS Extended Service and the establishment of AMHS interregional connections are prerequisites for the exchange of IWXXM messages and for supporting the operation of Regional OPMET Centres (ROCs). The meeting recognized that the IWXXM data format is an essential enabler of System Wide Information Management (SWIM) and that timely implementation across the MID Region will facilitate the digital exchange of meteorological information and enhance data interoperability with adjacent Regions. The meeting encouraged States to coordinate closely with their CNS and MET authorities to ensure the availability of the required AMHS capabilities to support IWXXM message exchange.
- 4.12 The meeting requested States provide updates on the status of their IWXXM implementation to the ICAO MID Office, including information on system capability, interregional connectivity, and planned timelines, in order to facilitate regional monitoring and support coordinated SWIM transition planning. Therefore, the meeting agreed that the MIDAMC focal points should provide a detailed status to the upcoming MIDAMC STG/11 meeting.

Capacity Building on AMHS/AMC

- 4.13 The meeting supported the MIDAMC team's proposal for an AMHS/AMC Workshop/Training to strengthen COM Centre staff capabilities and endorsed actions for all States to:
 - Migrate remaining AFTN/CIDIN links to AMHS;
 - Update routing directories and focal points in EUR AMC; and
 - Report on IWXXM implementation progress as part of the SWIM readiness framework.
- 4.14 The meeting requested the ICAO MID Office, in coordination with the MIDAMC Chairperson, to organize an AMHS/AMC Workshop/Training for AMC users, focusing on the use of the routing management function and the development of routing directories in AMC format. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 14/XX: ORGANIZATION OF AMHS/AMC WORKSHOP/ TRAINING

That, the ICAO MID Office, in coordination with the MIDAMC Chairperson, organizes, by Q4 of 2026, an AMHS/AMC Workshop/Training for AMC users to enhance their technical capability in:

- a) utilizing the routing management function; and developing, and
- b) maintaining routing directories in the AMC standard format.

Rationalization of the AFTN/AMHS network

4.15 The meeting discussed the need to rationalize the AFTN/AMHS network in the MID Region based on operational requirements. The meeting agreed that States should review their bilaterally established connections to ensure that they remain operationally justified and in line with regional planning objectives. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 14/XX: INTERREGIONAL CONNECTIONS BETWEEN MID AND ADJACENT ICAO REGIONS

That, in order to enhance the efficiency and performance of the Aeronautical Fixed Service (AFS) network, States are urged to:

- a) rationalize interregional connections established on a bilateral basis, taking into account the regional requirements defined in the MID ANP, Volume II, and operational needs; and
- b) migrate AFTN/CIDIN interregional communication links to AMHS by the end Q4 of 20XX.

Asymmetric Routing in a Mixed AFTN-AMHS Environment

- 4.16 The subject was addressed in PPT/12, presented by the MIDAMC.
- 4.17 The meeting discussed challenges caused by AFTN/AMHS asymmetric routing, where outbound and return messages take different network paths. The meeting noted the potential causes such as coexistence of AFTN and AMHS systems, inconsistent routing tables, or dynamic path selection, which may lead to missing acknowledgements, loop detection issues, or message delays.
- 4.18 The meeting highlighted that, although asymmetry cannot be completely avoided, it can be minimized by:
 - Maintaining consistent routing tables across COM Centres,
 - Implementing automated validation tools in AMC to detect potential loops or incomplete paths, and
 - Coordinating through the MIDAMC team for rectification actions.

4.19 The meeting encouraged MID States to strengthen coordination between their national COM Centres and AMC to ensure symmetrical routing and robust message delivery within the AFS network.

Accreditation Procedure for MID External COM Operators

- 4.20 The subject was addressed in PPT/13, presented by the MIDAMC.
- 4.21 The meeting reviewed the updated accreditation procedure for MID External COM Operators, developed jointly by the MID AMC team and EUROCONTROL. The meeting highlighted that the procedure replaces outdated the previous modalities highlighted in in EUR Doc 021 and establishes a harmonized process for user registration and account activation in the OneSky Online Extranet.
- The meeting noted that each MID COM Centre shall designate one External COM Operator and one backup, register via the OneSky portal, and update contact details in the Network Inventory on Day 1 of each AIRAC cycle. Account activation is coordinated through the MID AMC team and EUROCONTROL. The meeting agreed on the amended procedure and encouraged States that have not yet registered their MIDAMC users as external AMC operators to do so by 31 December 2025 and update all focal points accordingly.
- 4.23 Accordingly, the meeting agreed to the following Draft Decision:

DRAFT DECISION 14/XX: AMENDMENT OF ACCREDITATION PROCEDURE FOR MID EXTERNAL COM OPERATORS

That, amended Accreditation Procedure for MID External COM Operators, at Appendix 4B, is endorsed.

