INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT OF THE FIFTEENTH MEETING OF THE MIDDLE EAST AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP

MIDANPIRG/15
(Bahrain, 8 – 11 June 2015)

The views expressed in this Report should be taken as those of the Regional Planning and Implementation Group and not of the Organization. This Report will, however, be submitted to the ICAO Council and any formal action taken will be published in due course as a Supplement to the Report

Approved by the Meeting
and published by authority of the Secretary General

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PART I - HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Fifteenth Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/15) was gratefully hosted by the Civil Aviation Affairs (CAA), Ministry of Transportation and Telecommunication of Bahrain at the Gulf Hotel – Manama, from 8 to 11 June 2015.

2. OPENING

2.1 Mr. Ahmed N. Al Nemah, Acting Under Secretary Civil Aviation Affairs, Bahrain, opened the meeting. Mr. Al Nemah conveyed the greetings and best wishes of His Excellency Eng. Kamal Bin Ahmed Mohammed, Minister of Transportation and Telecommunication to the meeting. He extended a warm welcome to all participants to the MIDANPIRG/15 meeting and wished them a pleasant stay in Bahrain. Mr. Al Nemah highlighted that, the MID Region, being the fastest growing Region, had been facing challenges of airspace congestion and collaborative efforts are needed to reduce airspace fragmentation and increase capacity and cost-effectiveness. He thanked ICAO, and especially, the Regional Director, Mr. Mohamed Khonji, for their efforts in fostering the implementation of the Middle East (MID) Regional Air Navigation Plan (ANP) and improvement of air navigation services in the MID Region. He confirmed that MIDANPIRG, since its establishment in 1993 has progressed very well and established a solid foundation and necessary guidelines paving the way to States to modernize their ANS systems and infrastructure to enhance safety and efficiency of air transport. Mr. Al Nemah wished the meeting fruitful deliberations.

2.2 Mr. Mohamed Khonji, Regional Director, ICAO Middle East (MID) Regional Office welcomed all the participants to Bahrain. He expressed ICAO's sincere gratitude and appreciation to Bahrain and especially to H.E. Eng. Kamal Bin Ahmed Mohammed, Minister of Transportation and Telecommunication, and Mr. Ahmed N. Al Nemah, Acting Under Secretary Civil Aviation Affairs, and Mr. Ali Ahmed, Air Navigation Director, CAA Bahrain and Chairman of MIDANPIRG, for hosting this important meeting and for the generous hospitality extended to all participants. He pointed out that Bahrain has always been supporting the ICAO MID Regional Office and MIDANPIRG activities and played an important and positive role in the MID Region.

2.3 Mr. Khonji highlighted that MIDANPIRG has matured, transforming the MID Region into a more developed active Region over the twenty one (21) years of its existence. In this respect, he highlighted that with the contributions of all Partners, the planning process has been successful and Air Navigation has continued to be safe, economical and more efficient in the MID Region. He highlighted that the continuing growth of traffic in the MID Region placed increased demand on airspace capacity, which necessitates an optimum utilization of the available airspace and Airports.

2.4 Mr. Khonji recalled that as a follow-up to the MIDANPIRG/14 Conclusion 14/6, the MSG/4 meeting reviewed, updated and endorsed the MID Region Air Navigation Strategy, which was consolidated based on the outcome of the different MIDANPIRG subsidiary bodies and other inputs from States and concerned international organizations. He also highlighted that the DGCA-MID/3 meeting (Doha, Qatar, 27-29 April 2015) endorsed a Declaration on Aviation Safety and Air Navigation in the MID Region called "Doha Declaration", which was developed taking into consideration the MID Region Air Navigation and Safety Strategies and the Montréal Declaration on Planning for Aviation Safety Improvement (February 2015). Finally, Mr. Khonji thanked all Participants for their presence wishing them successful and productive meeting.

2.5 Mr. Ali Ahmed, Chairman of MIDANPIRG welcomed all delegates to Bahrain wishing them a fruitful meeting.

3. ATTENDANCE

3.1 The meeting was attended by a total of Eighty Nine (89) participants, which included experts from thirteen (13) States (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE and USA) and seven (7) International Organizations/Agencies (AACO, CANSO, IATA, IFAIMA, IFATCA, JEPPESEN and MIDRMA). The list of participants is at Attachment A.

4. OFFICERS AND SECRETARIAT

4.1 Mr. Mohamed R. M. Khonji, ICAO Middle East Regional Director acted as the Secretary of the Meeting, assisted by the following ICAO MID Regional Officers:

Mr. Mohamed Smaoui	-	Deputy Regional Director (DRD)
Mr. Raza A. Gulam	-	Regional Officer, Communications, Navigation and Surveillance (CNS)
Mr. Elie El Khoury	-	Regional Officer, Air Traffic Management and Search and Rescue (ATM/SAR)
Mr. Abbas Niknejad	-	Regional Officer, Aeronautical Information Management/Air Traffic Management (AIM/ATM)

4.2 The meeting was also supported by Mr. Michiel Vreedenburgh, Chief, Implementation Support and Development Section – Safety, ANB/SMM/ISD-SAF from the Air Navigation Bureau of ICAO Headquarters in Montreal and Mr. Christopher Keohan, Regional Officer Meteorology (MET) from the ICAO EUR/NAT Office, Paris.

5. LANGUAGE

5.1 The discussions were conducted in English. Documentation was issued in English.

6. AGENDA

6.1 The following Agenda was adopted:

Agenda Item 1: Adoption of the Provisional Agenda

Agenda Item 2: Follow-up on the outcome of MIDANPIRG/14 and MSG/4 Meetings

- Review of action taken by the ANC on MIDANPIRG/14 Report
- Review status of MIDANPIRG/14 and MSG/4 Conclusions and Decisions

Agenda Item 3: Global, Inter and Regional Activities

Agenda Item 4: Aviation Safety

4.1 Update from and coordination with the RASG-MID
4.2 Air Navigation Safety related issues

Agenda Item 5: Performance Framework for Regional Air Navigation Planning and Implementation

5.1 Air Navigation Strategy and Planning

- *MID Region statistics and forecasts*
- *MID Region Air Navigation Strategy*
- *MID eANP*

5.2 Air Navigation Systems Implementation

5.2.1 MID Region air navigation priorities and targets (ASBU Implementation)

- *Airport Operations*
- *Global interoperable systems and data – through globally interoperable system-wide information management*
- *Optimum capacity and flexible fights – through global collaborative ATM*
- *Efficient flight paths – through trajectory-based operations*

5.2.2 Specific air navigation issues

- *Outcome of the MIDANPIRG subsidiary bodies (Non-ASBU related issues)*

5.2.3 Environmental Protection

Agenda Item 6: Air Navigation Deficiencies

Agenda Item 7: Future Work Programme

Agenda Item 8: Any other Business

7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1 The MIDANPIRG records its actions in the form of Conclusions and Decisions with the following significance:

a) **Conclusions** deal with matters that, according to the Group's terms of reference, merit directly the attention of States, or on which further action will be initiated by the Secretary in accordance with established procedures; and

b) **Decisions** relate solely to matters dealing with the internal working arrangements of the Group and its Sub-Groups

8. LIST OF CONCLUSIONS AND DECISIONS

DECISION 15/1: DISSOLUTION OF THE CALL SIGN CONFUSION AD-HOC WORKING GROUP

CONCLUSION 15/2: CALL SIGN SIMILARITY PROVISIONS AND GUIDELINES

CONCLUSION 15/3: MIDRMA REVISED MEMORANDUM OF AGREEMENT

CONCLUSION 15/4: MIDRMA FUNDING MECHANISM

CONCLUSION 15/5: ONLINE REPORTING OF LARGE HEIGHT DEVIATION (LHD)

CONCLUSION 15/6: SIMPLIFIED LARGE HEIGHT DEVIATION (LHD) REPORTING PROCEDURE

CONCLUSION 15/7: MID RVSM SAFETY MONITORING REPORT (SMR) 2014

CONCLUSION 15/8: MID RVSM SAFETY MONITORING REPORT (SMR) 2015

CONCLUSION 15/9: AVIATION STATISTICS AND TRAFFIC FORECASTS

CONCLUSION 15/10: MID REGION AIR NAVIGATION STRATEGY

CONCLUSION 15/11: ENDORSEMENT OF THE MID eANP

DECISION 15/12: DISSOLUTION OF THE ANP AD-HOC WORKING GROUP

CONCLUSION 15/13: MID FLIGHT PROCEDURE PROGRAMME (FPP) WORKSHOP

DECISION 15/14: DISSOLUTION OF THE MPST

CONCLUSION 15/15: MID CIVIL/MILITARY SUPPORT TEAM

DECISION 15/16: COLLABORATIVE AIR TRAFFIC FLOW MANAGEMENT (ATFM-CDM)

CONCLUSION 15/17: FORMAL ARRANGEMENTS BETWEEN AIS AND DATA ORIGINATORS

CONCLUSION 15/18: MID REGIONAL GUIDANCE FOR IMPLEMENTATION OF AIDC/OLDI

CONCLUSION 15/19: REGIONAL PERFORMANCE DASHBOARDS

CONCLUSION 15/20: MID REGION ATM CONTINGENCY PLAN

CONCLUSION 15/21: MID REGION ACCs LETTER OF AGREEMENT TEMPLATE

CONCLUSION 15/22: MID REGION HIGH LEVEL AIRSPACE CONCEPT

CONCLUSION 15/23: MID SSR CODE MANAGEMENT PLAN (CMP)

DECISION 15/24: MID REGIONAL/SUB-REGIONAL SEARCH AND RESCUE TRAINING EXERCISES

DECISION 15/25: MIDAD SUPPORT TEAM (MIDAD ST)

CONCLUSION 15/26: EAD-MIDAD MEMORANDUM OF COOPERATION (MOC)

CONCLUSION 15/27: SUPPORT ICAO POSITION TO WRC-15

CONCLUSION 15/28: GNSS RADIO FREQUENCY INTERFERENCE

CONCLUSION 15/29:	*WORKSHOP ON THE USE OF THE ICAO FREQUENCY FINDER*
CONCLUSION 15/30:	*AFTN/CIDIN AFS CONNECTIVITY AND AMHS IMPLEMENTATION*
CONCLUSION 15/31:	*MIDAMC ACCREDITATION PROCEDURE*
CONCLUSION 15/32:	*MID REGION PROCESS FOR MODE S IC CODES ALLOCATION*
CONCLUSION 15/33:	*OPMET EXCHANGE SCHEME*
CONCLUSION 15/34:	*SINGLE ENGINE TAXI OPERATIONS*
CONCLUSION 15/35:	*AIR NAVIGATION DEFICIENCIES*

PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF THE PROVISIONAL AGENDA

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

REPORT ON AGENDA ITEM 2: FOLLOW-UP ON THE OUTCOME OF MIDANPIRG/14 MEETING AND MSG/4 MEETINGS

2.1 The subject was addressed in WP/2 presented by the Secretariat.

Review of action taken by the ANC on MIDANPIRG/14 Report

2.2 The meeting was apprised of the actions taken by the Air Navigation Commission on the MIDANPIRG/14 Report (AN-WP/8822 and AN Min. 195-10 refers). It was noted with appreciation that the coordination of work between the MIDANPIRG and RASG-MID on safety-related issues and in particular with respect to Conclusion 14/7 – *Second Regional Runway Safety Seminar (MID-RRSS/2)* and Decision 14/10 – *Transfer of Aerodromes Activities to RASG-MID*, was commended. It was highlighted though, that aerodrome implementation matters, including the update of planning items in the ANP, remained within the remit of the MIDANPIRG.

2.3 The meeting noted that concern was raised regarding the use of terminology such as Go-Team and Pre-Go-Team (Conclusion 14/14 refers).

Review status of MIDANPIRG/14 and MSG/4 Conclusions and Decisions

2.4 The meeting reviewed the progress made on the implementation of MIDANPIRG/14 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**.

2.5 The meeting was apprised of the progress made for the implementation of the MSG/4 Conclusions and Decisions as at **Appendix 2B**.

REPORT ON AGENDA ITEM 3: GLOBAL AND REGIONAL DEVELOPMENTS

Air Navigation Global Update

3.1 The subject was addressed in PPT/1 presented by the Secretariat providing an update on Air Navigation from a global perspective. The following topics were covered:

- Preliminary Figures for the State of Global Air Navigation to be included in the Second Annual Global Air Navigation Report to be published in June 2015.
- New Initiatives for Implementation Enhancement.
- Update of Regional Dashboards based on MID Air Navigation Strategy and Doha Declaration and planned transfer to the Regional Office.
- Implementation Kits (I-Kits).
- Results of the second PIRG-RASG Global Coordination Meeting.
- New Regional Air Navigation Plan.
- New PANS-Training Provisions for Competency-Based Training (CBT) and Assessment for Air Traffic Controllers and Air Traffic Safety Electronics Personnel.
- Outcome of the RPAS Symposium and new Manual (Doc 10019), I-Kit, Panel and provisions.
- NCLB Symposium to be held 23 – 25 November 2015, ICAO Headquarters, Montréal, Canada.

Remotely Piloted Aircraft Systems (RPAS)

3.2 The United States presented WP/40 on the FAA's programme related to safe integration of RPAS/UAS (Unmanned Aircraft Systems) into non-segregated airspace, and work underway to establish rules for small RPAS/UAS. The meeting invited the United States to present the same to the ATM SG/2 meeting (Cairo, Egypt, 30 November – 3 December 2015) which was agreed to. The meeting encouraged States to support the work of ICAO on RPAS.

PIRG Activities in other Regions

3.3 The meeting noted the content of IP/5 providing executive summaries of the latest PIRG meetings in the different ICAO Regions and a summary of the review of the corresponding PIRG meeting reports by the Air Navigation Commission.

Update related to Amendments of the ICAO Annexes, PANS and MID ANP (Doc 9708)

3.4 The meeting noted the content of IP/6 related to the recent approved and proposed amendments to ICAO Annexes, Procedures for Air Navigation Services and MID ANP (Doc 9708); as well as a list of State Letters issued by ICAO HQ, which are of relevance to MIDANPIRG.

