
PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF THE PROVISIONAL AGENDA

1.1 The meeting reviewed the Provisional Agenda, and adopted it as at Para 6 of the History of the Meeting.

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REPORT ON AGENDA ITEM 2: FOLLOW-UP ON THE OUTCOME OF MIDANPIRG/16***Review of action taken by the ANC on MIDANPIRG/16 Report***

2.1 The subject was addressed in WP/2 presented by the Secretariat. The meeting recalled that MIDANPIRG/16 was held in Kuwait, 13 to 16 February 2017. The meeting noted that the ANC Working Group of the Whole for Strategic Review and Planning presented its review of the reports of the MIDANPIRG/16 and RASG-MID/6 meeting to the Air Navigation Commission (ANC) through AN.2017.WP/9167.

2.2 It was highlighted that the ANC noted that the MID Region 2016 Air Navigation Report includes the first regional report on the status of implementation of priority 1 Block 0 modules as well as an outlook for 2020. It was noted that some States had a significant gap between the current ASBU status and their forecast for 2020. Whilst noting that the 2020 forecasts are based on States' own estimates, which may be overly optimistic, the ANC liked the concept of the report and forecast. It was highlighted that best practices with regards to the reporting of the MID ASBU implementation and forecasts could be harmonised globally in order to facilitate the analysis of current and forecast ASBU implementation.

2.3 With regard to the challenges facing MIDANPIRG and the MID Region in general, the ANC noted that many of these concerns were similar to those of the Asia Pacific (APAC) and NAT-SPG regional reports discussed in the ANC's 206th session, such as SMS/SSP implementation, AIM implementation, SAR implementation, civil-military cooperation, insufficient State resources, and low State participation in PIRG and RASG working level meetings. In this respect, it was highlighted some of the common challenges between the Asia Pacific, Europe and MID Regions, might be addressed by the AIRARD Task Force.

Review status of MIDANPIRG/16 Conclusions and Decisions

2.4 The meeting reviewed the progress made on the implementation of MIDANPIRG/16 Conclusions and Decisions. The actions taken by States and the Secretariat on the above-mentioned Conclusions and Decisions were reviewed and the updated list is provided at **Appendix 2A**. The meeting urged States that have not yet done so, to send their replies to the ICAO MID Office State Letters related to the MIDANPIRG/16 Conclusions such as Conclusion 16/5, 16/6, 16/9, 16/15, 16/22 and 16/31.

REPORT ON AGENDA ITEM 3: GLOBAL AND REGIONAL DEVELOPMENTS***Outcome of the Thirteenth Air Navigation Conference (AN-Conf/13)***

3.1 The subject was addressed in WP/3 presented by the Secretariat. The meeting recalled that the Thirteenth Air Navigation Conference (AN-Conf/13) was held in Montréal from 9 to 19 October 2018. The meeting was attended by a total of 1022 participants from 116 Contracting States and 37 observer delegations. The list of the participants and the full report of the Conference can be found on the AN-Conf/13 website at: www.icao.int/meetings/anconf13.

3.2 The meeting noted that the AN-Conf/13 endorsed fifty-two (52) Recommendations, addressing a wide variety of subjects, such as, Air Traffic Management (ATM), Communications, Navigation and Surveillance (CNS), Aeronautical Meteorology, Information Management, Aerodrome, Human Factors, Civil-Military Collaboration, Remotely Piloted Aircraft System (RPAS), Search and Rescue (SAR), Cyber resilience, new operations types, Global Aviation Safety Oversight System (GASOS), State Safety Programme (SSP), Safety Management, Universal Safety Oversight Audit Programme (USOAP), Continuous Monitoring Approach (CMA) and Regional Safety Oversight Organizations (RSOO).

3.3 The meeting reviewed the AN-Conf/13 Recommendations related to air navigation and agreed that the different MIDANPIRG subsidiary bodies should identify clearly the Recommendations related to their terms of reference and agree on the necessary follow-up actions. In addition, the meeting agreed that a Working Paper should be presented by the Secretariat to the MIDANPIRG/17 meeting to propose follow-up actions for assignment to States and the different actors/stakeholders. Accordingly, the meeting agreed to the following MSG Decision:

MSG DECISION 6/1: FOLLOW-UP ON THE AN-CONF/13 RECOMMENDATIONS

That,

- a) the Secretariat present a Working Paper to the MIDANPIRG/17 meeting to propose follow-up actions on relevant AN-Conf/13 Recommendations, for assignment to States and the different actors/stakeholders; and*
- b) the different MIDANPIRG subsidiary bodies should identify clearly the AN-Conf/13 Recommendations related to their terms of reference and agree on the necessary follow-up actions.*

3.4 In connection with the above, it was highlighted that the Joint ACAO/ICAO EUR/NAT and MID ASBU Symposium, which will be held in Marrakech, Morocco, 10-13 December 2018 will include Sessions on the Sixth Edition of the GANP (GANP 2019) and the different ASBU Threads (Technology, Information, Safety and Operational), as well as Panel Discussion on the implementation of Block 0 Modules and the planning for the implementation of Block 1 Modules. Accordingly, the meeting encouraged States to participate actively in this Symposium.

3.5 In the same vein, the meeting recalled that the ANSIG/3 meeting (Cairo, Egypt, 2 – 4 July 2018), through Draft Decision 3/2 established an ad-hoc Working Group to coordinate the development, submission and presentation of joint Working Papers to the AN-Conf/13, on subjects of mutual interest. The ad-hoc Working Group was composed of Egypt, Saudi Arabia, UAE (Rapporteur), ACAO and the ICAO MID Office. The meeting noted with concern that, despite some efforts, this initiative was not very successful, in comparison with the number of papers presented by the different groupings to the AN-Conf/13, such as AFCAC, EU, ECAC and EUROCONTROL. The meeting was informed also that the ACAO ANC/39 meeting (Rabat, Morocco, 29-30 November 2018) invited member States to prepare Draft

Working Papers to be presented under the ACAO umbrella to the Fortieth ICAO General Assembly (A40). These papers will be discussed during the ACAO ANC/40 meeting in April 2019.

3.6 Based on the above, the meeting encouraged States to coordinate through ACAO the submission of joint papers to the A40 addressing subject of mutual interest, such as GANP and ASBU implementation, the MID FPP, etc.

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REPORT ON AGENDA ITEM 4: AIR NAVIGATION SAFETY MATTERS AND COORDINATION WITH RASG-MID

RASG-MID ACTIVITIES

4.1 The subject was addressed in WP/4 presented by the Secretariat. The meeting was apprised of the RASG-MID activities. The meeting noted that the MID Annual Safety Report (MID-ASR) Sixth Edition for the period (2012-2016) was endorsed by the RSC/6 meeting (Cairo, Egypt, 25-27 June 2018). The main Focus Areas in the MID Region identified by the RSC/6 meeting based on the 6th ASR are Runway Safety (RS), (mainly RE and ARC during landing); Loss of Control In-Flight (LOC-I) and System Component Failure (SCF). The meeting noted also that the Draft MID Annual Safety Report (MID-ASR) Seventh Edition for the period (2013-2017), was reviewed by the ASRT/3 meeting (Cairo, Egypt, 2-22 December 2018), which agreed to present it to the RASG-MID/7 meeting (Cairo, 18-19 April 2019) for endorsement. Based on the analyses contained in the 7th ASR, the main Focus Areas identified in the MID Region are: Runway Safety (RS); (mainly RE and ARC during landing), Loss of Control Inflight- (LOC-I); Controlled Flight Into Terrain- (CFIT); and Mid Air Collision- (MAC).

4.2 With respect to the Emerging Risks, the meeting noted that the followings were identified and included in the 6th and 7th ASRs: Security risks with impact on safety-SEC; Fire/Smoke-non impact- (F-NI); Runway Incursion- (RI); Birdstrike- (BIRD); Wake Turbulence; System Component Failures- (SCF-NP); and Wildlife (Wild).

4.3 It was highlighted that Runway Incursion and Birdstrike categories would be addressed by the RGS Working Group; and the Mid-Air Collision (MAC) and Turbulence Encounter (TURB) categories would be addressed by the Regional Aviation Safety Team (MID-RAST), under the RASG-MID Framework; and by the ATM SG under the MIDANPIRG Framework.

4.4 The meeting reviewed and noted the consolidated inputs received by the ICAO MID Office from six (6) States related to the number of accidents, incidents and serious incidents related to the identified emerging risks, as reflected in the **Table 1**:

#	Occurrence Category	2015			2016			2017		
		# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents
1	CFIT			5			1			5
2	Mid Air Collision (MAC)		35	66		20	66		16	102
3	Fire/Smoke (F-NI)		8	26		2	42		8	30
4	Runway Incursion- (RI)		5	15		2	19		9	17
5	SCF-NP		14	122		9	267		9	257
6	Turbulence Encounter (TURB)	2		326			351		1	325
7	BIRD			119			198			297
8	Wildlife (Wild)			3			7			3

Near Mid Air Collision

4.5 The meeting noted with concern the significant increase in the Near Mid Air Collision incidents (NMACs) and recalled that the ATM-SG/4 agreed on the establishment of an Action Group composed of the ATM SG Chairpersons, Secretariat and experts from Saudi Arabia, UAE and IATA to carry out further analysis of the reported occurrences, based on the safety analyses and recommendations emanating from the SMSs of concerned States, and provide feedback to the MID-ASRT. Accordingly, the meeting urged States to share their occurrences, safety data analysis, and the relevant safety recommendations.