REPORT ON AGENDA ITEM 5: FREQUENCY MANAGEMENT MATTERS

Frequency Spectrum Management: Updates on the ICAO Position for WRC-27

- 5.1 The subject was addressed in WP/15, presented by the Secretariat.
- 5.2 The meeting reviewed the ICAO presentation on WRC-27 preparations and the recently approved ICAO Position, endorsed by the Council at its 235th Session (25 June 2025). The State Letter SL (E 3/5-25/65) issued on 16 July 2025 urged States and international organizations to support ICAO's position and incorporate it in national preparations for ITU WRC-27.
- 5.3 The meeting recalled Assembly Resolution A41-7, as amended by the 42nd Assembly (A42), which emphasizes active State participation in the international spectrum process and prioritization of aviation safety and spectrum protection. ICAO's Frequency Spectrum Strategy, developed under the FSMP, aims to ensure sustainable access to and protection of aeronautical bands supporting evolving CNS systems.
- 5.4 The meeting encouraged MID States to coordinate closely with national telecommunication authorities to safeguard aviation spectrum needs and to actively contribute to regional telecommunication organization meetings and ITU preparatory groups leading to WRC-27.

Review and Update of the MID Region Allotment Plan

- 5.5 The subject was addressed in WP/17, presented by the Secretariat.
- 5.6 The meeting recalled that the MID Region VHF Allotment Plan (117.975–137 MHz) has not been revised for several years and no longer reflects current operational demand. The Secretariat presented a proposal to review and update the plan to improve the efficient use of spectrum and expand availability for ATC services.
- 5.7 The meeting recalled MIDANPIRG/21 Decision on the Review of the MID Region Allotment Plan (D. 21/23). The meeting agreed that MID States should submit, as deemed necessary, their current and forecast frequency requirements to the ICAO MID Office, enabling the FM Working Group to perform a technical reassessment and prepare a revised VHF Allotment Plan. The updated version will be then reviewed by the CNS SG prior to submission to MIDANPIRG/23 for endorsement. Consequently, the meeting agreed on the following Draft Decision to replace and supersede the D. 21/23 and represent the proposed Decision to MIDANPIRG/23 meeting for endorsement:

CNS DRAFT DECISION 14/XX: REVIEW AND UPDATE OF THE MID REGION ALLOTMENT PLAN

That, in order to enhance the efficient use of the aeronautical spectrum and increase the availability of frequencies for ATC communications, the meeting agreed that:

a) States should provide, as deemed necessary, to the ICAO MID Office their current and forecast frequency requirements for the band 117.975 – 137 MHz, based on operational and technological developments;

- b) the Frequency Management Working Group (FM WG), should conduct the necessary technical assessments and, as deemed necessary, prepare a revised version of the MID Region VHF Allotment; and
- c) the CNS Sub-Group (CNS SG) should review and agree on any revised version of the allotment plan, then be submitted to the upcoming MIDANPIRG for endorsement.

Alignment of AIP Data with ICAO Frequency Finder (FF) Database

- 5.8 The subject was addressed in WP/18, presented by the Secretariat.
- The meeting noted discrepancies between AIP publications and the ICAO Frequency Finder Tool database, particularly for NAV facilities, resulting in potential safety and coordination risks. The meeting highlighted that some operational facilities were found to be transmitting on uncoordinated frequencies not recorded in ICAO's database, which could expose them to interference and deprive them of international protection.
- 5.10 The meeting agreed that States should:
 - Verify and align AIP-published frequency data with the ICAO FF database;
 - Avoid commissioning facilities on uncoordinated frequencies; and
 - Regularly update FF entries to maintain synchronization with national records.
- 5.11 Consequently, the meeting agreed on the following Draft Conclusion:

CNS DRAFT CONCLUSION 14/XX: ALIGNMENT OF AIP DATA WITH ICAO FREQUENCY FINDER (FF) DATABASE

That, in order to ensure the accuracy of frequency assignment records and to mitigate the risk of harmful interference, States should:

- a) verify and align the frequency information published in their AIP with the assignments registered and coordinated through the ICAO Frequency Finder (FF) tool:
- b) refrain from placing into operation NAV or COM facilities whose frequency assignments have not been coordinated and registered with ICAO; and
- c) regularly update the FF tool with any changes to their national frequency assignments to ensure consistency with published AIP information.