Outcome of the DGCA-MID/3 meeting

3.5 The subject was addressed in WP/3 presented by the Secretariat. The meeting was apprised of the outcome of the Third Meeting of the Directors General of Civil Aviation-Middle East Region (DGCA-MID/3), held in Doha, Qatar, 27-29 April 2015 with a focus on the Conclusions related to air navigation.

3.6 The meeting noted that the DGCA-MID/3 meeting, through Conclusion 3/1, endorsed the Declaration on Aviation Safety and Air Navigation in the MID Region "Doha Declaration", which was developed taking into consideration the MID Region Air Navigation and Safety Strategies and the Montréal Declaration on Planning for Aviation Safety Improvement (February 2015). It was highlighted that the objective of the Declaration is to expedite the achievement of the main Aviation Safety and Air Navigation Targets in the MID Region, which are to be monitored by the DGCA-MID meetings.

3.7 The meeting noted with appreciation that the DGCA-MID/3 meeting supported the MID ATM Enhancement Programme (MAEP) and the MID Region AIM Database (MIDAD) Project.

REPORT ON AGENDA ITEM 4: AVIATION SAFETY

4.1 Update from and coordination with the RASG-MID

4.1.1 The subject was addressed in WP/4 presented by the Secretariat.

RASG-MID Activities

4.1.2 The meeting was apprised of the RASG-MID activities. It was highlighted that the Third Edition of the MID Annual Safety Report (MID-ASR), which was endorsed by the RASG-MID/4 meeting (Jeddah, Saudi Arabia, 30 March - 1 April 2015), demonstrated that the top three Focus Areas (FAs) in the MID Region are Runway Safety (RS), LOC-I and CFIT (in line with the global priorities).

4.1.3 The meeting noted that System/Component Failure or Malfunction (SCF); Near Midair Collision (NMAC) and laser attacks have been identified as Emerging Risks.

4.1.4 It was informed that the RASG-MID/4 meeting noted with concern that reporting of incidents is very low in the MID Region, which underlines the need to enhance the reporting mechanisms/systems at the national level. Accordingly, the RASG-MID/4 meeting invited States to take necessary measures to enhance their mandatory and voluntary reporting systems.

4.1.5 The meeting noted that the RASG-MID/4 meeting agreed that an Accidents and Incidents Analysis Working Group (AIAWG) be established under the MID Annual Safety Report Team (MID-ASRT) to review, analyse and categorize on annual basis the accidents and incidents. The AIA WG would also, to the extent possible, identify the main root causes and contributing factors of the reviewed accidents and incidents. The AIA WG should be composed of experts from the safety and ATM fields with grounded knowledge and experience in Accident and Incident Investigation.

4.1.6 The meeting was apprised of the changes to the MID Region Safety Strategy approved by the RASG-MID/4 meeting, as well as the main RASG-MID deliverables.

Coordination between MIDANPIRG and RASG-MID

4.1.7 The meeting noted that RASG-MID and MIDANPIRG have been coordinating some safety-related issues such as mitigation measures for CFIT (unstabilized approaches) and call sign confusion and similarity. Other subjects of interest to both groups have been identified, in particular those related to ATM safety such as SMS implementation for ANS/ATM, Language Proficiency for Air Traffic Controllers, RVSM safety monitoring, etc.

4.1.8 The meeting was apprised of the outcome of the Second PIRG-RASG Global Coordination meeting held in ICAO Headquarters, Montreal on 5 February 2015. In order to further improve the current coordination mechanism between MIDANPIRG and RASG-MID and considering the outcome of the Second PIRG-RASG meeting, the RASG-MID/4 meeting and the DGCA-MID/3 meeting, it was agreed that:

- the Chairperson(s) of MIDANPIRG should attend the RASG-MID meetings;
- the Chairperson(s) of RASG-MID should attend the MIDANPIRG meetings;
- the ICAO MID Regional Office to organize on a yearly basis a MIDANPIRG/RASG-MID Coordination meeting to be attended by the Chairpersons of both Groups and

their subsidiary bodies, in order to follow-up on the activities being coordinated between the two Groups, agree on the level of involvement of the relevant subsidiary bodies, address any roadblocks and identify additional subjects, which need to be addressed by/coordinated between both Groups;

- the Table at **Appendix 4.1A** listing the subjects in which both MIDANPIRG and RASG-MID have interest with an assignment of the leading Group be presented to the First MIDANPIRG/RASG-MID Coordination meeting for endorsement; and
- the procedural handbooks of MIDANPIRG and RASG-MID should be updated before the end of 2015 to include the agreed coordination mechanism.

4.1.9 In connection with the above, the First MIDANPIRG/RASG-MID Coordination meeting was held on 10 June 2015 as a side meeting and endorsed the Table at **Appendix 4.1A**. It was also agreed that that the Second MIDANPIRG/RASG-MID Coordination meeting be held in Cairo, Egypt on **14 December 2015** back-to-back with the Fourth meeting of the RASG-MID Steering Committee (RSC/4), which is scheduled to be held in Cairo, Egypt, 15-17 December 2015.

Call sign similarity and confusion

4.1.10 The subject was addressed in WP/5 presented by the Secretariat and WP/41 presented by IATA, on behalf of the MID Region ATM Enhancement Programme Interim Project Management Office (MAEP IPMO).

4.1.11 The meeting recalled that the MSG/4 meeting, through MSG Decision 4/23, agreed to the establishment of a Call Sign Confusion Ad-hoc Working Group (CSC WG) in order to:

a) analyze the results of the survey on the acceptance/processing of flight plans containing “alphanumeric” call signs ending with letter(s); and

b) develop solutions.

4.1.12 The meeting was apprised of the outcome of the First Meeting of the Call Sign Confusion Ad-hoc Working Group (CSC WG/1) held in Abu Dhabi, UAE, 16-18 February 2015. The Summary of Discussions of the CSC WG/1 is available on the ICAO MID Regional Office website.

4.1.13 The meeting noted that the CSC WG/1 meeting analysed the results of the survey on call sign confusion carried out by ICAO and developed a set of actions, which would mitigate the risk associated with call sign confusion and similarity.

4.1.14 The meeting noted that the outcome of the CSC WG/1 meeting was reviewed by RASG-MID/4 meeting, which tasked the RASG-MID Steering Committee (RSC) to consider if it would be necessary to endorse Detailed Implementation Plans (DIPs) addressing the remaining actions related to call sign confusion and similarity, including the mid and long term actions.

4.1.15 The meeting noted with appreciation that the RASG-MID/4 meeting endorsed the RASG-MID Safety Advisory on Guidance material related to call sign similarity developed by the MAEP IPMO, which provides a set of guidelines and similarity rules for use by airline operators and air traffic controllers. The RASG Safety Advisory RSA-04 was issued by the ICAO MID Regional Office through State Letter Ref.: ME 4-15/152 dated 26 May 2015 and posted on the ICAO MID website. Accordingly, the meeting encouraged State**s** and aircraft operators to implement the RASG-MID Safety Advisory-RSA-04.

4.1.16 The meeting was apprised of the MAEP IPMO activities related to call sign similarity and confusion, as reflected in the progress report at **Appendix 4.1B.**

4.1.17 The meeting agreed that the MAEP PMO/IPMO should follow-up the implementation of the outcome of the CSC WG/1 meeting, monitor the conduct of FPL tests for the acceptance of alphanumeric call signs, collect call sign similarity and confusion reports and provide progress reports to the MIDANPIRG ATM Sub-Group.

4.1.18 The meeting emphasized the importance of the reporting of call sign similarity/confusion using the EUROCONTROL Template (Excel Sheet) at **Appendix 4.1C**. The meeting encouraged States to implement simplified mechanism to trigger the reporting of call sign similarity/confusion by ATCOs. In this respect, the meeting noted with appreciation the mechanism implemented by Bahrain, as part of their SMS, to improve the reporting of ATM incidents and hazards.

4.1.19 The meeting noted with appreciation that EUROCONTROL, in accordance with the CSC WG/1 Action Plan, provided the ICAO MID Regional Office on 11 May 2015 with the EUROCONTROL Voluntary ATM Incident Reporting (EVAIR) analysis related to the identified Middle East Air Operators (AOs) with call similarities/confusions within the Europe Region, as at **Appendix 4.1D**. It was highlighted that call sign similarity/confusion issues were occurring not only between MID AOs and non-MID AOs but also between the same AO flights.

4.1.20 The meeting reviewed and updated the Action Plan developed initially by the CSC WG/1 meeting**,** as at **Appendix 4.1E**.

4.1.21 Based on the above the meeting agreed to the following Decision and Conclusion:

DECISION 15/1: DISSOLUTION OF THE CALL SIGN CONFUSION AD-HOC WORKING GROUP

That, the Call Sign Confusion Ad-hoc Working Group is dissolved.

CONCLUSION 15/2: CALL SIGN SIMILARITY PROVISIONS AND GUIDELINES

That, States be urged to:

a) take necessary measures to ensure that their Aircraft Operators (AOs) implement a mechanism to de-conflict call similarity between the same AO flights and thereafter between their local AOs and other Middle East AOs flights;

*b) report call sign similarity/confusion cases using the template at **Appendix 4.1C**; and*

c) develop a simplified mechanism to trigger the reporting of call sign similarity/confusion by ATCOs.

4.1.22 The meeting recognized the need for harmonization of mitigation measures related to call sign similarity and confusion with other regions and at a global level. Accordingly, the meeting invited ICAO to consider the development of global provisions and/or guidance material to reduce the risk associated with call sign similarity and confusion, including possible amendment to the ICAO FPL Format.

REPORT ON AGENDA ITEM 4: AVIATION SAFETY

4.2 Air Navigation Safety related issues

RVSM Operations and Monitoring Activities in the MID Region

4.2.1 The subject was addressed in WP/6 and WP/7 presented by the Secretariat and the MIDRMA, respectively. The meeting was apprised of the outcome of the MIDRMA Board/13 as reviewed by the ATM SG/1 and the ANSIG/1 meetings

Revised Memorandum of Agreement (MOA)

4.2.1 The meeting noted that in line with the AN-Conf/12, Recommendation 6/11, and further to the approval of the Proposals for Amendment (*Serial No: MID Basic ANP 13/04 and 13/05 – AOP/ATM/SAR*), by the President of the ICAO Council on 12 October 2013, Libya and Sudan have been transferred from the AFI Air Navigation Plan (ANP) to the MID ANP and hence, automatically became Members of MIDANPIRG.

4.2.2 Based on the above, the ICAO MID Regional Office and the MIDRMA took necessary measures for the transfer of the membership of Libya and Sudan from the AFI RMA to the MIDRMA.

4.2.3 The meeting recalled that Qatar had not been included in the membership of the MIDRMA Board since its establishment, considering that the membership was agreed upon based on the list of FIRs where RVSM was implemented. Nevertheless, considering the important number of Qatari registered aircraft and the associated MIDRMA activities related to RVSM height monitoring activity, which is directly related to the volume of fleet, the MIDRMA Board/13 meeting agreed to invite Qatar to join the MIDRMA.

4.2.4 The meeting noted that Qatar joined officially the MIDRMA Board by the signature of the MIDRMA Memorandum of Agreement (MOA) on 28 April 2015.

4.2.5 The meeting recalled that the MIDRMA MOA had never been updated since 27 February 2006 and that many clauses of the Agreement became outdated, in particular those clauses related to the MIDRMA Board membership and funding mechanism. Accordingly, the MIDRMA Board/13 meeting endorsed a revised version of the MOA as at **Appendix 4.2A** and agreed that this version of the MOA would replace and supersede the initial MOA upon its signature by the MIDRMA member States. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/3: MIDRMA REVISED MEMORANDUM OF AGREEMENT

That,

*a) the revised version of the MIDRMA Memorandum of Agreement (MOA) dated 12 March 2014, at **Appendix 4.2A** is endorsed, to replace and supersede the MIDRMA MOA dated 27 February 2006; and*

b) the ICAO MID Regional Office follow-up with concerned States the signature of the revised MIDRMA MOA

4.2.6 The meeting reviewed and updated the MIDRMA funding mechanism and agreed to the following Conclusion to replace and supersede the MIDANPIRG/12 Conclusion 12/12:

CONCLUSION 15/4: MIDRMA FUNDING MECHANISM

That,

a) the activities of the MIDRMA be ensured through contributions from all MIDRMA Member States, which could be recovered in accordance with ICAO Policies on charges for Airports and Air Navigation Services (Doc 9082), in coordination with IATA;

b) the MIDRMA Member States pay their contributions on a yearly basis not later than two (2) months after the issuance of the invoices by ICAO;

c) ICAO issue the invoices related to States contribution to the MIDRMA Project on a yearly basis as decided by the MIDRMA Board or its Chairperson;

d) the annual amounts to be paid by the MIDRMA Member States are, as follows:

i) Bahrain, Egypt, Iran, Oman and Saudi Arabia annual contribution is US$ 30,000 each; and

ii) Iraq, Jordan, Kuwait, Lebanon, Libya, Qatar, Sudan, Syria and Yemen annual contribution is US$ 10,000 each;

e) UAE is exempted from the payment of contributions to the MIDRMA for the first ten (10) years of operation (up-to end of 2015);

f) the MIDRMA Member States comply with the payment instructions contained in the invoices sent by ICAO HQ (Project code, fund number, invoice number, Bank information, etc);

g) in case a MIDRMA Member State does not pay the contribution to the MIDRMA Project in a timely manner, the MIDRMA Board might consider to take penalty measures against this State (exclusion from the MID RVSM Safety Monitoring Report, review of the Membership, etc);

h) the MIDRMA Board Chairperson, in compliance with the Custodian Agreement and based on the agreed funding mechanism and the estimation of the yearly operating budget of the MIDRMA, be delegated the authority to certify on behalf of the MIDRMA Member States the requests for advance payment from the MIDRMA account managed by ICAO HQ to the MIDRMA Bank account in Bahrain, as decided by the MIDRMA Board;

i) the bills related to the MIDRMA expenses be certified by the MIDRMA Board Chairperson and reviewed by the MIDRMA Board at each of its meetings;

j) the MIDRMA funding mechanism be revised by the MIDRMA Board, when necessary.