Wake Turbulence

4.6 The meeting reviewed the data shared by IATA on Wake Turbulence at **Appendix 4A** and noticed a significant increase of turbulence encounter occurrences mentioned. In addition, the meeting noted that ATM-SG/4 agreed that the Turbulence Encounter category (TURB) would be breakdown (at the level of the ATM SG) to the monitoring of the component related to Wake Turbulence. Accordingly, the meeting urged States to share their occurrences, safety data analysis, and the relevant recommendations pertaining to wake turbulence.

4.7 The meeting noted that a Regional Safety Advisory (RSA) regarding the wake turbulence is being prepared by the ICAO MID Office and UAE for presentation to the RASG-MID/7 meeting for endorsement.

Strategy for the Enhancement of Cooperation in the Provision of AIG Services in the MENA Region

4.8 The meeting was apprised of the progress achieved in the implementation of the Strategy for the Enhancement of Cooperation in the Provision of AIG Services in the MENA Region at **Appendix 4B** and the Roadmap for AIG Regional Cooperation at **Appendix 4C**. The meeting urged those States that have not yet done so, to reply to the questionnaire on AIG Level 1 of Cooperation, before 15 January 2019, for review by the MID-SST/5 meeting (Cairo, 19-21 February 2019).

REPORT ON AGENDA ITEM 5: AIR NAVIGATION PLANNING AND IMPLEMENTATION**5.1 State of Air Transport in the MID Region (aviation statistics for 2017)**

5.1.1 The subject was addressed in WP/5 presented by the Secretariat. The meeting was apprised of the global state of air transport in 2017; in particular, it was noted that the Total number of passengers carried on scheduled services rose to 4.1 billions in 2017 with an increase of 7.2% compared to 2016 and the total number of departures reached 36.7 million in 2017, with an increase of 3.1% compared to 2016.

5.1.2 According to the latest ICAO long-term air traffic forecasts, the 4.1 billion airline passengers carried in 2017 are expected to grow to about 10.0 billion by 2040, and the number of departures is projected to rise to some 90 million in 2040.

5.1.3 With regard to the MID Region state of air transport in 2017 (scheduled services), the meeting noted that the Region has been the fastest growing region for passenger and cargo traffic since 2011, and airlines in the MID Region have posted double-digit passenger traffic growth every year since 2012 except for 2017 (growth rate of 6.5 per cent compared to 2016). It was also highlighted that International traffic of air carriers in the Middle East represented 95.9% of the airlines' total RPK in 2017.

5.1.4 With regard to the total number of departures, the total number of scheduled commercial departures in 2017 grew at a pace of 5.4 per cent to reach about 1.37 million departures, compared to 1.3 million departures in 2016.

5.1.5 With regard to the long-term forecasts (up-to 2042), the passenger traffic to, from and within the MID Region on the five major route groups concerned is expected to increase at an average annual rate of 5.2 per cent. In 2042, the Middle East-Central South West Asia Route Group is expected to become the largest traffic route group to/from Middle East with an average annual growth rate of 8.2 per cent per annum, followed by Europe-Middle East, North Asia and Pacific South East Asia-Middle East, Africa-Middle East and North America-Middle East Route Groups with growth rates of 2.9 per cent, 3.5 per cent, 4.7 per cent and 3.4 per cent, respectively, for the period concerned.

5.1.6 The meeting recalled that an ICAO Aviation Data and Analyses Seminar was held in Tehran, Iran, 20-23 February 2017; and the ICAO EUR/MID Aviation Data and Analyses Seminar was held in the ICAO EUR/NAT Office, Paris, France, 4 – 6 April 2018. The meeting noted with concern that the level of attendance to both Seminars was very low. The presentations delivered during the Seminars are available at: <https://www.icao.int/MID/Pages/2017/Aviation%20Data%20and%20Analysis%20Seminar.aspx>; and <https://www.icao.int/Meetings/aviationdataseminar/Pages/default.aspx>, respectively.

5.1.7 The meeting was informed also that a Joint ACAO/IATA/ICAO Workshop on Airports and Air Navigation Charges was successfully held in Rabat, Morocco, 27-28 November 2018.

5.1.8 The meeting noted that the ICAO Aviation Data and Analyses and the Airports and Air Navigation Charges Seminars/Workshops do not address only the air traffic statistics, forecasts and connectivity, but also provide a forum for all aviation stakeholders to foster dialogue on the development of an economically viable civil aviation system (airlines, airports, air navigation services providers, etc.) and enhancement of its economic efficiency and transparency, while facilitating access to funding for aviation infrastructure and other investment needs, technology

transfer and capacity building to support the growth of air transport and for the benefit of all stakeholders. These events aim also to promote the use of the ICAO tools related to aviation data analysis to facilitate data-driven decision-making.

5.1.9 Based on the above, the meeting agreed that the ICAO Aviation Data and Analyses and the Airports and Air Navigation Charges Seminars/Workshops should be organized on regular basis; and encouraged States to participate actively in these events. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 6/1: AVIATION DATA & ANALYSES AND AIRPORTS & AIR NAVIGATION CHARGES SEMINARS/WORKSHOPS

That, in order to foster dialogue on the development of an economically viable civil aviation system (airlines, airports, air navigation services providers, etc.) and enhance its economic efficiency and transparency:

- a) ICAO organize on regular basis the Aviation Data and Analyses and the Airports and Air Navigation Charges Seminars/Workshops; and*
- b) States are encouraged to participate actively in these events.*

5.2 MID Region Air Navigation priorities and targets

ASBU Implementation Monitoring

Update to the MID eANP Volume III

5.2.1 The subject was addressed in WP/6 presented by the Secretariat. The meeting agreed to the changes to the MID eANP Vol III, proposed by the AIM SG/4, ATM SG/4, CNS SG/8 and MET SG/7 meetings (Tables B0-ACDM, B0-DATM, B0-FICE, B0-FRTO, B0-NOPS, B0-ACAS, B0-SNET and B0-AMET), as reviewed by the ANSIG/3 meeting, at **Appendix XX**. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/2: AMENDMENT TO THE MID eANP VOLUME III

That, the amendment to the MID eANP Volume III at Appendix 5.2X is approved.

5.2.2 The meeting was informed that the RGS WG/5 agreed that the Table B0-SURF 3-1 should be reviewed and improved to support a good monitoring and reporting related to the status of implementation of A-SMGCS Level 1 and 2. This will be done by the RGS WG/6 meeting in November 2019.

Second Edition of the MID Air Navigation Report (2017)

5.2.3 The meeting recalled that the MIDANPIRG/16 meeting agreed that States should provide the ICAO MID Office with relevant data necessary for the development of the Second Edition of the MID Region Air Navigation Report (2017).

5.2.4 The meeting recalled that the ANSIG/3 meeting reviewed and updated the Second Edition of the MID Air Navigation Report (2017) consolidated by the Secretariat; and urged States to provide necessary inputs/updates to the ICAO MID Office, in order to present the Final version of the Report for endorsement by MSG/6.

5.2.5 The meeting reviewed and endorsed the Second Edition of the MID Region Air Navigation Report (2017) at **Appendix XX**.

5.2.6 The meeting noted that the Methodology for the estimation of environmental benefits accrued from the implementation of priority 1 Block 0 Modules in the MID Region, developed by the Secretariat at **Appendix XX**, has been used for the estimation and reporting of environmental benefits in the Second Edition of the MID Air Navigation Report (2017). Additional Details about the Methodology (explanation of assumptions, calculations, etc.) is at **Appendix XX**.

5.2.7 The meeting noted that Bahrain, Egypt, Jordan, Lebanon, Qatar, Sudan and UAE made a good progress in the implementation of the priority 1 ASBU Block 0 Modules. From a regional perspective, the progress for the implementation of B0-SNET, B0-AMET and B0-ACAS is very good. However, the progress for the implementation of B0-ACDM, B0-CDO and B0-CCO is far below expectation.

5.2.8 Based on the above, the meeting agreed on the following MSG Conclusion:

MSG CONCLUSION 6/3: SECOND EDITION OF THE MID REGION AIR NAVIGATION REPORT (2017)

That, the Second Edition of the MID Region Air Navigation Report (2017) at Appendix NN is endorsed.

Third Edition of the MID Region Air Navigation Report (2018)

5.2.9 The meeting agreed that the ICAO MID Office should start the development of the Third Edition of the MID Region Air Navigation Report (2018), beginning of 2019. Therefore, States should provide the ICAO MID Office, with necessary data by **15 February 2019**. Accordingly, the meeting agreed on the following MSG Conclusion:

MSG CONCLUSION 6/4: MID REGION AIR NAVIGATION REPORT (2018)

That, MID States be urged to provide the ICAO MID Office, with relevant data necessary for the development of the Third Edition of the MID Region Air Navigation Report (2018), by 15 February 2019.

MID Region Air Navigation Strategy

5.2.10 The subject was addressed in WP/7 presented by the Secretariat. The meeting noted that the MID Region Air Navigation Strategy (MID Doc 002) endorsed by MIDANPIRG/16, was further reviewed by the MIDANPIRG subsidiary bodies and some amendments have been proposed and supported by the ANSIG/3 meeting. Accordingly, the meeting agreed to the following changes:

- deletion of the elements “National AIM implementation plan/roadmap”, eTOD and Digital NOTAM from the list of Elements of B0-DATM in the MID Air Navigation Strategy; and inclusion of a new element related to the agreements with data originators;
- update of the parts related to B0-FRTO, B0-NOPS, B0-FICE and B0-SNET;
- deletion of the element “PBN plans” from B0-APTA; and
- addition of a new element related to OPMET to B0-AMET.