Optimization of Frequency Assignment in the MID Region

- 5.12 The subject was addressed in PPT/19, presented by the Secretariat.
- 5.13 The meeting discussed the status of 8.33 kHz channel-spacing consideration in the MID Region and recalled that previous simulation exercises could not be completed due to insufficient data

submissions. The meeting agreed that there is no immediate operational requirement for 8.33 kHz implementation; instead, emphasis should be placed on optimizing existing VHF assignments and updating the regional Allotment Plan. In addition, IATA proposed to provide the CNS SG with the latest available feet equipage data relating to 8.33 in the MID Region.

- 5.14 Consequently, the meeting recalled the MIDANPIRG/21 Conclusion 21/24 on the Optimization of Frequency Assignment in the MID Region and agreed that to close the conclusion. The meeting recalled the normal process illustrating that States coordinate all new frequency assignments with the ICAO MID Office and ensuring consistency with the FF database and avoiding congestion.
- 5.15 In addition, the meeting recalled the technical synchronization issue encountered in the ICAO Frequency Finder (FF) Tool, which affected compatibility checks and, consequently, the registration of validated frequencies. The United Arab Emirates (UAE) noted that, to ensure business continuity, it would be prudent to explore the use of a secondary tool alongside the Frequency Finder as the main platform, and proposed that the EUROCONTROL tool could serve as an appropriate alternative, as it can be synchronized with the ICAO FF Tool.
- 5.16 The meeting supported the proposal by the UAE and requested the ICAO MID Office to coordinate with EUROCONTROL to explore the modalities of such synchronization and to inform the CNS Sub-Group of the outcomes of this coordination.

Strengthening Air Traffic Safety with ILS/DME Channel Allocation Oversight

- 5.17 The subject was addressed in WP/16, represented by the UAE.
- 5.18 The meeting highlighted the importance of CAA oversight of ILS/DME channel pairing allocations to prevent duplication, ensure interference-free operation, and verify data integrity in the ICAO FF Tool.
- The meeting noted the UAE's practice of pre-allocating ILS/DME channels for planned projects as a best-practice model for regional adoption. The meeting encouraged States to establish systematic verification of ILS/DME data accuracy, maintain consistent national databases, and strengthen navigational frequency management governance. ICAO was invited to provide guidance on the minimum separation distance required between co-channel ILS/DME systems.

Frequency Spectrum Congestion for ATC Tower Services (Saudi Arabia)

- 5.20 The subject was addressed in WP/20, presented by Saudi Arabia.
- 5.21 The meeting was apprised of Saudi Arbia experience on frequency congestion at Jeddah (OEJN) for Aerodrome Surface Control (ASC) and Tower (TWR) services, as high communication density and overlapping spectrum usage were identified as principal causes of interference.
- The meeting noted with appreciation Saudi Arabia mitigation strategy that was implemented by using a combination of Double-Cavity, Notch, and Crystal Filters to minimize intermodulation effects, supported by theoretical path-loss analysis (Egli Model). Although effective, this approach increased system cost and complexity.

Regional and Interregional Coordination on Space-Based VHF

- 5.23 The subject was addressed in WP/21, presented by the Secretariat.
- 5.24 The meeting reviewed the draft coordination mechanism developed by ICAO HQ for regional and interregional management of Space-Based VHF (SB-VHF) frequencies.
- 5.25 The mechanism outlines responsibilities and notification flows between States, Regional Offices, and ICAO HQ to ensure global compatibility between space-based and terrestrial VHF systems. However, the meeting agreed that CNS Focal points should analyse in depth the proposal provide their feedback to the CNS SG/15 Meeting.