Large Height Deviation (LHD) Reporting

4.2.7 The meeting noted with appreciation that the MIDRMA developed an online LHD reporting tool to be used by States as the only mean for reporting of LHDs. The meeting re-iterated the necessity for the development of a simplified LHD Template containing the minimum data necessary to trigger the process of reporting LHDs by the Air Traffic Controllers (ATCOs). In this regard, the meeting noted with appreciation that Bahrain implemented a simplified automated LHD procedure/tool through the ATC system. Accordingly, the meeting encouraged States to implement a procedure within their ACCs to easily trigger the LHD reporting process and provide the ICAO MID Regional Office with an update on the action(s) undertaken.

4.2.8 Based on the above the meeting agreed to the following Conclusions:

CONCLUSION 15/5: ONLINE REPORTING OF LARGE HEIGHT DEVIATION (LHD)

That, States:

*a) be urged to use only the online tool at (*http://www.midrma.com/lhd*) for reporting LHDs; and*

b) be encouraged to provide feedback to the MIDRMA for further improvement of the tool.

CONCLUSION 15/6: SIMPLIFIED LARGE HEIGHT DEVIATION (LHD) REPORTING PROCEDURE

That, States be urged to implement a procedure within their ACCs to easily trigger the LHD reporting process and provide the ICAO MID Regional Office with an update on the action(s) undertaken.

4.2.9 The meeting noted with concern that some States with high volume of traffic have been still reporting "NIL LHDs", and that the level of reporting of some States has been unsatisfactory, despite the implementation of the Online LHD Reporting Tool. Accordingly, the meeting agreed that Iran, Iraq and Yemen be included in the MIDANPIRG list of air navigation deficiencies.

Height Keeping Monitoring Requirements

4.2.10 The meeting noted with concern that some States are still not fully complying with Annex 6 provisions and MIDRMA Minimum Monitoring Requirements related to height keeping performance monitoring. The meeting noted that two air navigation deficiencies have been filed against Lebanon and Yemen for granting RVSM approvals to some aircraft without known height monitoring results. The meeting agreed that the MIDRMA continue their coordination with the concerned States in order to conduct necessary GMU missions for the identified aircraft.

4.2.11 The meeting recalled that in accordance with the MID Region Height-Keeping Monitoring Strategy, for Medium and Long Term (2014 – 2020), the MIDRMA would continue to conduct GMU monitoring for identified operators' aircraft and the use of Height Monitoring Units (HMUs) as a means of conducting height-keeping monitoring; would be considered in due time.

4.2.12 The meeting noted with concern that some State aircraft were filing "W" in their flight plans while they were not RVSM approved. Accordingly, the meeting urged States to implement necessary measures for granting RVSM approvals to their State aircraft.

4.2.13 It was highlighted that the MIDRMA had been facing difficulties with some States related to the update of the RVSM approvals list and height monitoring requirements. Accordingly, the meeting agreed that States, in addition to the ATC focal point, nominate a focal point from their Airworthiness/Flight Operations Authority responsible for the RVSM Certifications in order to improve the coordination process between the MIDRMA and the States. The meeting urged States to provide the ICAO MID Regional Office with their MIDRMA Board Member/Alternate and MIDRMA ATC and Airworthiness/Flight Operations Focal Points, if not yet done so.

4.2.14 The meeting recognized that the MIDRMA was not able to comply with the increased demands for GMU monitoring, in a timely manner, with only one old GMU unit which might be subject

to breakdown at any time. Taking into consideration the unsuccessful efforts that have been carried out to ease the conditions of the CSSI Sale and Services Agreement and the urgent need for GMU devices to be owned by the MIDRMA, the MIDRMA Board/13 meeting, through Draft Conclusion 13/11, granted authorization for the MIDRMA to purchase two (2) Enhanced GMU devices from the CSSI Company with the imposed restrictions. The meeting noted with appreciation that the MIDRMA purchased and received two Enhanced GMUs, which will improve the monitoring capabilities in the MID Region.

4.2.15 The meeting noted that the DGCA-MID/3 meeting was apprised of the difficulties facing the MIDRMA when conducting GMU missions especially with the Customs (i.e. in some cases the Customs did not authorize the MIDRMA staff to enter the Country with the GMU Units). Accordingly, the meeting supported the MIDANPIRG/14 Conclusion 14/37, and urged States to take necessary measures to implement its provisions.

4.2.16 The meeting recalled that MIDANPIRG/14 requested the MIDRMA to circulate the List of RVSM approved aircraft without known height-keeping monitoring results, to all MID States and other RMAs for appropriate action. Accordingly, the meeting agreed that the consolidated Table of the MID States RVSM Aircraft Minimum Monitoring Requirements (MMR) be posted on the MIDRMA website and kept regularly up to date.

4.2.17 The MIDRMA managed to conduct GMU monitoring for **71** aircraft registered in the Middle East since MIDANPIRG/14 and achieved **83.7%** with known height monitoring results which is **11.3%** less from the performance target for height monitoring set by MIDRMA Board/13 meeting (95%).

4.2.18 The meeting noted that **260** airframes out of the **1593** RVSM approved aircraft in the MID Region have no height keeping performance monitoring results. In order to meet Annex 6 requirements, **123** aircraft should be monitored. Accordingly, the meeting requested the MIDRMA to coordinate with the concerned States' Airworthiness/RVSM approval authorities to agree on the necessary course of actions.

4.2.19 The meeting noted that Iran requested the monitoring of 66 aircraft instead of the 30 aircraft that require height keeping monitoring. However, due to the imposed restrictions on the use of the GMU Units, the MIDRMA was not able to respond to Iran request.

Training on RVSM Safety Assessment

4.2.20 The meeting recalled that in order to increase the awareness about the MIDRMA activities and RVSM safety assessment requirements, MIDANPIRG/14 requested the MIDRMA to include in its work programme regular missions to the Member States, during which briefings on the MIDRMA activities and RVSM safety assessment requirements be provided to concerned personnel. In the same vein, MIDANPIRG/14 agreed that such briefings could be provided in the MIDRMA premises in Bahrain, or during the MIDRMA monitoring missions to the States.

4.2.21 In connection with the above, the meeting highly appreciated the training session on RVSM Safety Assessment organized during the course of the MIDRMA Board/13 meeting. In this regard, the meeting encouraged the MIDRMA to organize additional training sessions on RVSM Safety Assessment, as appropriate.

Development of the MID RVSM Safety Monitoring Report (SMR) 2014

4.2.22 The meeting noted that in accordance with MIDANPIRG/14 Decision 14/34−*Scrutiny Group Work Programme*, the MIDRMA Board/13 meeting reviewed, analysed and validated the Large Height Deviation (LHD) Reports provided to the MIDRMA for the period 1 September 2013 to 8 March 2014.

4.2.23 It was highlighted that, in accordance with MIDANPIRG/14 Conclusion 14/38 States were requested to send their FPL/Traffic data for the period 15 January–15 February 2014, to the MIDRMA by 30 April 2014, for the development of the MID RVSM Safety Monitoring Report (SMR) 2014.

4.2.24 The meeting noted that the initial results of the MID RVSM SMR 2014 were presented to the ATM SG/1 and ANSIG/1 meetings by the MIDRMA. The meeting reviewed the final version of the MID RVSM Safety Monitoring Report (SMR) 2014 presented by the MIDRMA. The meeting noted that the results of the MID RVSM SMR 2014 were calculated for thirteen (13) FIRs in the Middle East Region. Tripoli FIR was excluded from the analysis due to the non-submission of the required traffic data**.**

4.2.25 The MID RVSM SMR 2014 presents evidence that, according to the data and methods used, the key safety objectives as set out by MIDANPIRG, through Conclusion 12/16, continue to be met. In this respect, it was noted with appreciation that the three safety objectives were met, as follows:

Safety Objective 1:

4.2.26 The risk of collision in MID RVSM airspace due solely to technical height-keeping performance meets the ICAO target level of safety (TLS) of 2.5 x 10^{-9} fatal accidents per flight hour. The 2014 value computed for technical height risk is **3.18** x **10^{-11}**. This meets RVSM Safety Objective 1.

4.2.27 According to the technical risk values as shown in the table below from the previous SMRs, the TLS value decreased from the last SMR which is safe comparing to the ICAO TLS **2.5 x 10^{-9}**. This meets the RVSM Safety Objective 1.

4.2.28 The Pz(1000) is the probability that two aircraft at adjacent RVSM flight levels will lose vertical separation due to technical height keeping errors. The value of the probability of vertical overlap Pz(1000), based on the actual observed Altimetry System Error (ASE) and typical Assigned Altitude Deviation (AAD) data is estimated to be of **3.28 x 10^{-9}**. This value meets the Global System Performance Specification that the probability of two aircraft will lose procedural vertical separation of 1000ft should be no greater than **1.7x10^{-8}**, which meets the ICAO requirement.

4.2.29 With the advanced features of the MID Risk Analysis Software (MIDRAS), the MIDRMA, for the first time, calculated the Horizontal Overlap Frequency (HOF) for all the MID RVSM airspace and not only within the congested airspace by adopting the ICAO methodology developed for this purpose. The HOF was estimated to be **5.04 x 10^{-9}** per flight hour.

Safety Objective 2:

4.2.30 The overall risk of collision due to all causes which includes the technical risk and all risk due to operational errors and in-flight contingencies in the MID RVSM airspace meets the ICAO overall TLS of 5 x 10^{-9} fatal accidents per flight hour. The computed value for the overall risk in the SMR 2014 is **4.91 x 10^{-11}**. This meets RVSM Safety Objective 2.

4.2.31 The effect of future traffic growth has also been assessed. The overall risk of collision will continue to meet the TLS at least until 2018.

Safety Objective 3:

4.2.32 Safety objective 3 addresses any safety-related issues raised in the SMR by recommending improved procedures and practices; and propose safety level improvements to ensure that

any identified serious or risk-bearing situations do not increase and, where possible, that they decrease. This should set the basis for a continuous assurance that the operation of RVSM will not adversely affect the risk of en-route mid-air collision over the years.

4.2.33 The meeting noted that the analysis of operational error reports and LHD reports and the recommendations put forward in the SMR 2014 provide sufficient evidence that RVSM Safety Objective 3 is being met.

4.2.34 Based on the above the meeting agreed to the following Conclusion:

CONCLUSION 15/7: MID RVSM Safety Monitoring Report (SMR) 2014

That, the MID RVSM Safety Monitoring Report (SMR) 2014 is endorsed.

Development of the MID RVSM SMR 2015

4.2.35 The meeting agreed that for the development of the MID RVSM SMR 2015, the Flight Plan/Traffic Data will be collected for the period **1 – 30 September 2015**. The data should be provided to the MIDRMA not later than **31 October 2015**.

4.2.36 It was reiterated that the required data must be submitted in the right format and in the formulated excel sheet designed for this purpose which is the only sheet recognized by the MID Risk Analysis Software (MID RAS). Any data received in a different format, or in an excel sheet different from the one available on the MIDRMA website (www.midrma.com) will not be acceptable.

4.2.37 The meeting urged States to implement the provisions of MIDANPIRG Conclusion 14/35 related to the provision of required data to the MIDRMA, on regular basis and in timely manner. In particular, the data related to the route structure (above FL290) and the waypoints.

4.2.38 Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 15/8: MID RVSM Safety Monitoring Report (SMR) 2015

That,

*a) the FPL/traffic data for the period **1 – 30 September 2015** be used for the development of the MID RVSM Safety Monitoring Report (SMR 2015);*

b) only the appropriate Flight Data form available on the MIDRMA website (www.midrma.com) should be used for the provision of FPL/traffic data to the MIDRMA; and

c) *the final version of the MID RVSM SMR 2015 be ready for presentation to and endorsement by MIDANPIRG/16.*

Conclusion and Decisions related to the MIDRMA project financial and managerial issues

4.2.39 The meeting agreed that the MIDRMA Board Conclusion and Decisions related to the MIDRMA project financial and managerial issues should not be presented to MIDANPIRG and can be endorsed by the MIDRMA Board.

REPORT ON AGENDA ITEM 5: PERFORMANCE FRAMEWORK FOR REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION

5.1 AIR NAVIGATION STRATEGY AND PLANNING

MID Region Statistics and Forecasts

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

STATE OF AIR TRANSPORT IN THE MID REGION

5.1.2 The meeting was apprised of the state of air transport in the MID Region. It was highlighted in particular that:

- air carriers of the MID Region (the 15 Member States to which the MID Office is accredited) recorded the highest annual growth of 10.6 per cent in terms of Revenue Passenger-Kilometers (RPK) on total (i.e. domestic and international services combined) scheduled services in 2014, compared to 11.2 per cent growth in 2013;

- the total number of scheduled commercial departures in 2014 grew at a pace of 6.1 per cent to reach about 1.3 million departures, compared to a growth rate of 5.8 per cent recorded in 2013;

- international traffic on scheduled services of air carriers in the MID Region represents 94.7 per cent of the Region's total RPK and recorded 10.8 per cent annual growth in 2014; and

- cargo traffic performed by MID carriers recorded the highest annual growth of 12.6 per cent in 2014 in terms of freight tonne-kilometers (FTK), compared to 12.3 per cent in 2013.

OUTCOME OF THE FOURTH MEETING OF THE MIDANDPIRG TRAFFIC FORECASTING SUB-GROUP

5.1.3 The meeting noted that according to the forecasts presented to and endorsed by, the Fourth meeting of the MIDANPIRG Traffic Forecasting Sub Group (Cairo, Egypt, 15-17 November 2011), the passenger traffic to, from and within the MID Region on the five major route groups concerned for the period 2010-2030 is expected to increase at an average annual rate of 9.1 per cent. The total aircraft movements to, from and within the Middle East Region are estimated to increase from some 976400 in 2010 to slightly above 5204000 in 2030 at an average annual growth rate of 8.7 per cent over the same period.

CUSTOMIZED SETS OF FORECASTS TO BE PRODUCED FOR THE TFGS

5.1.4 In accordance with the outcome of the First Meeting of the Aviation Data and Analysis Panel (ADAP/1), held in Montréal from 14 to 17 April 2014, it is planned to organise a meeting every three years gathering all the TFGs/Regions during one week at the ICAO Headquarters (HQ) for the development of the customized and/or more detailed forecasts consistent with the single set of forecasts to be developed by the Multi-disciplinary Working Group on Long-term Traffic Forecasts (MDWG-LTF). The first meeting is planned for the first half of 2016.