5.2.11 The meeting recalled that, considering the progress related to ADS-B and MLAT implementation in the MID Region, the CNS SG/8 meeting proposed to change the B0-ASUR from priority 2 to priority 1. However, the meeting agreed with the ANSIG/3 that, prior to changing the priority of B0-ASUR from 2 to 1, it was necessary for the CNS SG to agree on the elements, applicability area, performance indicators/supporting metrics and their associated targets. Similarly, the meeting agreed that the MET SG/8 meeting should consider the inclusion of the wind shear as an element of the B0-AMET in the MID Air Navigation Strategy with well identified applicability area (list of International Airports requiring implementation of wind shear systems).

5.2.12 Based on the above, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/5: MID REGION AIR NAVIGATION STRATEGY

That, the revised MID Region Air Navigation Strategy (MID Doc 002, Edition February 2017) at Appendix 5.1A is endorsed.

5.3 Specific Air Navigation issues

AOP Matters

5.3.1 The subject was addressed in WP/9, presented by the Secretariat.

Airport Master Plan

5.3.2 The meeting underlined that the Airport Master Plan is a document that presents the short-term (1-5 years), intermediate-term (6-10 years) and long-term (10-20 year) development\goals of an airport and is typically evaluated and updated every 5 to 10 years. It was recalled that new ICAO provisions on airport planning have been proposed to be included in Annex 14, Volume I and PANS Aerodromes, to support the provision of airport capacity enhancements.

5.3.3 The meeting noted that the Airport Master Plan Task Force (AMPTF) had been established by the Aerodrome Design and Operations Panel (ADOP) and tasked with a complete rewrite of the obsolete guidance contained in Doc 9184, Airport Planning Manual, Part 1 - Master Planning.

A-CDM Implementation

5.3.4 The subject was addressed in WP/9, presented by the Secretariat. The meeting recalled that the ANSIG/3 meeting raised concern about the slow progress in the implementation of A-CDM and requested that an A-CDM Workshop be organized by the ICAO MID Office in 2019.

5.3.5 The meeting agreed that States should develop an action plan for the A-CDM implementation in line with the MID Air Navigation Strategy (according to the applicability area included in the MID Air Navigation Strategy).

5.3.6 Based on the above, the meeting agreed to the following MSG Conclusions to replace and supersede the MIDANPIRG/16 Conclusion 16/6:

MSG CONCLUSION 6/6: SURVEY ON ACDM IMPLEMENTATION

That,

- a) *concerned States (according to the B0-ACDM applicability area included in the MID Air Navigation Strategy) be urged to provide the ICAO MID Office with the contact details of their designated ACDM Focal Points; and*
- b) *a Survey on ACDM implementation be carried out for the monitoring of ACDM implementation, using the template at **Appendix 5XX**.*

MSG CONCLUSION 6/7: ACDM IMPLEMENTATION WORKSHOP

That,

- a) *an ACDM Implementation Workshop be organized by the ICAO MID Office in 2019; and*
- b) *States be urged to develop an action plan for A-CDM implementation in line with the MID Air Navigation Strategy.*

Aerodrome Certification

5.3.7 The meeting was apprised of the status of implementation of Aerodrome Certification as at **Appendix 5XX**.

AIM Matters

5.3.8 The subject was addressed in WP/8, presented by the Secretariat.

16th Edition of Annex 15 and the new PANS AIM

5.3.9 The meeting recalled that, taking into consideration the major changes introduced by the Amendment 16 to the Annex 15 and the new PANS AIM, an Interregional EUR/MID Workshop on PANS AIM was successfully conducted at the ICAO EUR/NAT Office in Paris, France, from 10 to 12 July 2018. The objectives of the Workshop were to introduce the new PANS-AIM (Doc 10066) and latest Amendments to Annex 15; and address associated challenges and share best practices for a timely implementation of the new provisions, including the implementation of digital datasets.

5.3.10 The meeting noted that, in line with the Workshop Recommendations, the Secretariat has prepared analysis of changes (compliance checklist) of the 16th Edition of Annex 15, as at **Appendix MM**. This spreadsheet would help States with transposition of the requirements and identification of differences with the Annex 15 SARPs. A similar compliance checklist will be developed/distributed as soon as the final/official version of the PANS AIM is available.

5.3.11 Based on the above, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/8: IMPLEMENTATION OF THE 16TH EDITION OF ANNEX 15 AND THE PANS AIM

That, States be urged to:

- a) *take necessary actions on the implementation of the 16th Edition of Annex 15 and the PANS AIM, including:*

- *updating AIS/AIM National Regulations;*
- *identification and notification of differences (EFOD and AIP GEN 1.7), if any;*
- *coordination with their AISPs to develop necessary operational procedures/practices in order to implement the provisions of Annex 15 and the PANS AIM;*

b) provide feedback to the ICAO MID Office on the implementation of the 16th Edition of Annex 15 and the PANS AIM (Implementation Plan, difficulties/challenges, need for assistance, etc).

5.3.12 The meeting urged States to actively participate in the Regional Workshop on the implementation of 16th Edition of Annex 15 and PANS AIM, which is scheduled to be held in Cairo, concurrently with the AIM SG/5 meeting, 22-24 January 2019.

MID Region AIM Implementation Roadmap

5.3.13 The meeting recalled that the AIM SG/3 meeting updated the MID Region AIM Roadmap and agreed that some AIM Phase 3 steps should be included in the Roadmap.

5.3.14 The meeting noted that, with the introduction of new provisions of Annex 15 and the PANS AIM, there would be a need to adjust the Roadmap with those provisions, in particular the digital datasets. Accordingly, the meeting tasked the AIM SG to update the MID Region AIM Implementation Roadmap in order to include the provisions of the 16th Edition of Annex 15 and the PANS AIM.

ATM Matters

5.3.15 The subject was addressed in WP/10 presented by the Secretariat. The meeting was apprised of the outcome of the ATM SG/3, ATM SG/4 meetings as well as the outcome of the ANSIG/3 meeting related to ATM.

ATS Route Network

5.3.16 The meeting commended States and stakeholders for the excellent cooperation and their commitment to improve the ATS route network in the MID Region.

5.3.17 The meeting congratulated UAE and Sudan for the successful implementation of the new airspace restructuring project on 7 December 2017 within Emirates FIR and 26 April 2018 within Khartoum FIR.

5.3.18 The meeting recalled that the ATM SG/4 meeting recognized that the prefix “U” (Routes in Upper Airspace) has been misused, which is leading to confusion. In most cases, the limits of Upper ATS Routes are beyond the limits of the upper Airspaces, which are not clearly defined by some States.

5.3.19 The meeting, based on the outcome of the ATM SG/4 meeting, agreed that the prefix “U” be removed from route designators providing that the limits of the ATS routes be clearly published in the AIPs. The meeting recognized the need for the optimization of the route designators in the MID Region. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/9: REMOVAL OF PREFIX “U” WITH ROUTE DESIGNATORS

That,

- a) *States take necessary measures to remove the prefix “U” from the route designators published in their AIPs to be completed by December 2020;*
- b) *a Proposal for Amendment to the MID eANP Volume II-Specific Regional Requirements - Table ATM II-MID-1 - MID Region ATS Routes be processed to remove the prefix ‘U’; and*
- c) *States support the MID Office to optimize the use of route designators in the MID Region.*

ICAO International Codes and Route Designators (ICARD)

5.3.20 The meeting recalled that the following issues related to ICARD/5LNCs were addressed by the ATM and AIM Sub-Groups:

- publication in National AIPs of 5LNCs, which have not been registered in ICARD;
- 5LNCs duplicates (5LNCs used in more than one State);
- sound-like proximity;
- 5LNCs registered in ICARD but not used;
- increasing demand of 5LNCs for terminal use (SIDs, STARs, IAPs);
- shortage of available 5LNCs for allocation;
- coordination of 5LNCs used as FIR BDRY with the neighboring States; and
- ICARD system/platform issues.

5.3.21 The meeting noted that ICAO has launched a new ICARD platform in March 2017 to resolve the issues faced with the old ICARD system. The new system is more user-friendly with improved database, menus and functions, including the MAP function.

5.3.22 The meeting, based on the outcomes of the AIM and ATM Sub-Groups meetings, underlined the need to use the alphanumeric codes for terminal airspace in accordance with PANS-OPS (Doc 8168) provisions and agreed to mandate the use of ICARD as the only mean for managing 5LNCs through the amendment of the MID eANP. Accordingly, the meeting agreed to the following MSG Decision and MSG Conclusion:

MSG DECISION 6/10: 5LNCs/ICARD REGIONAL REQUIREMENTS

That, the Secretariat process a Proposal for Amendment to the MID eANP Volume II-Specific Regional Requirements to mandate the use of ICARD as the only means for managing 5LNCs; and the alphanumeric codes for terminal airspace, in accordance with PANS-OPS (Doc 8168) provisions.