Capacity building on Frequency Management Tools

- 5.26 The meeting emphasized that training on frequency management tools, including the ICAO Frequency Finder (FF) Tool and the EUROCONTROL frequency management platform, is deemed necessary and urgent for all Frequency Management Working Group (FM WG) focal points. The meeting recognized that enhanced technical proficiency in using these tools is essential to ensure accurate frequency coordination, compatibility verification, and efficient spectrum utilization across the MID Region.
- 5.27 The meeting therefore encouraged the organization of a dedicated regional training workshop to strengthen the capacity of national frequency management experts and ensure harmonized use of available tools.

CNS DRAFT CONCLUSION 14/XX: FREQUENCY MANAGEMENT TOOLS TRAINING

That, the ICAO MID Office, in coordination with ICAO HQ and/or EUROCONTROL, organizes, by 2026 a regional training workshop on frequency management available operational tools, including the ICAO Frequency Finder (FF) Tool and/or the EUROCONTROL platform, to build the technical capacity of FM WG focal points and enhance regional frequency coordination and compatibility analysis.

REPORT ON AGENDA ITEM 6: ASBU THREADS/ELEMENTS RELATED TO CNS

Harmonizing Regional Air Navigation

- 6.1 The subject was addressed in WP/14, presented by IATA.
- 6.2 IATA emphasized on the need for regional and global harmonization of Air Navigation Services implementation across all ASBU threads to achieve seamless, interoperable operations. Based on the data provided by IATA, the meeting highlighted disparities in deployment timelines across regions and States, particularly regarding ATFM, FF-ICE/TBO, SWIM, and the transition from AIS to AIM.
- 6.3 The meeting noted IATA's position supporting enhanced Civil/Military Cooperation (CMAC), Flexible Use of Airspace (FUA), Free Route Airspace (FRA), and Direct Routing Operations (DRO) as enablers of flight efficiency and environmental sustainability.
- 6.4 The meeting agreed on the importance of aligning national plans with the GANP's PIA 1 (Airspace Optimization) and PIA 2 (Global Interoperability) objectives and encouraged continued coordination among ANSPs, States, and users to ensure harmonized deployment of CNS and ATM systems across the MID Region.

Implementation of ADS-B in the Kingdom

- 6.5 The subject was addressed in WP/22, presented by Saudi Arabia.
- 6.6 The meeting noted with appreciation Saudi Arabia successful deployment of a nationwide ADS-B ground-station network to enhance ATS surveillance within the Jeddah FIR. The meeting was informed that fourteen ADS-B ground stations and eight WAM co-located sites were installed to complement radar coverage and improve situational awareness.
- 6.7 The meeting recognized ADS-B implementation as a key enabler under ASBU SURF-B0/1 (Improved Surveillance), contributing to PIA 2: Globally Interoperable Systems and Data and PIA 3: Optimum Capacity and Flexible Flights. The meeting commended the progress achieved under the Saudi National Air Navigation Plan (SNAP) and invited other MID States to share their ADS-B deployment status and lessons learned to support regional harmonization.

Deployment of A-SMGCS: CNS Perspective

- 6.8 The subject was addressed in WP/23, presented by Saudi Arabia.
- 6.9 The meeting reviewed the deployment of A-SMGCS Level 2 systems at Riyadh (OERK) and Madinah (OEMA) airports by Saudi Arabia, which have received regulatory approval and are fully operational. The meeting was informed that the system integrates MLAT, SMR, and ADS-B to improve surveillance of aircraft and vehicles on the surface, providing runway-incursion alerts and low-visibility operation support.
- 6.10 The meeting recognized the deployment as a key contribution to ASBU SURF-B1/2 (Enhanced Surface Operations) under PIA 1: Airport Operations and Capacity, enhancing safety and efficiency in ground movement management. The meeting encouraged other States to consider similar implementations, and requested ICAO MID Office to reflect this progress in the MID Air Navigation Report 2025.

Controller-Pilot Data Link Communications (CPDLC)

- 6.11 The subject was addressed in WP/24, presented by Saudi Arabia.
- 6.12 The meeting noted the successful introduction of CPDLC service within the Jeddah FIR by Saudi Arabia in July 2025, following a six-month operational trial. The system enables non-urgent ATC communications through digital messaging between controllers and pilots, reducing voice-frequency congestion and improving operational efficiency.
- 6.13 The meeting recognized CPDLC implementation as aligned with ASBU FICE-B0/1 (Improved Flight and Flow Information through Interoperability and Data Link Applications) under PIA 2: Globally Interoperable Systems and Data. The meeting encouraged States to share updates on data-link deployments and to coordinate with the ICAO MID Office for inclusion of CPDLC progress in the regional ASBU monitoring plan.