ICAO AVIATION DATA ANALYSES SEMINAR

5.1.5 The meeting was apprised of the outcome of the ICAO Aviation Data Analyses Seminar held in Cairo, Egypt, 27 – 29 October 2014. The main objectives of the Seminar were to focus on ways and means to improve the quality and quantity of statistics data sent to ICAO and the Civil Aviation Authorities, taking into consideration the Recommendations of the Tenth Session of the Statistics Division (STA/10) and the results of the First Meeting of the Aviation Data and Analyses Panel (ADAP/1). It was noted that as part of the Recommendations of the Seminar, States and ICAO were requested to continue to cooperate closely to overcome the difficulties related to the low level of reporting statistics data to ICAO in order to improve the coverage and quality of reporting on ICAO Air Transport Reporting Forms. The meeting supported the outcome of the MSG/4 and DGCA-MID/3 meetings regarding the need for another Seminar to be organized by ICAO in 2016 to further enhance the technical knowledge of States and address other subjects of relevance, which due to time constraints, have not been addressed in detail during the Seminar of 2014. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/9: AVIATION STATISTICS AND TRAFFIC FORECASTS

That,

a) States be urged to:

i. nominate to ICAO Focal Points for aviation statistics;

ii. provide the statistics required by ICAO in a timely manner and to the extent possible in an electronic format

b) ICAO organise a Second Aviation Data Analyses Seminar in 2016 to keep the momentum and further enhance the technical knowledge of States.

MID Region Air Navigation Strategy

5.1.6 The subject was addressed in WP/9 presented by the Secretariat. The meeting noted that the MSG/4 meeting reviewed, updated and endorsed the MID Region Air Navigation Strategy based on the outcome of the different MIDANPIRG subsidiary bodies and other inputs from States and concerned International Organizations; and through MSG Conclusion 4/3 urged States to develop their National Air Navigation Performance Framework, ensuring the alignment with and support to the MID Region Air Navigation Strategy; and provide the ICAO MID Regional Office, on an annual basis (by the end of November), with relevant data necessary for regional air navigation planning and monitoring.

5.1.7 The meeting recalled that the MSG/4 meeting agreed that the implementation of the B0-TBO concerns initially Muscat and Sana'a Flight Information Regions (FIRs) to enhance the exchange of information and communications between air traffic controllers and pilots over the Indian Ocean. However, it was highlighted that Muscat FIR including the area over the Indian Ocean is fully covered by Radar Surveillance and VHF Communication capabilities. Accordingly, Oman is not planning to implement the B0-TBO elements in the short term (i.e. by 2018). Similarly, the implementation of B0-TBO is not a priority for Yemen.

5.1.8 Based on the above, the meeting agreed that the priority for implementation of B0-TBO should be changed from 1 to 2 as reflected in the revised MID Region Air Navigation Strategy.

Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/10: MID REGION AIR NAVIGATION STRATEGY

That,

a) the revised MID Region Air Navigation Strategy:

i. is endorsed as the framework identifying the regional air navigation priorities, performance indicators and targets; and

ii. be published as MID Doc 002

b) MID States be urged to:

i. develop their National Air Navigation Performance Framework, ensuring the alignment with and support to the MID Region Air Navigation Strategy; and

ii. provide the ICAO MID Regional Office, on an annual basis (by the end of November), with relevant data necessary for regional air navigation planning, reporting and monitoring.

MID eANP

5.1.9 The subject was addressed in WP/10 presented by the Secretariat. The meeting was apprised of the progress achieved in the development of the MID eANP. The meeting noted that the ANP WG/2 meeting (Cairo, Egypt, 16-18 December 2014) reviewed and updated VOL I, II and III of the MID eANP, consolidated by the Secretariat based on the Council approved template and inputs received from the different MIDANPIRG contributary bodies (AIM SG/1, ATM SG/1, CNS SG/6 and MET SG/5).

5.1.10 It was highlighted that the population of the Tables ATM I-1 *MID Region Flight Information Regions (FIRs)/ Upper Information Regions (UIRs)* and SAR I-1 *MID Region Search and Rescue Regions (SRRs)* is a challenging process that requires the cooperation of all concerned States. In this regard, the meeting reviewed the ATM I-1 and SAR I-1 Tables, as developed by the ANP WG/2 meeting, based on the following process:

a) The Amendments to the MID ANP approved by the ICAO Council.
b) The MID RAN Meetings Reports.
c) Agreements between States communicated to ICAO.
d) AIS publications when descriptions coincide with the current Charts ATS-1 and there are no differences between the States' information (inconsistencies, if any, will be noted in the remarks column).

5.1.11 The meeting noted that, as a follow-up action to the ANP WG/2 Draft Conclusion 2/1, the ICAO MID Regional Office issued State Letter Ref.: AN 9/2.2-15/029, urging States to provide their inputs/updates related to the Tables of the MID eANP Volumes I, II and III before 15 March 2015. Updates were received from twelve (12) States (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan and UAE). States did not report any inconsistencies in the published lateral limits coordinates of their FIR/UIR compared to adjacent States published coordinates (in AIPs). The meeting agreed that during the process of endorsement/approval of the MID eANP, ICAO (HQ) would identify the inconsistencies, if any, in the lateral limits coordinates of the different FIRs/UIRs (Tables ATM I-1 and SAR I-1) and the Regional Office(s) will coordinate with the concerned States to seek a resolution.

5.1.12 The meeting reviewed and endorsed the MID eANP VOL I, II and III. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/11: ENDORSEMENT OF THE MID eANP

That,

*a) the new MID ANP VOL I, II and III available at:*http://www.icao.int/MID/MIDANPIRG/Pages/Final%20Report/MID-eANP.aspx *are endorsed; and*

b) the ICAO MID Regional Office process the necessary Proposals for Amendment, in accordance with the procedure for amendment approved by the Council, for formal approval by the end of 2015.

5.1.13 Noting that the majority of the tasks assigned to the ANP WG have been completed, the meeting agreed to the following Decision:

DECISION 15/12: DISSOLUTION OF THE ANP AD-HOC WORKING GROUP

That, the ANP Ad-Hoc Working Group is dissolved.

REPORT ON AGENDA ITEM 5: PERFORMANCE FRAMEWORK FOR REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION

5.2 AIR NAVIGATION SYSTEMS IMPLEMENTATION

5.2.1 *MID Region Air Navigation Priorities and Targets (ASBU Implementation*)

5.2.1.1 The status of implementation of the different elements of the priority 1 ASBU Block 0 Modules, included in the MID Air Navigation Strategy was addressed in separate WPs presented by the Secretariat: WP/11 (B0-APTA, B0-CDO, and B0-CCO), WP/12 (B0-FRTO), WP/13 (B0-NOPS), WP/15 (B0-DATM), WP/16 (B0-AMET), WP/17 (B0-SURF), WP/18 (B0-ACDM), WP/19 (B0-FICE) and WP/20 (B0-ACAS). The meeting reviewed and updated the status of implementation of the different priority 1 ASBU Block 0 Modules as reflected in the following Tables**:**

B0 – APTA: Optimization of Approach Procedures including vertical guidance				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
States' PBN Implementation Plans	All	Indicator: % of States that provided updated PBN implementation Plan Supporting metric: Number of States that provided updated PBN implementation Plan	80 % by Dec. 2014 100% by Dec. 2015	60% May 2015 *(9 States)*
LNAV	All RWYs Ends at International Aerodromes	Indicator: % of runway ends at international aerodromes with RNAV(GNSS) Approach Procedures (LNAV) Supporting metric: Number of runway ends at international aerodromes with RNAV (GNSS) Approach Procedures (LNAV)	All runway ends at Int'l Aerodromes, either as the primary approach or as a back-up for precision approaches by Dec. 2016	46% May.2015 *(83 out of 180 RWY Ends)*
LNAV/VNAV	All RWYs ENDs at International Aerodromes	Indicator: % of runways ends at international aerodromes provided with Baro-VNAV approach procedures (LNAV/VNAV) Supporting metric: Number of runways ends at international aerodromes provided with Baro-VNAV approach procedures (LNAV/VNAV)	All runway ends at Int'l Aerodromes, either as the primary approach or as a back-up for precision approaches by Dec. 2017	22% May 2014 *(39 out of 180 RWY Ends)*

B0-SURF: Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
A-SMGCS Level 1*	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEDF, OEJN, OERK, OMDB, OMAA, OMDW	Indicator: % of applicable international aerodromes having implemented A-SMGCS Level 1 Supporting Metric: Number of applicable international aerodromes having implemented A-SMGCS Level 1	70% by Dec. 2017	46% (6 ADs out of 13)

A-SMGCS Level 2*	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEDF, OEJN, OERK, OMDB, OMAA, OMDW	Indicator: % of applicable international aerodromes having implemented A-SMGCS Level 2 Supporting Metric: Number of applicable international aerodromes having implemented A-SMGCS Level 2	50% by Dec. 2017	46% (6 ADs out of 13)

B0 – ACDM: Improved Airport Operations through Airport-CDM				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
A-CDM	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEJN, OERK, OMDB, OMAA, OMDW	Indicator: % of applicable international aerodromes having implemented improved airport operations through airport-CDM Supporting metric: Number of applicable international aerodromes having implemented improved airport operations through airport-CDMimplemented as required.	40% by Dec. 2017As	0%

B0 – FICE: Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
AMHS capability	*All States*	Indicator: % of States with AMHS capability Supporting metric: Number of States with AMHS capability	70% of States with AMHS capability by Dec. 2017	60% (9 States)
AMHS implementation /interconnection	*All States*	Indicator: % of States with AMHS implemented (interconnected with other States AMHS) Supporting metric: Number of States with AMHS implemented (interconnections with other States AMHS)	60% of States with AMHS interconnected by Dec. 2017	53% (8 States)
Implementation of AIDC/OLDI between adjacent ACCs	*All ACCs*	Indicator: % of FIRs within which all applicable ACCs have implemented at least one interface to use AIDC/OLDI with neighboring ACCs Supporting metric: Number of AIDC/OLDI interconnections implemented between adjacent ACCs	70% by Dec. 2017	29% (4 FIRs out of 14 FIRs)

B0 – DATM: Service Improvement through Digital Aeronautical Information Management				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
1- National AIM Implementation Plan/Roadmap	*All States*	Indicator: % of States that have National AIM Implementation Plan/Roadmap Supporting Metric: Number of States that have National AIM Implementation Plan/Roadmap	80% by Dec. 2016 90% by Dec. 2018	80% (12 States)
2-AIXM	*All States*	Indicator: % of States that have implemented an AIXM-based AIS database Supporting Metric: Number of States that have implemented an AIXM-based AIS database	60% by Dec. 2015 80% by Dec. 2017 100% by Dec. 2019	47% (7 States)
3-eAIP	*All States*	Indicator: % of States that have implemented an IAID driven AIP Production (eAIP) Supporting Metric: Number of States that have implemented an IAID driven AIP Production (eAIP)	60% by Dec. 2016 80% by Dec. 2018 100% by Dec. 2020	27% (4 States)
4-QMS	*All States*	Indicator: % of States that have implemented QMS for AIS/AIM Supporting Metric: Number of States that have implemented QMS for AIS/AIM	70% by Dec. 2016 90% by Dec. 2018	53% (8 States)
5-WGS-84	*All States*	Indicator: % of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD) Supporting Metric: Number of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD) Indicator: % of States that have implemented WGS-84 Geoid Undulation Supporting Metric: Number of States that have implemented WGS-84 Geoid Undulation	Horizontal: 100% by Dec. 2017 Vertical: 90% by Dec. 2018	87% (13 States) 80% (12 States)
6-eTOD	*All States*	Indicator: % of States that have implemented required Terrain datasets Supporting Metric: Number of States that have implemented required Terrain datasets Indicator: % of States that have implemented	Area 1 : Terrain: 50% by Dec. 2015, 70% by Dec. 2018 Obstacles: 40% by Dec. 2015, 60% by Dec. 2018 Area 4: Terrain:	Area 1: Terrain: 40% (6 States) Obstacles: 33% (5 States) Area 4: Terrain: 40%

		required Obstacle datasets Supporting Metric: Number of States that have implemented required Obstacle datasets	50% by Dec. 2015, 100% by Dec. 2018 Obstacles: 50% by Dec. 2015, 100% by Dec. 2018	(6 States) Obstacles: 33% (5 States)
7-Digital NOTAM*	*All States*	Indicator: % of States that have included the implementation of Digital NOTAM into their National Plan for the transition from AIS to AIM Supporting Metric: Number of States that have included the implementation of Digital NOTAM into their National Plan for the transition from AIS to AIM	80% by Dec. 2016 90% by Dec. 2018	60% (9 States)

B0 – AMET: Meteorological information supporting enhanced operational efficiency and safety				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
1- SADIS 2G and Secure SADIS FTP	*All States*	Indicator: % of States that have implemented SADIS 2G satellite broadcast or Secure SADIS FTP service Supporting Metric: Number of States that have implemented SADIS 2G satellite broadcast or Secure SADIS FTP service	90% by Dec. 2015 100% by Dec. 2017	87% (13 States)
2-QMS	*All States*	Indicator: % of States that have implemented QMS for MET Supporting Metric: Number of States that have implemented QMS for MET	60% by Dec. 2015 80% by Dec. 2017	53% (8 States)

B0 – FRTO: Improved Operations through Enhanced En-Route Trajectories				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
Flexible use of airspace (FUA)	*All States*	Indicator: % of States that have implemented FUA Supporting metric*: number of States that have implemented FUA	40% by Dec. 2017	To be determined by ATM SG/2 Dec. 2015
Flexible routing	*All States*	Indicator: % of required Routes that are not implemented due military restrictions (segregated areas) Supporting metric 1: total number of ATS Routes in the Mid Region Supporting metric 2*: number of required Routes that are not implemented due military restrictions (segregated areas)	60% by Dec. 2017	To be determined by ATM SG/2 Dec. 2015

B0 – NOPS: Improved Flow Performance through Planning based on a Network-Wide view				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
ATFM Measures implemented in collaborative manner	*All States*	Indicator: % of States that have established a mechanism for the implementation of ATFM Measures based on collaborative decision Supporting metric: number of States that have established a mechanism for the implementation of ATFM Measures based on collaborative decision	100% by Dec. 2017	To be determined by the ATM SG/2 Dec. 2015