MSG CONCLUSION 6/11: ICARD ISSUES

That,

- a) *States be urged to take necessary actions on the resolution of the issues related to ICARD/5LNCs, including:*
- i. *registration of all 5LNCs published in AIP into ICARD;*
 - ii. *5LNCs duplicates;*
 - iii. *Non-ICAO codes;*
 - iv. *sound-like proximity;*
 - v. *release of unused registered 5LNCs; and*
 - vi. *use of Alphanumeric codes for terminal airspace, in accordance with PANS-OPS (Doc 8168) provisions.*
- b) *Users (IATA, IFALPA, Jeppesen, etc.) are invited to report issues related to ICARD/5LNCs in the MID Region to the ICAO MID Office; and*
- c) *an air navigation deficiency be filed against those States that are not complying with Annex 11 and Doc 8168 provisions related to 5LNCs.*

MID Route Development Working Group (RDWG) Activities

5.3.23 The meeting recalled that MIDANPIRG/16, through Decision 16/17, established the MID RDWG. The meeting reviewed and endorsed the Terms of Reference (TORs) of the RDWG at **Appendix 5X**, which were developed by the ATM SG/3 meeting, through the following MSG Decision:

MSG DECISION 6/12: TERMS OF REFERENCE OF THE MID ROUTE DEVELOPMENT WORKING GROUP (MID RDWG)

*That, the MID RDWG Terms of Reference at **Appendix 5X** are endorsed.*

5.3.24 The meeting commended the work of the RDWG in particular related to the development of the new MID Region ATS Route Catalogue, which was reviewed and endorsed by the ATM SG/4 meeting. Accordingly, the meeting agreed to the following MSG Conclusion emanating from the ATM SG/4 meeting:

MSG CONCLUSION 6/13: MID REGION ATS ROUTE CATALOGUE

That,

- a) *the MID Region ATS Route Catalogue at **Appendix 5X** is endorsed and be published on the ICAO MID and IATA MENA websites; and*
- b) *IATA is responsible to maintain the Catalogue up-to-date through the agreed process and the MID RDWG framework.*

5.3.25 Taking into consideration that several efforts are taking place to improve the ATS Route Network at national and cross-border levels, the meeting invited States to use the MID RDWG as a platform to facilitate bilateral and multilateral coordination.

Contingency Planning

5.3.26 The meeting commended States and Stakeholders for their commitment and excellent cooperation that ensured the success of the Contingency Coordination Team (CCT) framework.

5.3.27 The meeting noted that some of the world's largest carriers along with many international carriers operating within close proximity to each other at international hubs in the MID Region, during periods of disruption, including weather or ATC capacity limitations often lead to significant delays, diversion and unprecedented levels of airborne holding. This would require the development of a Demand Versus Capacity management program during periods of disruption to be published by States, as applicable.

5.3.28 The meeting recalled that the ATM SG/3 meeting through Draft Decision 3/4 established the MID ATM Contingency Plan Action Group to carry out a comprehensive review of the MID Region ATM Contingency Plan (MID Doc 003), taking into consideration the experience gained, the latest developments, and to include in the revised version measures and procedures enabling the CCTs to deal with airports and airspace disruptions due to weather or other factors in a timely and effective manner. The meeting agreed that the Action Group be composed of ATM experts from Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, UAE, AACO, IATA and ICAO.

5.3.29 Based on the above, the meeting agreed to the following MSG Decision:

MSG DECISION 6/14: MID ATM CONTINGENCY PLAN ACTION GROUP

That, the MID ATM Contingency Plan Action Group, composed of ATM experts from Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, UAE, AACO, IATA and ICAO, be established to carry out a comprehensive review of the MID Region ATM Contingency Plan (MID Doc 003).

5.3.30 Taking into consideration that the signature of contingency agreements is a regional requirement in the MID Region and it is not mandated in the adjacent Regions, the meeting agreed that the signature of the contingency agreements with ACCs of the States at the interfaces with the ICAO MID Region be considered as "recommended" and not mandatory. Therefore, the meeting agreed that the deficiencies reported against the States at the interfaces for non-signature of contingency agreements should be removed.

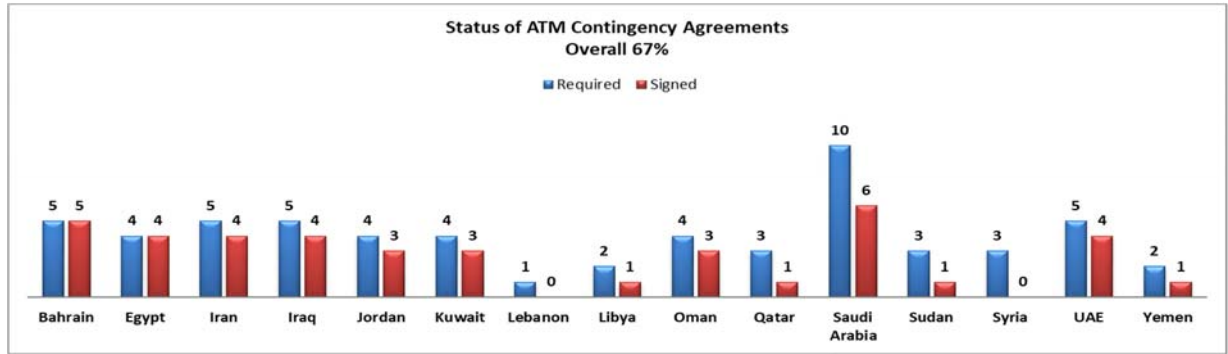
5.3.31 The meeting noted that the above requirement should be reflected in the MID eANP, Volume II Part IV under Specific Regional Requirements. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/15: DEFICIENCIES RELATED TO THE NON-SIGNATURE OF CONTINGENCY AGREEMENTS WITH STATES AT THE INTERFACE WITH ICAO MID REGION

That,

- a) the MID eANP Volume II-Part IV (ATM) be amended to reflect the regional requirements related to the signature of ATM Contingency Agreements; and*
- b) the deficiencies related to the non-signature of contingency agreements with the States at the interfaces with the ICAO MID Region be removed.*

5.3.32 The meeting reviewed the status of signed contingency agreements between adjacent ACCs at **Appendix 5X**, which is reflected in the **Graph** below:



AIDC/OLDI

5.3.33 The meeting reviewed the status of implementation of AIDC/OLDI in the MID Region as at **Appendix 5X** and noted with concern that the level of implementation is still far beyond the acceptable level. The meeting noted that based on the Questionnaire circulated by the MID Office, the following challenges have been identified:

- adjacent State(s) not ready to implement AIDC/OLDI;
- no response from adjacent State(s);
- ATM system does not support AIDC/OLDI as reported by two (2) States; and
- technical problems; and
- no common protocol supported by all ATM systems in the MID Region (Incompatibilities issues).

5.3.34 The meeting noted with appreciation that Oman organized a 2-day AIDC/OLDI familiarization workshop, from 4 to 5 September 2018 to assist Jordan establishing AIDC/OLDI connections. In this respect, the meeting urged States to initiate communication for AIDC/OLDI connections taking into consideration other States' experiences and use the guidance provided in the MID Doc 006 available on the ICAO MID Website.

5.3.35 The meeting recognized that the implementation of AIDC/OLDI would improve significantly the coordination process and would reduce the amount of coordination failures between ACCs, which has been identified as a major long-standing issue by the MIDRMA Board. Consequently, the implementation of AIDC/OLDI would enhance safety and reduce ATC workload.

5.3.36 The meeting noted with appreciation that Bahrain and UAE implemented OLDI on 2 July 2017 and Muscat and UAE on 12 March 2018. Bahrain and UAE shared their experience highlighting the advantages and the benefits gained from the OLDI connections. UAE informed the meeting that a reduction in coordination failures by 60% between 2010 and 2017 was achieved which directly contributes to the enhancement of safety.

5.3.37 The meeting agreed with the applicability area for the AIDC/OLDI at **Appendix 5X**, as defined by the ATM SG/4 meeting. The meeting agreed that a requirement for AIDC/OLDI implementation (priority 1 interconnections) should be included in the MID eANP Volume II Part IV-ATM, under Specific Regional Requirements.

5.3.38 Based on the above, the meeting agreed to following MSG Conclusion emanating from ANSIG/3 meeting:

MSG CONCLUSION 6/16: REGIONAL REQUIREMENT FOR AIDC/OLDI IMPLEMENTATION

That, a Proposal for Amendment to the MID eANP Volumes II – Part IV-ATM related to the requirement for AIDC/OLDI implementation (priority 1 interconnections) be processed in accordance with the standard procedure for amendment.

SSR Codes Issues at the EUR/MID Interface

5.3.39 The meeting recalled that the Secondary Surveillance Radar (SSR) Code in the MID Region are managed through the MID SSR Code Management Plan (CMP), which was developed based on the study carried out by EUROCONTROL on the MID Regional traffic patterns for the month of June 2009. The meeting recognized the need to review the initial study from 2009 in the future, taking into consideration the expected traffic growth.

5.3.40 The meeting noted that the ICAO Paris Office and EUROCONTROL approached ICAO MID Office concerning the interference of SSR Codes used by States at the interface between the ICAO EUR and MID Regions, in particular the Codes Series used by Greece, Libya and Malta. In order to resolve the issue, the meeting agreed to change the Transit SSR Series allocated to Libya from A2001-2077 to A7100-7177. The meeting also agreed to allocate the Domestic Code Series 2300-2377 to Qatar.