Expanding PBN Implementation with DME Optimization and Development

- The subject was addressed in WP/25, presented by Saudi Arabia.
- 6.15 The meeting noted with appreciation Saudi Arabia effort on strengthening Performance-Based Navigation (PBN) through DME-to-DME optimization and deployment of omnidirectional DME antennas. The initiative aims to enhance DME coverage, increase redundancy, and ensure navigation continuity during GNSS outages, thus supporting resilience against RFI events.
- 6.16 The meeting recognized the proposal's alignment with ASBU NAVS-B1/B2 (Improved Performance of Navigation Systems) under PIA 2: Globally Interoperable Systems and PIA 3: Optimum Capacity and Flexible Flights. The meeting agreed that the MID NAV-MON Action Group should analyze regional DME/DME coverage and develop recommendations to enhance PBN continuity in line with the Navigation Minimum Operational Network (NAV MON) strategy.

REPORT ON AGENDA ITEM 8: FUTURE WORK PROGRAMME

- 8.1 The subject was addressed in PPT/4, presented by the Secretariat.
- The meeting agreed on the CNS SG Terms of References (TORs) as at **Appendix 8A**.
- 8.3 The meeting agreed on the MIDAMC STG Terms of References (TORs) as at **Appendix 8B**.
- 8.4 The meeting agreed on the FM WG Terms of References (TORs) as at **Appendix 8C**, and confirmed that the FM WG is reporting directly to CNS SG.
- 8.5 The meeting noted that States are encouraged to send the updated list of all focal points of CNS SG, MIDAMC STG, and NAV-MON Action Group. The meeting emphasized that the CNS focal points will be responsible for supporting the workflow related to FF-ICE implementation.

8.6 The meeting noted the following Tentative CNS related Actions/Activities planned for 2026:

#	Action / Expected Output	Responsible Entity	Coordination With	Target Date / Cycle
1	Review and update AMC Routing Directory and Network Inventory each AIRAC cycle	MID External COM Operators	MIDAMC Team / ICAO MID Office	Every AIRAC (28-day cycle)
2	Provide updates on IWXXM implementation status	MID States / MIDAMC Focal Points	ICAO MID Office / CNS & MET Authorities	Q2 2026 (MIDAMC STG/11)
3	Coordinate with EUROCONTROL on virtual IP network meeting	ICAO MID Office	EUROCONTROL / MIDAMC Chair	Early 2026
4	Organize AMHS/AMC Workshop/Training	ICAO MID Office	MIDAMC Chairperson / States	Q4 2026
5	Rationalize AFTN/AMHS inter- regional connections and migrate to AMHS	MID States	ICAO MID Office / FM WG	By end 2026 (target in AI 4)
6	Submit current and forecast VHF frequency requirements (117.975–137 MHz)	MID States	ICAO MID Office / FM WG	Before MIDANPIRG/23 (2026)
7	Perform technical assessment and prepare revised VHF Allotment Plan	FM WG	CNS SG / ICAO MID Office	2026 (Q3–Q4)
8	Coordinate with EUROCONTROL to explore synchronization between FF and EUROCONTROL Tools	ICAO MID Office	EUROCONTROL	2026 progress report to CNS SG/15
9	Organize Regional Training Workshop on Frequency Management Tools	ICAO MID Office / ICAO HQ	EUROCONTROL / FM WG	By end 2026
10	Analyze regional DME/DME coverage for PBN continuity (NAV- MON Action Group)	NAV-MON Action Group	ICAO MID Office / FM WG	2026 cycle

8.7 The meeting agreed that the CNS SG/15 meeting will be tentatively held in XXX 2026. The meeting noted with appreciation XXX generous offer to host the CNS SG/15 and the ATM SG/12 meetings in parallel.

8.8 Furthermore, the meeting invited the States and Organizations to review and support the conduct of the ICAO MID Tentative Working Programme for 2026, which will be posted under the ICAO MID website, by the end of 2025; and which comprise all regional activities including the CNS ones.