B0 – ACAS: ACAS Improvements				
Elements	***Applicability***	***Performance Indicators/Supporting Metrics***	***Targets***	***Status***
Avionics	All States	Indicator: % of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons Supporting metric: Number of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons	80% by Dec. 2015 100% by Dec. 2016	40% (6 States)

B0 – CDO: Improved Flexibility and Efficiency in Descent Profiles (CDO)				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
PBN STARs	In accordance with States' implementation Plans	Indicator: % of International Aerodromes/TMA with PBN STAR implemented as required. Supporting Metric: Number of International Aerodromes/TMAs with PBN STAR implemented as required.	100% by Dec. 2016 for the identified Aerodromes/TMAs 100% by Dec. 2018 for all the International Aerodromes/TMAs	To be determined by PBN SG/2 Nov. 2015 34% May 2015 *(24 out of 65 int'l Aerodromes)*
International aerodromes/TMAs with CDO	In accordance with States' implementation Plans	Indicator: % of International Aerodromes/TMA with CDO implemented as required. Supporting Metric: Number of International Aerodromes/TMAs with CDO implemented as required.	100% by Dec. 2018 for the identified Aerodromes/TMAs	To be determined by PBN SG/2 Nov. 2015

B0 – CCO: Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Status**
PBN SIDs	in accordance with States' implementation Plans	Indicator: % of International Aerodromes/TMA with PBN SID implemented as required. Supporting Metric: Number of International Aerodromes/ TMAs with PBN SID implemented as required.	100% by Dec. 2016 for the identified Aerodromes/TMAs 100% by Dec. 2018 for all the International Aerodromes/TMAs	To be determined by PBN SG/2 Nov. 2015 32% May 2015 *(21 out of 65 int'l Aerodromes)*
International aerodromes/TMAs with CCO	in accordance with States' implementation Plans	Indicator: % of International Aerodromes/TMA with CCO implemented as required. Supporting Metric: Number of International Aerodromes/TMAs with CCO implemented as required.	100% by Dec. 2018 for the identified Aerodromes/TMAs	To be determined by PBN SG/2 Nov. 2015

PBN Implementation in the MID Region

5.2.1.2 The subject was addressed in WP/11 and WP/42 presented by the Secretariat. The meeting noted that, based on the outcome of the PBN SG/1 and ATM SG/1 meetings, the MSG/4 meeting endorsed the MID Region PBN Implementation Plan (Doc 007, June 2015), which is available on the ICAO MID website: https://portal.icao.int/RO_MID/Pages/MIDDocs.aspx

5.2.1.3 The meeting noted with concern that Iran, Iraq, Lebanon and Libya have not yet submitted their National PBN Implementation Plan and that Syria and Yemen provided only draft version of their PBN Plans. In this regard, the meeting urged States to implement the provisions of the MSG Conclusion 4/11*: STATES' PBN IMPLEMENTATION PLANS*. Moreover, the meeting highlighted that the airspace users should be consulted during the process of development/update of the National PBN Implementation Plans.

5.2.1.4 It was noted that the source used for the collection of data are the States' Aeronautical Information Publications (AIPs). The detailed status of implementation of the elements related to B0-APTA, B0-CCO and B0-CDO is at **Appendix 5.2.1A.**

5.2.1.5 The meeting underlined that the status of implementation of PBN in the MID Region, is far below expectation. The meeting identified the main challenges facing the implementation of PBN in the MID Region and recommended measures that would overcome these challenges as reflected in the Table below:

Challenges	Mitigation measures
Shortage of PANS-OPS, Airspace Planners and OPS-approval experts	• States should ensure the training/recruitment of qualified experts in the fields of flight procedure design, airspace planning, and operations approval. • States are strongly encouraged to work cooperatively. • The MID Flight Procedure Programme, when established, would provide the optimum solution and foster the implementation of PBN. • States might request ICAO support for the training and

	implementation of PBN under the framework of the ICAO PBN Programme, all the required information are available on the programme website http://www.icao.int/safety/pbn/Pages/default.aspx • Other Stakeholders might also provide the necessary support.
Need to raise awareness of all stakeholders on PBN advantages and how to achieve an effective implementation,	• States are strongly encouraged to organize at national level PBN Workshops; ICAO is willing to support these Workshops if required. • Involvement of all stakeholders at national level in the planning and implementation process of PBN (application of the airspace concept, establishment of PBN National Committee, etc) • The MID Flight Procedure Programme, when established, would provide the optimum solution and foster the implementation of PBN. • PBN Publications and Bundles in addition to some PBN online courses are available on the ICAO PBN Programme website http://www.icao.int/safety/pbn/Pages/default.aspx
Unstable political and security situation in some States	

5.2.1.6 The meeting emphasized that the establishment of the MID Flight Procedure Programme (MID FPP) would foster the PBN implementation in the Region. The meeting noted that the MID FPP was endorsed as one of the MAEP projects.

5.2.1.7 The meeting noted with appreciation that ICAO is ready to provide necessary support for the establishment of the MID FPP, and to share the experience gained from the ASIA-Pacific and AFI FPPs' establishment. Accordingly, the meeting agreed that a Workshop on the establishment of the MID FPP would be held in Cairo, Egypt, 18-19 October 2015, back-to-back with the upcoming MAEP SC/2 meeting (20-22 October 2015), in order to develop a framework for establishing an FPP for the MID Region along with the proposed organizational structure, governance procedures, scope of activities and services, work plan and deliverables, resources and financial structure to be presented in a Project Document.

5.2.1.8 Based on the above the meeting agreed to the following Conclusion:

CONCLUSION 15/13: MID FLIGHT PROCEDURE PROGRAMME (FPP) WORKSHOP

That, as part of the ICAO support for the establishment of the MID FPP, a Workshop be organized back-to-back with the MAEP SC/2 meeting to be held in October 2015 in order to develop a framework for the establishment of the MID FPP.

5.2.1.9 The meeting reviewed and updated the list of PBN Focal Points in the MID Region as at **Appendix 5.2.1B.**

5.2.1.10 The meeting noted with appreciation that the two PBN Workshops on the use of PBN in airspace planning, organized for the MID Region, in UAE and Tunis were successful and fruitful. The Summaries of Discussions of the mentioned Workshops are available on the ICAO MID website.

Accordingly, the meeting encouraged States to coordinate with ICAO the hosting of additional PBN Workshops.

5.2.1.11 The meeting recalled that MIDANPIRG/13, through Decision 13/48, established the MID PBN Support Team (MPST). Taking into consideration the latest developments related to PBN and the establishment of MID FPP, the meeting agreed to the following Decision:

DECISION 15/14: DISSOLUTION OF THE MPST

That, the MID PBN Support Team (MPST) is dissolved.

5.2.1.12 The meeting noted that after completion of a very successful roll-out of free PBN information and training sessions, ICAO is offering a suite of PBN products and services, at a cost that covers the full range of near- and medium-term implementation needs of States and aviation stakeholders.

5.2.1.13 The meeting encouraged States to utilize the ICAO PBN products and services available at: http://www.icao.int/safety/pbn/Pages/default.aspx by submitting requests electronically to ICAO through PBN@icao.int.

Civil/Military Cooperation

5.2.1.14 The subject was addressed in WP/12 presented by the Secretariat. The meeting recognized that the monitoring of the implementation of B0-FRTO has been a difficult task, which requires effective cooperation and contribution from all concerned stakeholders. In this regard, the meeting reviewed and updated the MID eANP Volume III Monitoring and Reporting Table for the implementation of B0-FRTO.

5.2.1.15 The meeting recalled that the 38th ICAO General Assembly, through Resolution A38-12, emphasized that the airspace is a resource common to both Civil and Military Aviation.

5.2.1.16 The meeting recalled that MIDANPIRG/14, through Conclusions 14/12 and 14/13, urged States to take necessary measures to foster the implementation of Civil/Military Cooperation and to implement the FUA concept through strategic Civil/Military Coordination and dynamic interaction, in order to open up segregated airspace when it is not being used for its originally-intended purpose and allow for better airspace management and access for all users.

5.2.1.17 Based on the above, the meeting urged States to take necessary measures to implement the provisions of the Resolution A38-12 and MIDANPIRG/14 Conclusions 14/12 and 14/13 and provide the ICAO MID Regional Office with an update on the action(s) undertaken before **1 October 2015**.

5.2.1.18 The meeting recalled that MIDANPIRG/14, through Conclusion 14/14, established the MID Civil/Military Go-Team. The meeting agreed that "Support Team" is more appropriate than "Go-Team". The meeting reviewed and endorsed the Objective and Working Arrangements of the MID Civil/Military Support Team at **Appendix 5.2.1C**.

5.2.1.19 Based on the above, the meeting agreed to the following Conclusion which replaces and supersedes the MIDANPIRG/14 Conclusion 14/14:

CONCLUSION 15/15: MID CIVIL/MILITARY SUPPORT TEAM

That, a MID Civil/Military Support Team be established with a view to expedite the implementation of the Flexible Use of Airspace (FUA) Concept in the MID Region.

5.2.1.20 The meeting recognized the need for an awareness campaign to promote the implementation of the FUA Concept in the MID Region. Accordingly, the meeting encouraged States to request the ICAO MID Regional Office to arrange for a Civil/Military Support Team visit, whose programme would include a Workshop on Civil/Military Cooperation and FUA.

Air Traffic Flow Management (ATFM)

5.2.1.21 The subject was addressed in WP/13 presented by the Secretariat. The meeting agreed that the subject be further addressed by the ATM Sub Group with a view to reach a final decision with regard to the necessity, feasibility and timelines related to the eventual implementation of a regional/sub-regional ATFM system.

5.2.1.22 The meeting noted that the First meeting of the MAEP Steering Committee (MAEP SC/1) (Dubai, UAE, 20-22 January 2015) agreed to include in the MAEP Master Plan a project related to a regional/sub-regional ATFM system. Accordingly, the meeting agreed to the following Decision:

DECISION 15/16: COLLABORATIVE AIR TRAFFIC FLOW MANAGEMENT (ATFM-CDM)

That, the ATM Sub-Group develop a Preliminary Project Proposal addressing the necessity, feasibility, and timelines related to the eventual implementation of a regional/sub-regional ATFM system, for consideration by the MAEP Steering Committee.

5.2.1.23 Based on the above, the meeting urged States to provide the ICAO MID Regional Office with their plans related to the implementation of the ASBU Module B0-NOPS.

5.2.1.24 The meeting noted that an ATFM Seminar will be organized by ICAO in 2016. In this respect, the meeting encouraged all stakeholders to participate in the Seminar and share their plans and experience.

Airport Collaborative Decision Making (A-CDM)

5.2.1.25 The meeting noted that, in order to support the implementation of B0-ACDM in the MID Region, a Seminar on A-CDM implementation will be held in Bahrain, 11-13 October 2015. The meeting noted with appreciation that the Seminar will be hosted by Bahrain Airport Company and encouraged all States and stakeholders to actively participate in this Seminar.

Aeronautical Information Management (AIM)

5.2.1.26 The subject was addressed in WP/15 presented by the Secretariat. The meeting recalled that for the First Edition of the Global Air Navigation Report and the Regional Performance Dashboards, the implementation of 3 steps from Phase I of the ICAO Roadmap for transition from AIS to AIM (AIRAC, QMS and WGS-84) was monitored. It was highlighted that for the future Global Air Navigation Reports and necessary updates/upgrades of the Regional Performance Dashboards, the reporting on the progress achieved in the transition from AIS to AIM should cover not only Phase I, but also Phase II and eventually Phase III. Accordingly, the meeting reviewed the draft Methodology for reporting and assessing the progress related to the transition from AIS to AIM, as at **Appendix 5.2.1D**, as an initial MID Regional framework for monitoring the progress achieved for the AIM transition.

5.2.1.27 The meeting noted that further to the endorsement of the "*MID Region AIM Implementation Roadmap*" at **Appendix 5.2.1E** and the "*National AIM Implementation Plan Template*" **Appendix 5.2.1F** by the MSG/4 meeting; twelve (12) States have provided their AIM National Plans and/or Roadmap to the ICAO MID Regional Office.

5.2.1.28 The meeting underlined the need for signature of formal arrangements between AIS/AIM and the data originators. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/17: FORMAL ARRANGEMENTS BETWEEN AIS AND DATA ORIGINATORS

That, States be urged to:

a) take necessary measures for the signature of formal arrangements between AIS/AIM and the data originators, commensurate with the Aerodrome operators, Air Navigation Service Providers (ANSPs) and the Military Authority; and

*b) inform the ICAO MID Regional Office of the actions taken before **31 December 2015**.*

AIDC/OLDI implementation in the MID Region

5.2.1.29 The subject was addressed in WP/19 presented by the Secretariat. The meeting recalled that in order to support the AIDC/OLDI implementation in the MID Region. The MSG/4 meeting, through MSG Conclusion 4/12, endorsed the Strategy for implementation of AIDC/OLDI.

5.2.1.30 The meeting noted that the MID Region Strategy for the implementation of AIDC/OLDI contained a combination of guidance, focal points, planning and implementation materials. The meeting reviewed and updated the list of AIDC/OLDI Focal Points at **Appendix 5.2.1G.**

5.2.1.31 For an improved consistency, and considering that the MID Air Navigation Strategy and the MID eANP Volume III include the ASBU Block 0 Module B0-FICE. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/18: MID REGIONAL GUIDANCE FOR IMPLEMENTATION OF AIDC/OLDI

That, the MID Region guidance for the implementation of AIDC/OLDI (Edition 1.1, June 2015) is endorsed as MID Doc 006.

MET implementation in the MID Region

5.2.1.32 The subject was addressed in WP/16 presented by the Secretariat providing an update on MET implementation in the MID Region.

5.2.1.33 The meeting noted that the Fifth Meeting of the Meteorology Sub-Group (MET SG/5, Jeddah, Saudi Arabia, 2-4 September 2014) had formulated four (4) Draft Conclusions which were addressed before the MIDANPIRG/15 meeting.