5.3.41 Based on the above, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/17: AMENDMENT OF THE MID SSR CMP AND MID eANP VOLUME II – TABLE ATM II-MID-2

That,

- a) *ICAO process a Proposal for Amendment of the MID eANP Volume II-Table ATM II-MID-2 — MID SSR Code Allocation List, to reflect the changes at Appendix 5X; and*
- b) *the revised version of MID SSR CMP (MID Doc 005) at Appendix 5X is endorsed.*

First Meetings of the Air Traffic Flow Management and FIFA World Cup 2022 Task Forces

5.3.42 The subject was addressed in WP/11 presented by the Secretariat. The meeting reviewed the outcomes of the First Meeting of the Air Traffic Flow Management Task Force (ATFM TF/1) and FIFA World Cup 2022 Task Force (FWC2022 TF/1), which were held back-to-back in Muscat, Oman from 23 to 26 September 2018.

5.3.43 The meeting recalled that the ATFM TF was established by MIDANPIRG/16 (Kuwait, 13 – 16 February 2017) through MIDANPIRG Decision 16/16, based on the recommendation of the ATFM Seminar (Dubai, UAE, from 13 to 15 December 2016) to develop an ATFM Concept of Operations for the MID Region.

5.3.44 The meeting commended the contribution provided by India, USA, AEROTHAI, CANSO, EUROCONTROL, IATA, MAAR and MIDRMA to the ATFM TF/1 and FWC2022 TF/1 meetings, and for their commitment to support the MID Region in this endeavor.

5.3.45 Taking into consideration the challenges, the work and resources required, and other experiences, the meeting agreed with the ATFM TF/1 meeting that at this stage it would not be possible to develop an ATFM CONOPS without the assessment of the MID Region ATFM Capabilities. Accordingly, the meeting agreed to the roadmap for the development of the CONOPS developed by the ATFM TF/1 meeting.

5.3.46 The meeting noted that the MID Office circulated a Questionnaire based on the one used in ASIA Pacific and the Americas, which would be considered as basis for the actions that will be undertaken by the ATFM TF. The deadline for inputs was 30 November 2018. However, only Bahrain, Jordan, Qatar, Saudi Arabia, Sudan and UAE replied to the Questionnaire. Accordingly, the meeting urged States, if not yet done so, to complete the Questionnaire and return it back to the ICAO MID Office not later than **15 December 2018**.

5.3.47 The meeting noted that the ATFM TF/1 meeting established the ATFM Core Team composed of experts from; Bahrain, India, Oman, Qatar, Saudi Arabia, UAE, USA, AEROTHAI, ACAO, CANSO, EUROCONTROL, IATA and ICAO. The Core Team will follow-up on the agreed actions by the ATFM TF, would conduct Teleconferences with some States based on the responses to the Questionnaire and develop a Draft CONOPS for ATFM. The first meeting of the Core Team will be hosted by UAE in Abu Dhabi, 22-24 January 2019.

5.3.48 The meeting reviewed and endorsed the TORs of the ATFM TF at **Appendix 5X**, which were developed by the ATM SG/3 meeting and updated by the ATFM TF/1 meeting. Accordingly, the meeting agreed to the following MSG Decision:

MSG DECISION 6/18: TERMS OF REFERENCE OF THE MID ATFM TASK FORCE

*That, the MID ATFM Task Force Terms of Reference at **Appendix 5X** are endorsed.*

5.3.49 The meeting recalled that MIDANPIRG/16 noted that Qatar will be hosting the World Cup tournament in 2022, which will have an impact on the airspace capacity in the MID Region. The meeting recognized the need for a collaborative action plan to accommodate the expected significant increase in air traffic, in a safe and efficient manner, with the participation of all concerned States and stakeholders, taking into consideration similar experiences, such as Brazil and South Africa World Cups, Athena Olympic Games, Hajj, etc. The meeting noted also that other major events are planned to be held in the Region, such as, the EXPO 2020 in UAE.

5.3.50 Based on the above, the MIDANPIRG/16 meeting established the World Cup 2022 Task Force to develop and follow-up the implementation of a collaborative action plan to accommodate the expected high increase in traffic, in a safe and efficient manner, taking into consideration similar experiences. The Task Force was also tasked to address other major events such as the EXPO 2020. With a view to avoid confusion with other events related to World Cups, the meeting agreed that naming of World Cup 2022 Task Force be changed to FIFA World Cup 2022 task Force (FWC2022 TF).

5.3.51 The FWC2022 TF/1 meeting was apprised of other similar experiences that took place in Europe, South Africa and USA. Qatar presented an update on the level of preparation highlighting some of the challenges that require the implementation of regional solution to enable the MID Region to accommodate safely and efficiently the increase of traffic during the World Cup 2022.

5.3.52 The FWC2022 TF/1 meeting recognized the need to establish regional collaborative mechanism to address the issues associated with excepted increase of traffic during the World Cup 2022 and other major events, which would have major impact on the traffic within and outside the MID Region.

5.3.53 The meeting agreed that the FWC2022 TF and ATFM TF should be working in the most effective and collaborative manner.

5.3.54 The meeting reviewed and endorsed the TORs of the FWC2022 TF at **Appendix 5X**, which were developed by the ATM SG/4 meeting and updated by the FWC2022 TF/1 meeting. Accordingly, the meeting agreed to the following MSG Decision:

MSG DECISION 6/19: TERMS OF REFERENCE OF THE FIFA WORLD CUP 2022 TASK FORCE

That,

- a) the name of the World Cup 2022 TF be changed to FIFA World Cup 2022 TF (FWC2022 TF); and*
- b) the FWC2022 TF Terms of Reference at **Appendix 5X** are endorsed.*

5.3.55 The meeting noted that Qatar offered to host the ATFM TF/2 back-to-back with the FWC2022 TF/2 meetings in Doha from 24 to 27 February 2018. Accordingly, the meeting encouraged States to support the work carried out by the ATFM TF and FWC2022 TF and actively participate in the ATFM TF/2 and FWC2022 TF/2 meetings.

Performance Based Navigation (PBN) Matters

5.3.56 The subject was addressed in WP/17 presented by the Secretariat. The meeting reviewed the outcome of the PBN SG/3 meeting (Cairo, Egypt, 11-13 February 2018) and the outcomes of the CNS SG/8, ATM SG/4 and ANSIG/3 meeting relevant to PBN.

MID Region PBN Implementation Plan

5.3.57 The meeting noted that the PBN SG/3 meeting (reviewed and updated the MID Region PBN Implementation Plan (MID Doc 007) parts related mainly to terminal airspace. Chapter 2 of the Plan (CNS Infrastructure) was reviewed and updated by the CNS SG/8 meeting. The ATM SG/4 meeting reviewed and updated the Plan parts related to en-route. The revised plan was circulated to States for their review and inputs in order for the Secretariat to present a consolidated version to the MSG/6 meeting for endorsement.

5.3.58 The meeting reviewed and endorsed the MID Region PBN Implementation Plan (MID Doc 007) - Edition December 2018 at **Appendix 5X** through the following MSG Conclusion:

MSG CONCLUSION 6/20: MID REGION PBN IMPLEMENTATION PLAN

*That the MID Region PBN Implementation Plan (MID Doc 007) - Edition December 2018 at **Appendix 5X** is endorsed and be published on the ICAO MID website.*

5.3.59 The meeting reiterated MSG Conclusion 4/11 and urged States to provide the ICAO MID Office with their updated National PBN Implementation Plans by end of each year.

5.3.60 Taking into consideration that the airspace users plan the equipage of their fleet based on the operation requirements as well as the air navigation services provided, it was recognized that the States' National PBN Plans would support the airspace users in their planning process. Accordingly, the meeting agreed that the States' National PBN Implementation Plan be published on the MID Office website to facilitate consultation and planning of airspace users.

5.3.61 Based on the above the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/21: NATIONAL PBN IMPLEMENTATION PLANS

That, the States' National PBN Implementation be published on the ICAO MID website to facilitate consultation and planning of the airspace users.

MID Flight Procedure Programme (MID FPP)

5.3.62 The meeting recognized that the MID FPP would be the ultimate solution to support States at national level in meeting their obligations related to PANS-OPS (regulatory and service provision) through an effective resource sharing approach under ICAO umbrella. It was noted that the envisaged date for start of operation of the Programme is January 2019.

5.3.63 It was highlighted that based on the outcome of the MID FPP Kick-off meeting (Cairo, Egypt, 22 – 24 January 2018), the MID Office circulated the consolidated draft MID FPP Project Document for States review through State Letter AN 6/33 – 18/144 dated 9 May 2018 at **Appendix 5X**. Only, Jordan and Lebanon provided feedback. The MID Office sent follow-up Letters on 15 November 2018 with a new deadline for comments **15 December 2018**.

5.3.64 The meeting noted with appreciation that the PBN OPS-Approval Course was conducted at the MID FPP premises in Beirut from 26-30 November 2018 free of charge as in-kind contribution from IATA to the MID FPP; twenty-two (22) experts from the Region benefited from the course.

5.3.65 The meeting recalled that in order to start the recruitment of the Manager for the MID FPP by ICAO TCB and formally start operation, it is required that five (5) States sign the MID FPP Project Document with ICAO and that USD300,000 be secured in the Programme's bank account at ICAO. Currently, USD100,000 were provided by Saudi Arabia and UAE and ICAO MID Office is working on some additional options for resource mobilization.

5.3.66 States have been invited to provide advance payments that will be deducted from their annual financial contributions for the coming years to expedite the launching of the project.

5.3.67 It was underlined that the MID FPP funding mechanism including the exact amount of the financial annual contributions will be agreed upon by the MID FPP Steering Committee. It was noted that States' advance financial contributions to the MID FPP will not be used without the MID FPP Steering Committee Decision.

5.3.68 Based on the above, the meeting urged States to join the MID FPP and benefit from its services. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG Conclusion 6/22: MID Flight Procedure Programme (MID FPP)

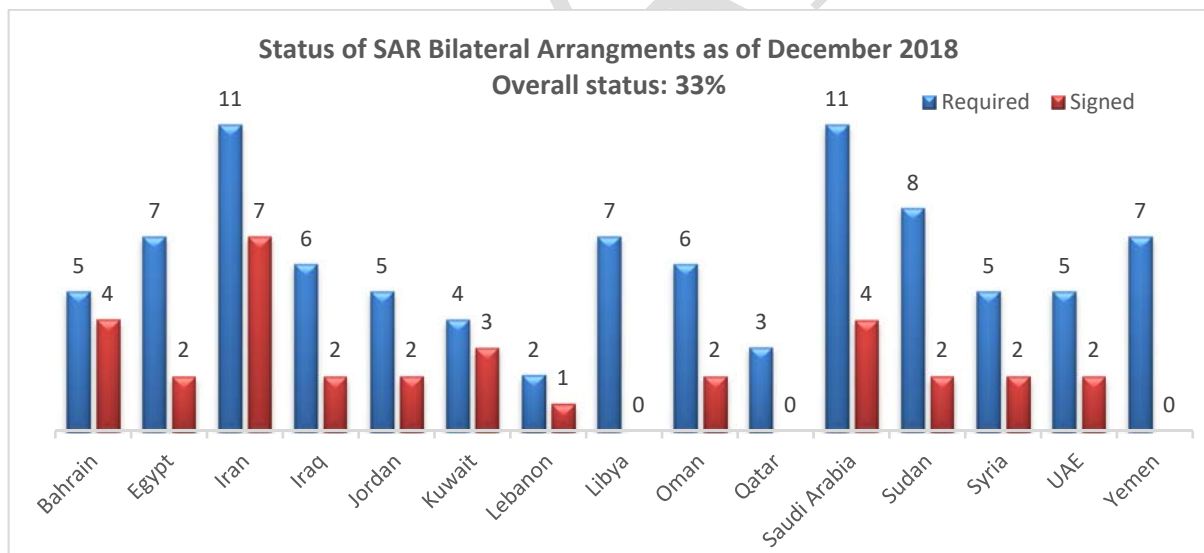
That, States that have not yet done so, be urged to respond to the MID Office State Letter related to the MID FPP, join and support the Programme to benefit from its services.

Search and Rescue (SAR) Matters

5.3.69 The meeting noted that SAR main USOAP-CMA findings in the MID Region are related to lack of:

- effective SAR oversight activities;
- English language proficiency for RCC radio operators;
- appropriate training programmes/plans of SAR experts;
- signature of SAR agreements;
- plans of operations for the conduct of SAR operations and SAR exercises;
- provision of required SAR services; and
- non-compliance with the carriage of Emergency Locator Transmitter (ELT) requirements.

5.3.70 The meeting reviewed and updated the status of SAR bilateral Arrangements as at **Appendix 5X**, which is also reflected in the following the **Graph** below:



Graph 2

5.3.71 The meeting recalled that MIDANPIRG/16 meeting urged States to implement the relevant recommendations emanating from the ICAO AFI/APAC/MID Regional and Inter-regional SAR Workshop (Mahe, Seychelles, 19 - 22 July 2016). Based on the success of the Workshop, it was agreed to organize the SAR Inter-Regional Workshop between the 4 ICAO Regions each 2 years and on rotation basis. In this respect, the meeting encouraged States (Regulators, ANSPs and Military) to participate in the Inter-Regional Workshop, which is tentatively planned to be held in Salalah, Oman, from 1 to 4 July 2019.

5.3.72 The meeting reviewed and endorsed the MID SAR Implementation Plan developed by the MID SAR Action Group (SAR AG) at **Appendix 5X**, which includes guidance material to support States to comply with global and regional requirements for SAR provisions. The Plan includes also the Matrix that will be used for the analysis of the SAR status of implementation in the MID Region and Templates related to the conduct of SAREX.

5.3.73 The meeting commended the work of the Action Group and agreed to the following MSG Conclusion:

MSG CONCLUSION 6/23: MID REGION SEARCH AND RESCUE IMPLEMENTATION PLAN

*That, the MID Region Search and Rescue Implementation Plan at **Appendix 5X** is endorsed as MID Doc 010 and to be published on the ICAO MID website.*

5.3.74 The meeting urged States to keep up-to-date their SAR Point of Contact (SPOC) contact details in their AIPs (GEN 3.6) and on the COSPAS-SARSAT website: <http://www.cospas-sarsat.int/en/contact-lists-mccs-and-spocs>

COMMUNICATIONS MATTERS

5.3.75 The subject was addressed in WP/12 presented by the Secretariat

World Radiocommunication Conference (WRC-19)

5.3.76 The meeting noted that the WRC-19 meeting will be held in Sharm El-Sheikh, 28 October to 22 November 2019. Furthermore, the meeting recalled that the ICAO Position for WRC-19 has been coordinated with all ICAO member States and approved by ICAO Council in June 2016.

5.3.77 The meeting urged States to work closely with their States Telecommunication Authorities to ensure that ICAO Position is suitably reflected in the national position of the State and in the regional position; and to support ICAO Position during the WRC-19 meeting. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/24: SUPPORT ICAO POSITION TO WRC-19

That, States be urged to:

- a) work closely with the States Telecommunication Authorities to support the ICAO Position to the WRC-19;*
- b) make necessary arrangements for the designated Civil Aviation Personnel to participate actively in the preparatory work for WRC-19 at the national level; and*
- c) attend the preparatory regional spectrum management groups meetings and WRC-19 to support and protect aviation interests.*

Frequency Finder Tool

5.3.78 The meeting was apprised of the new VHF Navigation frequency assignment (ILS/VOR) Module being developed by ICAO HQ. Furthermore, the meeting noted that several States requested training on the Frequency finder tool.

5.3.79 Considering the introduction of the new NAV module and to keep States abreast of the use of the Frequency Finder Tool, the meeting recognized the need to organize a Frequency Management Workshop and agreed to the following MSG Conclusion:

MSG CONCLUSION 6/25: FREQUENCY MANAGEMENT WORKSHOP

That, ICAO consider the organization of a Workshop on the Frequency Finder Tool jointly with ACAO in 2020.

5.3.80 The meeting noted that the registered frequencies in the ICAO database (using the Frequency Finder Tool) is not up-to-date, and that could result in incompatible frequency assignments. Therefore, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/26: REGISTERED FREQUENCY UPDATE

That, for an optimized frequency assignment process and in order to ensure that assigned frequencies to MID States are not interfering, States that have not yet done so, be urged to:

- a) verify and update existing registered frequencies in the COM list;*
- b) add any missing frequencies with the full details, where applicable;*
- c) delete unused frequencies;*
- d) send the changes in excel format generated by the FF export function; and*
- e) provide the ICAO MID Office with feedback before 15 February 2019.*

Harmful Interference

5.3.81 The meeting noted the occurrence of many frequency interferences incidents in the MID Region, and agreed that the removal of harmful interference requires coordination among States in close coordination with the ICAO MID Office. Therefore, the meeting agreed that States should assign focal points for the frequency management issues in order to improve the coordination and respond to the interference occurrences in a timely manner. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/27: FREQUENCY MANAGEMENT FOCAL POINTS

That, States, that have not yet done so, be invited to assign Frequency Management Focal Points by 15 February 2019, for a better coordination of frequency management issues, including harmful interference.

CRV Project

5.3.82 The meeting recalled that MIDANPIRG/16, though Conclusion 16/15, invited States to engage with the recommended CRV supplier (PCCW Limited) to establish individual service contracts. Therefore, eight (8) States (Bahrain, Iraq, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia and UAE) provided their network requirements through the completion of the high level questionnaire.

5.3.83 The meeting noted that States selected different packages for the same connections, and in order to request price revision from CRV service provider, the Secretariat prepared consolidated proposal with unified package for all MID States. In this vein, the meeting noted that six (6) States provided their requirements.

5.3.84 Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/28: MID CRV REQUIREMENTS

That, in order to request price revision from the CRV's Service provider (PCCW Global) for the MID Region, States that have not done so, are urged to complete the MID CRV requirements at Appendix 5.3X, not later than 15 February 2019.

5.3.85 The meeting noted that the CRV service provider (PCCW) offered a bundle discount with around 10-15% less if Six (6) States place order in a the same period. Also, it was highlighted that the CRV overall cost could be reduced if a high number of States join the project.

5.3.86 The meeting noted that the fifth meeting of the CRV Operation Group will be held in Hong-Kong, from 23 to 25 2019. that the CRV OG/5 will review the progress of the CRV project and regional implementation plan.

Missing Messages

5.3.87 The meeting noted that the CRV OG/5 meeting will address the missing messages issue; by reviewing the current AFTN/AMHS routing tables of the entry/exit points and the performance of inter-regional connections (Bahrain, Kuwait and Oman). Therefore, the meeting urged States to attend the CRV OG/5 and in particular the States concerned (Bahrain, Kuwait and Oman).