5.2.1.34 The meeting was apprised of the outcome of the Fifth Meeting of the MID Bulletin Management Group (BMG/5) of the MET SG held on 9 June 2015 in Bahrain as a side meeting during the MIDANPIRG/15 meeting presented (Flimsy/01 refers).

Global developments

5.2.1.35 The meeting noted that the recommendations from the Meteorology Divisional Meeting 2014 (MET/14) (Montreal, 7-18 July 2014) were assigned to the MET Panel and associated Working Groups in April 2015. Progress on these recommendations, such as the establishment of Regional Hazardous Weather Advisory Centres (RHWACs), in the context of regional implementation would be provided by the Secretariat at the MET SG/6 meeting during the first quarter of 2016.

Implementation of the WAFS and SADIS in the MID Region

5.2.1.36 The meeting noted that training on the use of new gridded World Area Forecast System (WAFS) forecasts for convective clouds, icing and turbulence was made available in Arabic on the WAFSOPSG website www.icao.int/safety/meteorology/WAFSOPSG/Pages/GuidanceMaterial.aspx (MIDANPIRG Conclusion 12/68 and WAFSOPSG Conclusion 7/13 refers).

5.2.1.37 With reference to World Area Forecast Centre (WAFC) London SIGWX forecasts, the meeting noted that in response to feedback from Bahrain, WAFC London had investigated forecast CB bases in the MID Region as they were reportedly too high. WAFC London was in agreement with this observation and accordingly has lowered the CB bases and when appropriate listed as FLxxx for those CB bases that are below FL100.

MIDANPIRG SADIS Cost Recovery Administrative Group (SCRAG) Member

5.2.1.38 The meeting was informed that Mr. Alobadli from the United Arab Emirates was nominated as the MIDANPIRG member of the SADIS Cost Recovery Administrative Group (MSG Conclusion 4/20 refers) and the list of SCRAG Members was updated, accordingly. The Secretariat would facilitate communication between the SCRAG Secretariat and the UAE in advance of the next SCRAG meeting that will be held in November 2015.

International Airways Volcano Watch

5.2.1.39 The meeting was apprised of the Global Database of Area Control Centre (ACC) AFTN 8-Letter Addresses for the Notification by VAAC London concerning the Release of Radioactive Material into the Atmosphere noting entries were missing from Iraq (Baghdad), Iran (Tehran ACC, FIC, FIR), and Syria (Damascus ACC). These States were encouraged to provide their ACC AFTN addresses to receive notification on the release of radioactive material into the atmosphere.

SIGMET

5.2.1.40 The meeting noted that SIGMET tests for volcanic ash, tropical cyclone and other phenomenon such as turbulence and icing had been conducted routinely; however, MID States' participation was still considered low. Consequently, the list of SIGMET contact information was updated by 7 States in the MID Region (MET SG draft Conclusion 5/2 refers).

5.2.1.41 With reference to World Meteorological Organization (WMO) Abbreviated Header Lines (AHL) used for the issuance of SIGMET, the meeting noted that this information was still needed for Iraq, Lebanon and Syria. With reference to WMO AHL used to promulgate special air-reports, the meeting noted that 9 States in the MID Region needed to provide this information. To assist in implementation in this regard, the BMG/5 meeting provided guidance on the format and promulgation of special air-reports that included various responsibilities from the pilot, ACC and Meteorological Watch Office (MWO) as provided at **Appendix 5.2.1H**.

5.2.1.42 The meeting noted that guidance material being developed in the EUR Region by the end of 2015 with regards to correcting SIGMET (e.g. updating SIGMET with incorrect FL) could be used in the MID Region when it becomes available. The use of COR SIGMET is not referenced in Annex 3 and not allowed in the ICAO Meteorological Information Exchange Model (IWXXM) and can cause confusion to the end user since it is not readily clear what element was corrected.

Regional Performance Dashboards

5.2.1.43 The meeting recalled that ICAO introduced the Regional Performance Dashboards as a framework of nested reporting of results with an increased focus on implementation. The Dashboards currently show the globally agreed indicators and targets related to the global priorities and their status at the regional level.

5.2.1.44 The meeting agreed that the dashboards should reflect also the status of implementation of the regionally agreed priority 1 ASBU Block 0 modules. Accordingly, the meeting urged States to provide the ICAO MID Regional Office with necessary data on the implementation of all the priority 1 ASBU Block 0 modules and requested ICAO to expand the dashboards to include all the MID Region-specific indicators, metrics and targets. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/19: REGIONAL PERFORMANCE DASHBOARDS

That, ICAO expedite the expansion of the regional performance dashboards to include the MID Region-specific indicators, metrics and targets, for which the necessary data is available.

5.2.2 Specific Air Navigation issues

MID Region ATS Route Network

5.2.2.1 The subject was addressed in WP/21 presented by the Secretariat. The meeting noted that a number of States were still implementing changes to the Regional ATS Route Network without complying with the established procedures for the amendment of the MID Air Navigation Plan (ANP). Accordingly, the meeting urged States to adhere to the established ICAO procedures related to the publication and amendment of regional ATS routes.

5.2.2.2 The meeting noted with concern that the Proposal for Amendment (PfA) Serial No. MID Basic ANP 13/01 – ATM, which was approved by the President of the ICAO Council on 2 August 2013, has not yet been implemented by Egypt and Jordan. Accordingly, the meeting urged the concerned States to take necessary measures in order to resolve this pending issue.

5.2.2.3 In accordance with MIDANPIRG/14 Conclusion 14/11, the meeting reviewed and agreed to the revised Top Ten Routes at **Appendix 5.2.2A**. The meeting urged concerned States to implement the Top Ten Routes and provide the ICAO MID Regional Office with an update on the actions undertaken by **1 October 2015**, for review by the ATM SG/2 meeting.

5.2.2.4 The meeting noted that as a follow-up action to the ANSIG/1 Draft Conclusion 1/3, the ICAO MID Regional Office processed PfA (Serial No.: MID Basic ANP 15/04 – ATM) which was circulated through State Letter Ref.: AN 6/5A - 15/136 dated 6 May 2015.

5.2.2.5 The meeting noted that the MID ATS Route Catalogue, as updated by the ATM SG/1 meeting, is available on the ICAO MID website: (https://portal.icao.int/RO_MID/Pages/eDocs.aspx). The meeting invited States to take into consideration the proposed routes contained in the routes Catalogue in their planning process for the improvement of the ATS route structure.

5.2.2.6 The meeting was apprised of the developments carried out by ICAO to upgrade the ICARD platform (the State Letter Ref.: AN 11/45.5-15/32 dated 7 May 2015 refers). The meeting urged Sates and airspace users to report 5LNCs duplication and/or like-sounding issues, if any, to the ICAO MID Regional Office, to recommend appropriate solutions.

5.2.2.7 In connection with the above, the meeting urged States to coordinate with the ICAO MD Regional Office the assignment/changes related to route designators.

Contingency Planning

5.2.2.8 The subject was addressed in WP/22 presented by the Secretariat. The meeting was apprised of the regional, inter –regional and global developments related to contingency planning.

5.2.2.9 The meeting noted that some airspace users continue to circumnavigate Baghdad, Damascus, and Tripoli Flight Information Regions (FIRs), due to the conflict zones. With regard to Sana'a FIR, the meeting noted that some air operators resumed operations through Sana'a FIR using the ATS routes over the high seas.

5.2.2.10 The meeting noted that in accordance with the MID Region ATM Contingency Plan, the Notification Procedures had been implemented and the Contingency Coordination Teams (CCTs), which ensured effective coordination between the concerned parties for sharing information and implementation of contingency measures, had been activated. In this respect, the meeting noted with appreciation that the successful implementation of contingency routes and measures supported the concerned States to accommodate the re-routing of air traffic in a safe manner with greatest possible efficiency.

5.2.2.11 The meeting commended the efforts carried out by the ICAO MID Regional Office to ensure effective coordination and sharing of information and facilitating the implementation of contingency routes/measures.

5.2.2.12 The meeting urged States to complete the signature of the contingency agreements with their adjacent States, if not yet done so.

5.2.2.13 The meeting reviewed the revised version of the MID Region ATM Contingency Plan, which was updated based on the experience gained from the implementation of the Plan in order to enhance its effectiveness. Accordingly, the meeting agree to the following Conclusion:

CONCLUSION 15/20: MID REGION ATM CONTINGENCY PLAN

That, the MID Region ATM Contingency Plan (Edition June 2015):

a) is endorsed as MID Doc 003; and

b) be used by States and concerned stakeholders to ensure the orderly flow of international air traffic in the event of disruptions of air traffic services and related supporting services and to preserve the availability of major world air routes within the air transportation system in such circumstances.

5.2.2.14 The meeting was apprised of the inter-regional activities related to Afghanistan. The meeting noted with appreciation that the Third Meeting of the Ad-Hoc Afghanistan Contingency Group (AHACG) was successfully held in Muscat, Oman from 11 to 14 May 2015.

5.2.2.15 The AHACG/3 meeting commended the continuous support provided by the MID Region. Some of the MID Region contributions to the inter-regional contingency planning are highlighted below:

- UAE offered to reinstate the Aeronautical Data Access System, which was installed by UAE in 2011. This will solve the long-standing AFTN problem in Afghanistan;
- Iran implemented the Organized Track System (OTS) that was proposed by the AHACG/1 meeting;
- improvements to the interfaces and contingency routes were implemented between Iran and Armenia, Azerbaijan, Pakistan and Turkey; and
- the AHACG/3 meeting was apprised of the MID Region's experience related to contingency planning. Accordingly, the meeting developed the Inter-regional Afghanistan Contingency Arrangement based on the MID Region ATM Contingency Plan Template, and in accordance with the MID Region procedures related to contingency planning.

5.2.2.16 The Final Report of the AHACG/3 meeting is available on the ICAO APAC Regional Office website accessed through the following link: http://www.icao.int/APAC/Meetings/Pages/2015-AHACG3.aspx

5.2.2.17 Based on the above, the meeting urged States to implement the global and regional contingency provisions/measures to ensure the safety of the air traffic operating across the MID Region.

5.2.2.18 With regard to the Conflict Zones, the meeting noted that the HLSC-2015 supported the comprehensive risk mitigation work programme presented by ICAO, which includes:

- an online repository hosted by ICAO, which serves as a single public source for up-to-date risk assessments from States and International Organizations;
- harmonization of terminology used for risk assessments;
- comprehensive review of existing requirements and message formats; and
- industry-led initiatives to share operational information and be more transparent with passengers on conflict zone risk methodologies being applied.

5.2.2.19 The meeting encouraged States to:

a) assign designated focal point for the use of the centralized repository related to conflict zones, if they did not yet done so; and

b) comply with the interim procedure to disseminate information on risks to civil aviation arising from conflict zones attached to State Letter Ref.: SMM 1/4-15/16 dated 20 March 2015.

5.2.2.20 The meeting noted that ICAO issued State Letter Ref.: AN13/35-15/36 dated 21 May 2015, related to State emergency response to natural disasters and associated air traffic contingency (ATC) measures, reminding States of their obligations with regards to the importance and necessity of proactive contingency planning.

5.2.2.21 Based on the above the meeting encouraged States to implement the provisions of the above-mentioned State Letter, review their plans and measures to ensure they are fit for purpose. Furthermore, the meeting invited States and International Organizations to share their best practice in relation to contingency planning and preparation with other States and applicable International Organizations.

Area Control Centres Letter of Agreement Template

5.2.2.22 The subject was addressed in WP/23 presented by the Secretariat. The meeting recognized that the main purpose of the Letter of Agreement (LOA) Template between the adjacent Air Traffic Services Units (ATSUs) is the achievement of a high level of uniformity in respect of operational requirements throughout the MID Region, which will ensure the harmonization of the coordination procedures to be applied between Area Control Centres (ACCs).

5.2.2.23 The meeting noted that the Template includes all the bilateral agreements as appendices to the LOA, such as, the AIDC/OLDI and Contingency Agreements, SAR Bilateral Arrangements, etc.

5.2.2.24 The meeting reviewed the LOA Template consolidated based on the inputs received from States and agreed to the following Conclusion:

CONCLUSION 15/21: MID REGION ACCS LETTER OF AGREEMENT TEMPLATE

That, States be encouraged to use the MID Region Area Control Centres (ACCs) Letter of Agreement Template (Edition June 2015) available on the ICAO MID website, to ensure the harmonization of coordination procedures between ACCs.

MID Region High Level Airspace Concept

5.2.2.25 The subject was addressed in WP/24 presented by the Secretariat. The meeting noted that an airspace concept provides the outline and intended framework of operations within an airspace.

Airspace concepts are developed to satisfy explicit strategic objectives such as improved safety, increased air traffic capacity and mitigation of environmental impact, etc. Airspace concepts can include details of the practical organization of the airspace and its users based on particular CNS/ATM assumptions, e.g. ATS route structure, separation minima, route spacing and obstacle clearance.

5.2.2.26 The meeting recognized that the objective of the High Level Airspace Concept is to consolidate the ATM operational requirements agreed upon by MIDANPIRG, in order to provide a generic set of characteristics to be applied by States, which would support the harmonization of the ATM operations in the MID Region.

5.2.2.27 Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 15/22: MID REGION HIGH LEVEL AIRSPACE CONCEPT

That, the MID Region High Level Airspace Concept (Edition June 2015) is endorsed as MID Doc 004.

MID Region Secondary Surveillance Radar Code Management Plan (SSR CMP)

5.2.2.28 The subject was addressed in WP/25 presented by the Secretariat. The meeting recalled that the Middle East Secondary Surveillance Radar (SSR) Code Management Plan (CMP) was endorsed by MIDANPIRG/13 through Conclusion 13/7, based on the outcome of the SSR Code Allocation Study Group (SSRCA SG).

5.2.2.29 The meeting emphasized that the main objective of the revised CMP is to solve the conflicts identified subsequent to the transfer of Libya and Sudan from the AFI to the MID ANP.

5.2.2.30 The meeting reviewed the revised MID SSR CMP, and agreed to the following Conclusion:

CONCLUSION 15/23: MID SSR CODE MANAGEMENT PLAN (CMP)

That,

a) the Middle East Secondary Surveillance Radar Code Management Plan (MID SSR CMP) (Edition June 2015) is endorsed as MID Doc 005;

b) States (regulator and service provider) be urged to:

i. take necessary measures to ensure strict compliance with the procedures included in the MID SSR CMP; and

ii. report interference/conflict cases, if any, to the ICAO MID Regional Office related to the misuse of SSR codes.