5.3.88 The meeting recalled that the missing messages issue have been raised in several ICAO meetings. Furthermore, the meeting noted that the following actions have been taken by the MID Office to resolve missing messages problem:

- a) requested the ICAO EUR/NAT Office to consider the establishment of new European Gateway (Rome) with the MID Region;
- b) invited Egypt and Lebanon to establish AMHS inter-regional connection with the current European gateways (Athens and Cyprus);
- c) coordinated with ICAO ESAF Office to establish new inter-regional AMHS connection between Cairo and South Africa; and
- d) invited Bahrain – UAE to migrate their bilateral CIDIN connection to AMHS.

5.3.89 The meeting was apprised of Sudan's request to consider Khartoum COM Centre as a Main COM Centre and gateway with the AFI Region. The meeting agreed that having additional entry/exit point between the AFI and MID Regions could offer more channel for the inter-regional communications. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 6/2: KHARTOUM COM CENTRE

That, in order to establish a third Gateway to the AFI Region, Khartoum COM Centre be changed to a main Centre.

ROC and IWXXM Implementation

5.3.90 The meeting recalled that Saudi Arabia and Bahrain will be the main and backup Regional OPMET Centres (ROC), respectively. It was highlighted that exchanging the IWXXM format in the current mixed environment (AFTN, Basic and Extended AMHS Connections) needs a lot of preparation and monitoring to ensure messages flow through consistent routes.

5.3.91 The meeting reviewed the communication requirements and agreed to the following MSG Conclusions:

MSG CONCLUSION 6/29: IMPLEMENTATION OF FTBP

That, States are urged to:

- a) implement FTBP capability at National COM Centres (AMHS is a pre-requisite);*
- b) implement P3/P7 with FTBP capability at the National OPMET Centre (NOC); and*
- c) set the maximum overall AMHS Message size to 4 MB.*

MSG CONCLUSION 6/30: THE COMMUNICATION NETWORK FOR IWXXM DATA EXCHANGE

That, the Main and Backup Regional OPMET Centres (Bahrain and Saudi Arabia) and the Main COM Centres in the MID Region be urged to join the CRV Project in order to enable the exchange of OPMET information in IWXXM format.

SITA Integration

5.3.92 The meeting noted that SITA integration is a pre-requisite to any AMHS inter-regional connection, in order to keep efficient and regular messages exchange. ICAO APAC, EUR/NAT and SAM Regions have completed the integration successfully. The ESAF and WACAF Regions are also progressing well.

5.3.93 The meeting was apprised of SITA Type X Transition Action Plan developed by the CNS SG/8 meeting. However, the transition could not be completed, as Egypt has not been ready for that.

5.3.94 Based on the above, the meeting urged Egypt to resolve the issue of SITA integration in order not to isolate the MID Region from AMHS upgrade with adjacent Regions. Furthermore, the meeting noted that a coordination meeting will be held between Egypt, EUROCONTROL, ICAO MID and SITA on 18 December 2018.

NAVIGATIONS MATTERS

5.3.95 The subject was addressed in WP/13 presented by the Secretariat.

5.3.96 The meeting reiterated that the GNSS is a vital component to the Air Navigation and that has been increasingly used by many Aviation applications.

5.3.97 The meeting recalled that the ICAO MID Office organized two GNSS Workshops jointly with ACAO. The need to consolidate all information about GNSS to guide MID States on GNSS implementation was recognized. Therefore, the Guidance on GNSS Implementation in the MID Region has been developed by the Secretariat and improved, taking into consideration States' inputs. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/31: GUIDANCE ON GNSS IMPLEMENTATION

That, the Guidance on GNSS Implementation in the MID Region at Appendix 5.3X is endorsed and be published as ICAO MID Doc 011.

5.3.98 The meeting noted that the draft RASG-MID Safety Advisory (RSA) on GNSS Vulnerabilities at **Appendix 5.3X** will be presented to the RASG-MID/7 meeting for endorsement.

SURVEILLANCE MATTERS

5.3.99 The subject was addressed in WP/14 presented by the Secretariat.

5.3.100 The meeting recalled that the Mode S Interrogator Code Allocation (MICA) process in the MID Region is managed by the EUROCONTROL MICA web application. Furthermore, it was highlighted that some MICA users are not familiar with the MICA procedures and process. Therefore, the meeting agreed that a Surveillance/MICA Workshop be organised in 2019.

5.3.101 The meeting recalled that MIDANPIRG/16, through Decision 16/23, tasked the CNS SG to develop the MID Region Surveillance plan. The Draft plan has been developed by the Secretariat and reviewed/amended during the CNS SG/8 meeting. Furthermore, the ATM SG/4 reviewed the Draft MID Region Surveillance plan and agreed that ADS-B out would be used to improve Surveillance coverage and availability.

5.3.102 The meeting reviewed the Draft MID Region Surveillance plan and agreed that the Plan should address also the space based ADS-B. The meeting agreed that Plan should be further improved taking into consideration the outcome of the Surveillance/MICA Workshop and the CNS SG/9 meeting. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/32: MID REGION SURVEILLANCE PLAN AND WORKSHOP

That, with a view to provide MICA Operator with necessary knowledge to implement MICA processes efficiently, and in order to develop a comprehensive Surveillance Plan in the MID Region:

- a) a Surveillance/MICA Workshop with support of EUROCONTROL be organised in February 2019;*
- b) States be invited to participate actively in the Workshop;*
- c) the Draft MID Region Surveillance Plan be reviewed/updated during the Surveillance/MICA Workshop and presented to the CNS SG/9 meeting for further review, before presentation to the MIDANPIRG/17 meeting for endorsement.*

CYBER SECURITY

5.3.103 The subject was addressed in WP/15 presented by the Secretariat and PPT/1 presented by the UAE.

5.3.104 The meeting recalled that MIDANPIRG/16, through Decision 16/26, established the ATM DATA Security Action Group (ADSAG) to develop the MID Region ATM Data Security Plan. Considering the wide scope of the task, the meeting agreed that the CNS SG/9 might develop detailed Terms of Reference for the ADSAG or Action Plan for the development of the MID Region ATM Data Security Plan.

5.3.105 The meeting noted that the ADSAG agreed that the MID Region ATM Data Security Plan outline would be as follow:

- a) Security Regulations;
- b) Physical Security
- c) ICT Cyber Security baseline
- d) Disaster Recovery

5.3.106 The meeting recalled that the UAE took the lead for the MID Region to develop, in co-ordination with other States, a security baseline for the various systems in use. The Minimum Security Baseline documents (MSBs) were presented during the CNS SG/8 meeting. Furthermore, it was noted that the MSBs would be included in the MID Region ATM Data Security Plan as ICT Cyber Security Baseline.

5.3.107 It was highlighted that the ATM Cyber Security has a wide scope, and accordingly should cover the security aspects of all ANS systems and infrastructure.

5.3.108 The meeting noted that in order to strengthen the Regional collective ability to detect and defend against malicious activities, by sharing information about adversaries and their behaviours, the UAE developed and hosted the ATM Data Security Portal (ADCS). In this regard, the meeting commended UAE for taking such initiative.

5.3.109 UAE underlined that ADCS portal is not intended to be a comprehensive solution for cyber security but rather a platform where cyber events can be logged, information related to cyber-attacks shared and discussions held on various cyber topics on the forum. Furthermore, the meeting noted that ADSC access will be restricted to approved ANSP/industry users only, therefore, it was agreed that MID States assign ADCS focal points. Other users from the Region can register online; the official emails will be used for verifying Registration.

5.3.110 Based on the above, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/33: ATM DATA CYBER SECURITY (ADCS) PORTAL

That;

- a) the ADCS Portal be used as a prototype platform for ATM cyber security; and
- b) States be encouraged to:
 - i. assign ADCS focal point(s) to register on the ADCS Portal;
 - ii. provide feedback to the ADCS Admin by **15 February 2019** for further enhancements; and
 - iii. share their experience related to cyber security, through the ADCS Portal.

5.3.111 The meeting agreed that in order to enrich cyber security awareness in the Region and strengthen the ability to prepare for, respond to and recover from a cyber-attack; a Cybersecurity & Resilience Seminar be organized jointly with ACAO in 2019. The Seminar will address; inter-alia, the Cyber Security Regulatory Framework; Cyber Risk Management; Infrastructure and information Security; Proactive cyber defence; Incident management and Resilience Techniques. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/34: CYBER SECURITY AND RESILIENCE SEMINAR

That, in order to enrich the cyber security awareness and strengthen the cyber resilience in the MID Region, ICAO organise a Cyber Security and Resilience Seminar in 2019 jointly with ACAO.

5.3.112 The meeting realised the need for Cyber Security Subject Matter Expert (SME) in the MID States, as Security is one of the fast-evolving and complex area. Also, the meeting underlined that States should include Cyber Security training to their Training plan. Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/35: CYBER SECURITY SUBJECT MATTER EXPERT

That, in order to strengthen States' Cyber-resilience capabilities in the MID Region, States be invited to ensure that they have qualified/trained Cyber Security Subject Matter Experts.

MET Matters

5.3.113 The subject was addressed in WP/16, presented by the Secretariat.

IWXXM Implementation

5.3.114 The meeting recalled that, as a follow-up to the MET SG Draft Conclusion 7/1, an IWXXM survey was conducted on 10 April 2018 (State letter Ref.: ME3/2.3 – 18/114 refers), in order to gather and analyse information on States' action plans for IWXXM implementation. Replies have so far been received from Five (5) States (Egypt, Jordan, Libya, Oman and Sudan).