Search and Rescue (SAR)

5.2.2.31 The subject was addressed in WP/26 presented by the Secretariat. The meeting was apprised of the outcome of the DGCA-MID/3 meeting related to regional and global SAR developments.

5.2.2.32 The meeting underlined that many deficiencies related to Search and Rescue (SAR) have not been eliminated since many years. The meeting noted that the SAR deficiencies in the MID Region concern mainly the following:

a) lack of signature of SAR agreements;

b) lack of plans of operations for the conduct of SAR operations and SAR exercises;

c) training of SAR personnel and SAR inspectorate staff;

d) lack of provision of required SAR services; and

e) non-compliance with the carriage of Emergency Locator Transmitter (ELT) requirements.

5.2.2.33 Based on the above, the meeting urged States to take necessary measures to ensure the implementation of the ICAO provisions related to SAR.

5.2.2.34 The meeting was apprised of the outcome of the ICAO/International Maritime Organization (IMO) Search and Rescue-Global Maritime Distress and Safety System Conference (ICAO/IMO SAR GMDSS Conference), which was successfully held in Bahrain 21-22 October 2014, for the Gulf Cooperation Council (GCC) States. The Conference provided a forum for sharing experiences and discussing relevant matters to SAR between Civil/Military Aeronautical and Maritime representatives.

5.2.2.35 The meeting encouraged States to take into consideration the Recommendations, emanating from the ICAO/IMO SAR GMDSS Conference.

5.2.2.36 The meeting agreed that the ICAO MID Regional Office scheduled a SAR Regional Workshop in 2016, which might be held jointly with the International Maritime Organization (IMO) to foster the implementation of SAR provisions in the MID Region and enhance cooperation between concerned stakeholders. In this respect, the meeting encouraged States to actively participate in the planned Workshop and ensure that their delegations are composed of Civil/Military Aeronautical and Maritime representatives involved in SAR.

5.2.2.37 The meeting noted that the DGCA-MID/3 meeting recognized the importance of the conduct of regional/sub-regional SAR training exercises. Accordingly, the meeting agreed to the following Decision:

DECISION 15/24: MID REGIONAL/SUB-REGIONAL SEARCH AND RESCUE TRAINING EXERCISES

That, the ATM Sub-Group develop an action plan for the conduct of regional/sub-regional SAR training exercises.

5.2.2.38 The meeting reviewed and updated the status of SAR Bilateral Arrangements between ANSPs/ACCs, the list of the MID SAR Point of Contact (SPOC) for the reception of the COSPAS-SARSAT messages and the List of MID SAR Focal Points, at **Appendices 5.2.2B, 5.2.2C and 5.2.2D**, respectively.

5.2.2.39 The meeting was apprised of the global developments related to SAR, which were initiated following the disappearance of the Malaysia Airlines Flight MH370, such as the recommendations emanating from the Multidisciplinary Meeting on Global Flight Tracking (MMGFT) (Montreal, Canada, 12-13 May 2014) related to flight tracking issues, and the outcome of the Second High Level Safety Conference 2015 (HLSC 2015) (Montreal, Canada, 2-5 February 2015) related to SAR. The meeting encourage Sates and Users to take into consideration the Montréal Declaration on Planning for Aviation Safety Improvement (February 2015) - Recommendation 1/2 related to SAR. The GADSS and ATTF Report and the Montreal Declaration are available on the HLSC 2015 webpage: http://www.icao.int/Meetings/HLSC2015/Pages

5.2.2.40 The meeting noted that the Air Navigation Commission, at the third meeting of its 198th Session held on 29 January 2015, considered a proposal for amendment of Annex 6 — *Operation of Aircraft*, Part I — *International Commercial Air Transport — Aeroplanes*, to develop a performance-based aircraft tracking requirement, and authorized its transmission to Contracting States and relevant international organizations, for comment.

5.2.2.41 The proposed amendments, which are aligned with the GADSS concept of operations and the performance criteria identified in the ATTF Report, have been prepared as a matter of urgency, as recommended by the HLSC 2015. The applicability date of the proposed amendments is **10 November 2015**.

5.2.2.42 The meeting noted that a proposal for amendment to Annex 6, Parts I, II and III relating to carriage requirements of flight recorders was also circulated to States through the ICAO State Letter Ref.: SP 55/4-15/15 dated 15 May 2015. Accordingly, the meeting encouraged States to provide ICAO with their comments to the proposed amendment to annex 6, circulated through State Letter Ref.: SP 55/4-15/15 dated 15 May 2015, not later than **14 August 2015**.

MID Region ATM Enhancement Programme (MAEP)

5.2.2.43 The subject was addressed in WP/27 presented by the Secretariat, and IP/10 providing an update on the activities of the MAEP Interim PMO. The meeting was provided with a progress report related to the establishment of MAEP.

5.2.2.44 The meeting noted that in order to complete the establishment of MAEP and to start the process for the recruitment of a manager for the MAEP Project Management Office (PMO), the following documents should be finalized and signed by States:

a) MAEP Memorandum of Agreement (MOA), which should be signed between States;
b) MAEP Management Service Agreement (MSA), which should be signed between States and ICAO; and
c) MAEP Project Document (ProDoc), which should be signed between States and ICAO.

5.2.2.45 The meeting noted that the DGCA-MID/3 meeting, through DGCA-MID Conclusion 3/2, endorsed the MAEP MOA. The meeting noted that the MAEP MOA shall come into effect on the date it is signed by at least five (05) States. In this respect the meeting urged States to join the Programme through the signature of the MAEP MOA. The meeting noted with appreciation that Sudan and UAE signed the MAEP MOA. The meeting noted that the majority of States are supporting the Programme in principal; however, they need more time in order to finalize their internal approval process before signature.

5.2.2.46 The meeting noted with appreciation that UAE will support the Programme with in-kind contribution. Moreover, ICAO offered to cover the salaries of the MAEP PMO Manager for the first six months.

5.2.2.47 The meeting noted that the MAEP MSA reflects the agreement between States and ICAO TCB regarding the management and other support services to be provided by or through ICAO. It was highlighted that States that have already signed an MSA with ICAO TCB, do not need to sign another MSA for MAEP.

5.2.2.48 The meeting noted that the MAEP ProDoc provides the project details such as: Project objectives, outputs, activities, inputs to be delivered by ICAO, States, and other Stakeholders, project monitoring, communication procedures; budget, job description of the MAEP PMO personnel, etc.

5.2.2.49 The meeting noted with appreciation that a MAEP ProcDoc Action Group was established by the First meeting of the MAEP Steering Committee (MAEP SC/1) (Dubai, UAE, 20-22 January 2015), to review and finalize the Draft MAEP ProDoc and eventually the Draft MSA. The meeting agreed that the final Draft MAEP MSA and ProDoc should be sent to States for final review and comment, prior to the endorsement by the MAEP Board.

5.2.2.50 The DGCA-MID/3 meeting reiterated that the MAEP Board delegated the MAEP Board Chairman, the authority to sign the necessary documentation with ICAO on behalf of the MAEP Member States.

5.2.2.51 The meeting noted the concern raised by some States related to the payment of the MAEP annual contribution, and eventually the funding of the projects that will be implemented under the framework of MAEP. Accordingly, the meeting noted that the DGCA-MID/3 meeting, through DGCA-MID Conclusion 3.3, tasked the MAEP Steering Committee with the exploration of several options for the funding of MAEP projects and delegated the authority to the MAEP Board to agree on the appropriate funding mechanism.

5.2.2.52 The meeting recognized the need for the development of a MAEP Master Plan to drive the modernization and enhancement of the ATM operations in the MID Region for the period 2016-2028. The MAEP Master Plan will be a high level document providing essential information on the programme including the identified/agreed projects and associated outcomes, benefits, timelines, etc.

5.2.2.53 The meeting supported the decision to implement the following regional projects under the framework of MAEP:

- MID Flight Procedure Programme (MID FPP):
- MID IP Network:
- MID Integrated Flight Plan Processing System (MID IFPS):
- MID ATS Route Network Optimization project (ARNOP):
- Regional/sub-regional ATFM system:
- MID Region AIM Database (MIDAD):
- Moreover, some Quick wins/initiatives will be also implemented under MAEP, such as the call sign confusion initiative.

5.2.2.54 The meeting recalled that in accordance with the MAEP SC Terms of Reference (TORs), the meetings of the MAEP SC should be organized by the MAEP PMO Manager. In this regard, the meeting agreed that until the appointment of the PMO Manager, ICAO will continue to act as the Secretariat of the MAEP SC meetings.

5.2.2.55 It was highlighted that the MAEP Board/2 meeting could not be convened before the signature of the MAEP MOA by at least five (5) States. Accordingly, the meeting agreed that MAEP SC/2 meeting to be held in Cairo, Egypt, 20-22 October 2015.

MID Region AIM Database (MIDAD)

5.2.2.56 The subject was addressed in WP/28 presented by the Secretariat. The meeting noted that, in line with the DGCA-MID/2 Conclusion 2/7, the Civil Aviation Affairs of Bahrain (BCAA) published a Call for Tender for the development of the specifications for the MIDAD Detailed Study on 15 August 2013. After evaluation of tenders, ITV was selected as the Consultant and a contract was signed on 10 February 2014. The meeting noted with appreciation that Bahrain, Qatar, Saudi Arabia and UAE covered the cost of the mentioned contract on the basis of equal contribution.

5.2.2.57 The meeting noted that, in accordance with the Action Plan/Timelines related to the MIDAD Project and based on the Specifications for the Detailed Study, a Call for Tender for the MIDAD Detailed Study was published by UAE on 25 November 2014. Offers were received from Two (2) Companies. The meeting noted that the evaluation of Tenders is being undertaken and final evaluation is expected to be reviewed and endorsed by the MIDAD TF/3 meeting (Kish Island, Iran, 29-30 August 2015).

5.2.2.58 The meeting was apprised of the outcome of DGCA-MID/3 related to the MIDAD Project. It was noted that the DGCA-MID/3 meeting, through Conclusion 3/4, agreed that the MIDAD Project (Detailed Study, implementation, operation, etc.) be managed as a TCB project under the MAEP framework and that the final decision on the funding mechanism of the MIDAD Project should be addressed by the upcoming MIDAD TF/3 and MAEP SC/Board meetings.

5.2.2.59 The meeting was apprised of the outcome of the MIDAD TF/2 meeting (Cairo, Egypt, 3-5 March 2015) related to the funding mechanism for the MIDAD Detailed Study. The meeting agreed that the following should be considered:

a) the MIDAD Project Memorandum of Agreement (MOA) as signed by the MIDAD Participating States;

b) the contribution of States be based on their economic figures; the volume of traffic and the Gross Domestic Product per capita (GDP);

c) proposals received from States (formal proposal, discussions, etc.) and in particular from the GCC States;

d) the method of collection of contributions;

e) the political/security stability of the committed States and their ability to pay contributions;

f) possibility of advance contribution from a number of State with a possibility for recovery;

g) late joining of additional States;

h) possible delays in the payment/collection of contributions;

i) legal/institutional framework;

j) initial thoughts about a cost-recovery mechanism.

5.2.2.60 Based on the above, the meeting urged States to take necessary measures to comply with the DGCA-MID/3 Conclusion 3/4, including the proposal of funding options of the MIDAD project (Detailed Study) for consideration by the upcoming MIDAD TF/3 and MAEP SC/2 meetings.

5.2.2.61 Taking into account that the majority of the tasks assigned by the DGCA-MID/2 meeting to the Four Leading States (Bahrain, Qatar, Saudi Arabia and UAE) has been successfully accomplished, and considering that the DGCA-MID/3 meeting has decided that the legal framework for the MIDAD Project will no longer be provided by the Leading States since MIDAD will be managed as a TCB project under the MAEP framework, the meeting agreed that the MIDAD ST composition be amended to include Bahrain, Jordan, Iran, Kuwait, Oman, Qatar, Saudi Arabia, Sudan, UAE and the ICAO MID Regional Office. Accordingly, the meeting agreed to the following Decision, which supersedes the MIDANPIRG/14 Decision 14/20:

DECISION 15/25: MIDAD SUPPORT TEAM (MIDAD ST)

That, the MIDAD Support Team (MIDAD ST)

a) be composed of members from Bahrain, Jordan, Iran, Kuwait, Oman, Qatar, Saudi Arabia, Sudan, UAE and the ICAO MID Regional Office; and

b) provide necessary support to the MIDAD Task Force to successfully complete Phase2 of the MIDAD Project.

5.2.2.62 The meeting noted that the EAD-MIDAD Workshop, hosted by EUROCONTROL, was successfully held at the EAD Operational Centre in Madrid, 3-4 February 2015. It was highlighted that it is very important to learn from and build on the EAD experience, in establishing formal ways of cooperation with EUROCONTROL. In this respect, the meeting agreed that a Memorandum of Cooperation (MOC) on sharing/exchange of Aeronautical Information/Services between the two Regional databases, should be signed between EUROCONTROL and the ICAO MID Regional Director (on behalf of MIDAD States). The meeting agreed that the above arrangement should be considered in the development of the MIDAD Detailed Study. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/26: EAD-MIDAD MEMORANDUM OF COOPERATION (MOC)

That, a Memorandum of Cooperation (MOC) on sharing/exchange of Aeronautical Information/Services between EAD and MIDAD be signed by the ICAO MID Regional Director (on behalf of MIDAD States) with EUROCONTROL.

5.2.2.63 The meeting was informed about the evaluation of the tenders and in particular the conclusions of the coordination meeting between Bahrain, Qatar, Saudi Arabia, UAE and ITV (IP/11 refers).