5.3.115 The meeting urged States, that have not yet done so, to complete the IWXXM survey and provide their feedback to the ICAO MID Office, not later than **15 February 2019**.

5.3.116 The meeting agreed that the “*Guidelines for the Implementation of OPMET data exchange using IWXXM*” be presented to MIDANPIRG/17 for endorsement and publication as MID Doc xxx (MET SG Draft Conclusion 7/2 refers). This document is maintained by the Meteorology Panel (METP) Working Group on Meteorological Information Exchange (WG-MIE).

MID ROCs Implementation

5.3.117 The meeting noted that the status of implementation of ROC Jeddah and back-up ROC Bahrain had no significant progress (Bahrain, Egypt, Iran and Kuwait: Partially Implemented; Syria and Yemen: Not Implemented). Accordingly, the meeting urged States, that have not yet done so, to complete the implementation.

Wind Shear Questionnaire

5.3.118 The meeting recalled that, in order to identify the International Aerodromes for which wind shear is considered a safety factor for operation; and determine the requirement and applicability area for Wind Shear warning/alert, a Questionnaire was distributed to States on 21 February 2018 (State letter Ref.: ME 3/2.3 – 18/066 refers). Replies have been received from eight (8) States (Bahrain, Egypt, Iran, Kuwait, Libya, Qatar, Sudan and Yemen).

5.3.119 The meeting noted that the Questionnaire mainly focused on the MET issues and, since wind shear is considered as a safety issue, the meeting agreed that there is a need to further investigate wind shear occurrences from a Safety perspective (to be addressed by RASG-MID).

5.3.120 The meeting noted that the replies provided by States on the Questionnaire could not effectively contribute to the identification of the Wind Shear warning/alerts requirement. Accordingly, the meeting urged States to identify those International Airports, for which wind shear is a safety factor (based on the occurrences/incidents and statistics for the past 3 to 5 years); and inform the ICAO MID Office, in order to include them in the applicability area for wind shear warning/alerts requirement.

5.3.121 Based on the above, the meeting agreed to the following MSG Conclusion:

**MSG CONCLUSION 6/36: IDENTIFICATION OF INTERNATIONAL AERODROMES
FOR WIND SHEAR WARNINGS/ALERTS REQUIREMENT**

That, based on the occurrences/incidents and statistics related to wind shear for the past 3 to 5 years, States be urged to:

- a) identify those International Aerodromes for which wind shear is considered a safety factor for operation; and*
- b) provide feedback to the ICAO MID Office before **15 February 2019**.*

REPORT ON AGENDA ITEM 6: AIR NAVIGATION DEFICIENCIES***Review of Air Navigation Deficiencies***

6.1 The subject was addressed in WP/19 presented by the Secretariat. The meeting noted with concern that the majority of deficiencies listed in the MANDD have no specific Corrective Action Plan (CAP). The meeting urged States to implement the provisions of MIDANPIRG Conclusion 15/35 related to the elimination of Air Navigation Deficiencies, in particular, the submission of a specific Corrective Action Plan (CAP) for each deficiency.

6.2 The meeting reviewed the list of deficiencies in the AIM, AOP, ATM, CNS, SAR and MET fields as reflected in the MID Air Navigation Deficiency Database (MANDD) at: <http://www.icao.int/mid> The meeting noted that the total number of air navigation deficiencies recorded in MANDD is **105** deficiencies compared to **114** deficiencies approved by MIDANPIRG/16.

6.3 A quantitative analysis of the MID States' air navigation deficiencies is shown in the tables and graphs presented at **Appendices 6A** and **6B**.

6.4 The meeting highlighted the following:

- In the AOP field; total number of AOP deficiencies is ten (10) priority "A". Eight (8) deficiencies related to aerodrome certification; one (1) related to runway physical characteristics; and one (1) related to apron lighting. The lack of implementation of aerodromes' certification represents 80% of these deficiencies.
 - In the AIM field; total number of AIM deficiencies is forty seven (47); forty one (41) priority "A" and six (6) priority "B". Seventeen (17) deficiencies related to eTOD; six (6) related to QMS; six (6) related to AIXM; six (6) related to WAC; four (4) related to pre-flight information services; three (3) related to AIP and aeronautical charts; three (3) related to AIRAC adherence; and two (2) related to WGS-84.
 - In the ATM field; total number is twenty six (26); seventeen (17) priority "A" and nine (9) priority "B". Thirteen (13) related to the uncompleted signature of contingency agreements; Nine (9) related to the non-implementation of planned regional ATS Routes; and four (4) related to unsatisfactory reporting of large Height deviation (LHD) to the MIDRMA
 - In the CNS field; total number of CNS deficiencies is two (2); one (1) priority "A" and one (1) priority "B". Both deficiencies are related to ATS Direct speech circuits.
 - In the MET field; total number of MET deficiencies is ten (10) priority "A" deficiencies. Six (6) related to QMS; and four (4) related to METAR, TAF, SIGMET and WAFS.
 - In the SAR field; total number is ten (10) priority "A" deficiencies. Five (5) related to the lack of SAR provisions; and five (5) related to non-compliance with the carriage of Emergency Locator Transmitter (ELT) requirements.
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REPORT ON AGENDA ITEM 7: MIDANPIRG WORKING ARRANGEMENTS***MIDANPIRG Members/Alternates/Advisers and Sub Groups Focal Points***

7.1 The subject was addressed in WP/20 presented by the Secretariat. The meeting reviewed and updated the lists of MIDANPIRG Members/Alternates/Advisers and Subsidiary Bodies' Focal Points (ATM SG, AIM SG, CNS SG, MET SG and PBN SG) as at **Appendix 7A**.

7.2 The meeting urged States to support the work of the Subsidiary bodies by assigning experts and specialists able to effectively contribute to the work of the different MIDANPIRG subsidiary bodies.

MIDANPIRG Procedural Handbook

7.3 The subject was addressed in WP/21 presented by the Secretariat. The meeting recalled that the Fourth meeting of the MIDANPIRG/RASG-MID Coordination meeting (Bahrain, 25 September 2017) agreed that, in many cases, there is a need for an expeditious decision-making process (fast track, approval by passing, etc.). It was further agreed that the MIDANPIRG and RASG-MID should agree on such procedure and include it in their Procedural Handbooks.

7.4 The meeting discussed the proposal of a Fast Track/Approval by passing procedure that requires the inclusion of the following paragraph in MIDANPIRG Handbook:

“In case an urgent follow-up action on an outcome from a MIDANPIRG subsidiary body is identified/needed, the ICAO MID Office may coordinate with the Chairperson(s) the approval by passing of the corresponding outcome, without waiting for the MIDANPIRG or MSG approval”.

7.5 The meeting recalled that the MSG/5 meeting initiated discussion on the working arrangements of MIDANPIRG and in particular the interaction between MSG and ANSIG. The meeting was apprised of the global developments related to PIRGs and RASGs, which would have impact on the working arrangements of MIDANPIRG and RASG-MID.

7.6 Based on the above, the meeting agreed to defer the discussion on the amendment of the MIDANPIRG Handbook, Fast Track and working arrangements to the MIDANPIRG/17 meeting. However, the meeting invited States to provide the ICAO MID Office by **15 March 2019** with their views and proposals related to the MIDANPIRG working arrangements and the MIDANPIRG Procedural Handbook (organizational structure, empowerment of the subsidiary bodies, approval by passing, etc.). Accordingly, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/37: MIDANPIRG WORKING ARRANGEMENTS

*That, States be invited to provide the ICAO MID Office, not later than **15 March 2019**, with their views and proposals related to the MIDANPIRG working arrangements and the MIDANPIRG Procedural Handbook (organizational structure, empowerment of the subsidiary bodies, approval by passing, etc.).*

REPORT ON AGENDA ITEM 8: FUTURE WORK PROGRAMME

8.1 The subject was addressed in WP/22 presented by the Secretariat. The meeting recalled that in accordance with the MIDANPIRG Procedural Handbook, the MSG is expected to review and update, as necessary, its Terms of Reference (TORs) and to decide on the dates and venue of its next meeting.

8.2 Taking into consideration the changes to the MIDANPIRG working arrangements that would be agreed upon in due course, the meeting agreed to defer the review of the MSG TORs and the decision on the venue and dates of the MSG/7 meeting to MIDANPIRG/17, which will be held in Cairo, Egypt, 15 – 16 April 2019, back-to-back with the RASG-MID/7 meeting.

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REPORT ON AGENDA ITEM 9: ANY OTHER BUSINESS

9.1 The meeting noted with appreciation EUROCONTROL willingness to support the work of MIDANPIRG and contribute to the efforts undertaken in the MID Region.

9.2 The meeting also commended the high level of cooperation and collaboration achieved between ACAO and ICAO MID Office, which will have positive impact on the support provided to States and the regional initiatives and projects.

9.3 The meeting noted with concern the low level of responses to the ICAO MID Office State Letters. Accordingly, the meeting agreed that the implementation of an online monitoring tool for the States' responses to the ICAO MID Office State Letters would support States in the process of follow-up and effective provision of replies.

9.4 Based on the above, the meeting agreed to the following MSG Conclusion:

MSG CONCLUSION 6/38: STATE LETTERS ONLINE MONITORING TOOL

That, in order to support States in the process of follow-up and effective provision of replies to the ICAO MID Office State Letters, ICAO is invited to explore/implement an online monitoring tool.