Aeronautical Frequency Spectrum in the MID Region

5.2.2.64 The subject was addressed in WP/29 presented by the Secretariat. The meeting noted that the ITU WRC-15 meeting is scheduled to be held in Geneva in November 2015. The meeting recalled that the DGCA-MID/2 meeting urged States to ensure continuous coordination with their Radio Frequency Spectrum Regulatory Authorities and the regional groupings such as the Arab Spectrum Management Group (ASMG) for the support of the ICAO position at WRC and its preparatory meetings. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/27: SUPPORT ICAO POSITION TO WRC-15

That, States be urged to:

a) support the ICAO Position to the WRC-15;

b) make necessary arrangements for the designated Civil Aviation Personnel to participate actively in the preparatory work for WRC-15 at the national level; and

c) *attend the preparatory regional spectrum management groups meetings and WRC-15 to support and protect aviation interests.*

5.2.2.65 The meeting noted that the ICAO MID Regional Office with support from ICAO HQ organized the "Aeronautical Frequency Spectrum Workshop WRC-15 preparation" (AFSW) in Cairo, 16-17 February 2015, back-to-back with the Thirty Second meeting of the Aeronautical Frequency Spectrum

Management Working Group (AFSM WG-F/32), 18 - 24 February 2015. The meeting supported the Workshop recommendations and urged concerned parties to take necessary follow-up actions.

5.2.2.66 The meeting recognized that frequency interference-free operation of GNSS is essential, and that the frequency band 1 559 - 1 610 MHz is used for elements of GNSS. The meeting noted with concern that the following States (Iraq, Jordan, Qatar, Saudi Arabia, Sudan, Syria and Yemen) still have their names in the footnotes 5.362B and/or 5.362C. The meeting urged the concerned States to delete their name from these footnotes, highlighting the opportunity to do so before the WRC-15.

5.2.2.67 The meeting recalled that many MID States use VSAT in the aviation communication; however they have not registered their VSAT frequencies. Accordingly, the meeting encouraged States to register their VSAT frequencies with their TRA for onward registration in ITU Master International Frequency Register (MIFR), to support the ICAO position for the VSAT frequencies protection at the WRC-15. Furthermore, the meeting urged States to designate focal points for the follow-up of the Frequency Spectrum-related issues and provide their names to the ICAO MID Regional Office.

5.2.2.68 The meeting was informed that the EUR FMG carried out a review of potential sources of non-intentional GNSS Radio Frequency Interference (RFI) that may affect GNSS frequencies. It was noted that future GNSS multi-constellation/dual-frequency receivers are expected to provide significant mitigation against GNSS vulnerability. However, it will not provide a full mitigation and it is important to assess and address all vulnerabilities to threats that may impact safety of GNSS-based operations.

5.2.2.69 In view of the above, the FMG conducted a review of existing and new material on GNSS vulnerabilities. As a result, the guidance material at **Appendix 5.2.2E** was collated to assist States when establishing and enforcing their regulatory provisions on the use of GNSS, considering the threats arising from the use of pseudolites, GNSS repeaters, GNSS jammers and spoofers. Accordingly the meeting agreed to the following Conclusion:

CONCLUSION 15/28: GNSS RADIO FREQUENCY INTERFERENCE

*That, States be invited to use the guidance at **Appendix 5.2.2E** for the development/amendment of their regulatory provisions related to the use of GNSS and associated threats.*

5.2.2.70 The meeting recognized that the introduction of GNSS multi-constellation, multi-frequency will entail number of new technical and regulatory challenges beyond those already associated with current GNSS implementation. Accordingly, the meeting supported the joint organization of a GNSS Seminar by ACAC and ICAO to address the augmentation systems (ABAS, GBAS and SBAS) and Multi-constellations. The meeting urged States and users to actively participate in this Seminar.

5.2.2.71 The meeting was apprised of the software for managing, assessing compatibility and presenting frequency assignments called Frequency Finder developed by ICAO. The meeting recognized the necessity for training on the use of the new software. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/29: WORKSHOP ON THE USE OF THE ICAO FREQUENCY FINDER

That, a Workshop on the use of the new Frequency Finder software be scheduled for 2016.

MID Aeronautical Fixed Services and MIDAMC

5.2.2.72 The subject was addressed in WP/30, WP/31 and WP/43 presented by the Secretariat and IATA. The meeting noted that the performance for Baghdad AFTN connections and the connection with the AFI Region require improvement. Accordingly, the meeting urged Iraq and Iran to complete the new connection between Baghdad and Tehran Com Centers and requested the ICAO MID Regional Office to coordinate with AFI Region for defining the requirement for additional exit entry points with the MID Region. Furthermore, Lebanon and Jordan implemented the long outstanding circuit between Amman and Beirut COM Centres, using the VPN technology and the circuit is operational and both States are in the AMHS interoperability testing stage. Accordingly, the meeting agreed that the related deficiencies in both States be deleted.

5.2.2.73 The meeting noted that IATA member airlines experienced disruptions of AFTN messaging particularly from the ICAO MID Region to the ESAF Region. The lack of monitoring of the AFTN messaging flows and regional oversight to resolve the messaging issues was also highlighted. The meeting agreed that the issue might be linked to the missing flight plans. In this respect, it was highlighted that the issue of missing flight plans could be resolved using some of the IFPS functions mainly the automatic generation of "ACK" and "REJ" messages. Accordingly, the meeting agreed that the CNS SG and the MIDAMC STG identify address the subject and update the AFTN messaging contingency plan.

5.2.2.74 The meeting noted that the MIDAMC STG developed the plan to implement AMHS communication paths between Jeddah-Vienna, and Bahrain-Vienna as at **Appendix 5.2.2F**, to enable the exchange of OPMET data in digital format between the MID and EUR Regions. It was noted that Athens and Nicosia, which are the entry/exit points between the MID and EUR Regions, had not yet implemented AMHS.

5.2.2.75 The meeting recalled that, both Bahrain and Jeddah have CIDIN traffic and the transition from CIDIN to AMHS will require a significant amendment in AFTN, CIDIN and AMHS routing tables not only in the State itself but also in adjacent COM Centres and others in the Network. Therefore, the meeting agreed that concerned COM Centres and the MIDAMC should identify all dependencies when the CIDIN relay traffic is taken off a dedicated CIDIN connection in normal routing situations and in all alternate routing cases as well.

5.2.2.76 The meeting noted that Tunis have already implemented the AMHS system and will be migrating the link with Rome to AMHS by December 2015. Tunis will also implement direct link Tunis-Vienna by December 2016. Furthermore, Egypt and Tunis will migrate to AMHS by September 2015. Accordingly, the meeting supported the proposal to consider Tunis as a back-up plan for the connection of MID ROC Centres. Furthermore, Tunis will present a working paper to the next EUR AFS Group meeting on the subject.

5.2.2.77 The meeting noted that Oman concluded the tests on AMHS with India (Mumbai) and it is under progress with Pakistan (Karachi). Accordingly, the meeting agreed that the MIDAMC STG and CNS SG study, recommend and support the implementation of the measures for the smooth implementation of the AMHS at exist/entry for the MID Region with other Regions, and work closely with the other Regions in order to avoid loss of message between Regions.

5.2.2.78 Based on all the above, the meeting urged States, that have not yet done so, to expedite their AMHS implementation. The meeting discouraged also the implementation of AFTN and CIDIN Circuits specially at international level and agreed that the replacement of the AFTN or CIDIN connections between States by AMHS links shall be based on ICAO Standards and Guidance Material (ICAO Doc 9880 and the ICAO EUR Doc 020 and 021). Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/30: AFTN/CIDIN AFS CONNECTIVITY AND AMHS IMPLEMENTATION

That States be urged to:

a) refrain from establishing new AFTN and CIDIN connections at the International level;

b) gradually phase out the current connections based on AFTN or CIDIN standards; and

c) expedite their AMHS implementation.

5.2.2.79 The meeting recalled that the Basic ATS Message Service was primarily conceived for easy intercommunication with users at the AFTN by the gateway facility. However, it includes some enhancement over the legacy AFTN; like length of message, Character set, reliability and integrity of data user.

5.2.2.80 The meeting noted that the World Metrological Organization (WMO) initially decided to migrate from alphanumeric codes to BUFR for the representation of Meteorological data; therefore, ATS Extended service was introduced to meet the Metrological requirement. At a later stage, the WMO decided to use Extensible Markup Language (XML). The meeting noted that most of the ATS systems in the MID Region can run the extended services and especially File Transfer Body Part (FTBP), and these services can provide significant operational improvements. Accordingly, the meeting agreed that trials be conducted for the use of extended services, and encouraged all States to support the ATS Extended Trial Team and requested the secretariat to facilitate the trials.

5.2.2.81 The meeting recalled that the accreditation procedure for the registration of the MIDAMC users was agreed by MIDANPIRG/14 through Conclusion 14/22, which defined three types of users. However, during the first year of trial and operation, the MIDAMC team received several requests from users outside the ICAO MID Region, who needed to create an account on the MIDAMC system. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/31: MIDAMC ACCREDITATION PROCEDURE

That, the accreditation procedure for registering in the MIDAMC be amended as at ***Appendix 5.2.2G.***

5.2.2.82 The meeting noted that the MIDAMC team was urged to send the three AMHS tables every AIRAC cycle even if there was no change in the tables, and to post the implementation issues/difficulties and possible solutions on the MIDAMC Forum for sharing experience.

5.2.2.83 The meeting was apprised of the outcome of the Tenth meeting of the NAFISAT SVC/10, which discussed the AMHS implementation and the MTA to MTA trials using the IP capability of the NAFISAT and SADC VSAT II networks. The trials were successful from a technical perspective and proved the capability of the future NAFISAT platform. However, some operational challenges were observed.

5.2.2.84 The NAFISAT SVC/10 meeting noted that the MID Region had achieved good level of AMHS implementation which included interconnection between systems from different vendors. Accordingly, the meeting agreed that the NAFISAT member States should register as external users on the MIDAMC and that the CNS SG/7 and the MIDAMC STG/3 meetings consider the extension of the MIDAMC support to the other Regions.

5.2.2.85 The meeting was apprised of the current static routes in AFS that do not allow for the automatic failover or redundant paths, thus if failure occurs, operators must manually adjust the routes to move data through an alternate path.

5.2.2.86 The meeting noted that in order to enhance the availability, reliability of the AFS Network and minimize downtime to the minimum, dynamic routing can be deployed. Dynamic routing protocols can update routing tables in the event of device or interface failure, thus if there are multiple possible paths, these protocols will continue to allow data flow. However, to achieve this stage detailed studies and trials are needed. It was noted that, in order to participate in these trials the States should have, among others Backup/Test AMHS System, operational AMHS Link, Human resources (Network Expert, system engineer, AFS Operator) and Vendor support preferable

5.2.2.87 The meeting supported the conduct of the trials and agreed that the MIDAMC conduct the surveys in order to decide further actions on the trials based on the survey results. The meeting encouraged States to support and join the trials to the extent possible.

5.2.2.88 The meeting noted that SITA requires interconnection with ANSPs within the MID Region using AMHS, since AFTN low speed connections reaching end of life and require urgent use of alternative IP based connections where possible to continue message exchanges. Accordingly, the CNS SG/6 meeting requested SITA to provide the list of SITA users and the AFTN connections in the MID Region and tasked the MIDAMC to develop the plan to migrate to AMHS/SITA Gateway.

5.2.2.89 The meeting was informed about the SITA "Transition Plan for Interconnection between MID AMHS Network and the SITA Type X Network" and noted that that the MIDAMC STG/2 meeting developed action plans to Migrate from Gateway Type B to Gateway Type X in Qatar and Jordan. The meeting encouraged the concerned States to complete the migration.

Use of Flight Plan "Converters" to Process the ICAO New FPL

5.2.2.90 The subject was addressed in WP/32 presented by the Secretariat. The meeting noted that as a follow-up action to MIDANPIRG/14 Conclusion 14/25, the ICAO MID Regional Office issued State Letter Ref.: AN 6/2B –14/122 dated 4 May 2014 requesting concerned States to take necessary measures to upgrade their systems and provide the ICAO MID Regional Office with an update on the action(s) undertaken not later than 30 June 2014. In this respect, the meeting noted with concern that the following States (Iran, Iraq, Libya, Saudi Arabia, Syria and Yemen) were still using converters.

5.2.2.91 The meeting noted that, as a follow-up action to the CNS SG/6 Draft Conclusion 6/10, the ICAO MID Regional Office issued a second follow-up State Letter Ref.: AN 6/2B – 15/039 dated 3 February 2015 requesting the concerned States to provide their action plans. The meeting reiterated the importance of upgrading the Flight Data Processing Systems (FDPS) to take full benefit from the information included in the INFPL and urged the concerned States to take necessary actions.

Integrated Flight Plan Processing System (IFPS)

5.2.2.92 The subject was addressed in WP/32 presented by the Secretariat. The meeting recalled that Bahrain introduced an IFPS System for the Bahrain FIR/UIR in 2013, and that the functions of this system could support the needs of other FIRs/UIRs as well as regional or sub-regional needs in the ICAO MID Region, as the system is expandable.

5.2.2.93 The meeting recalled that the IFPS is one of the priority projects under MAEP. The meeting requested Bahrain to present a working paper to the MAEP SC/2 meeting in October 2015, listing the milestones related to the extension of Bahrain's IFPS to other States.

5.2.2.94 In connection with the above, the meeting noted that Qatar IFPS will be operational in September 2015.

MID IP Network

5.2.2.95 The subject was addressed in WP/32 presented by the Secretariat. Based on the CNS SG/6 meeting Draft Conclusion 6/2 a MID IP Network Action Group was established and developed a MID IP Network Project Proposal, which was reviewed by the MSG/4 meeting. Accordingly, the MID IP Network was endorsed as a priority project under MAEP.

5.2.2.96 The meeting noted that the APAC States funded an ICAO TCB project for the evaluation of the CRV Network, and they are now in stage 2 (implementation) and they welcome interested MID States to join the project. The meeting agreed that the establishment of the MID IP Network needs to be expedited to cope with the current and future requirements.

Surveillance and ADS-B Implementation in the MID Region

5.2.2.97 The subject was addressed in WP/33 presented by the Secretariat. The meeting recalled that MIDANPIRG/14 was apprised of incidents where an IC Code conflict was observed. Accordingly, the meeting emphasized that when programming Mode S Interrogators, Mode S Operators have to comply with the allocated IC provided in the latest issued IC allocation; and develop an IC and coverage map programming procedures, taking their own specificities into account.

5.2.2.98 The meeting encouraged Mode S Radar Operators States to include the necessary verification in their local programming procedures. The CNS SG in coordination with EUROCONTROL updated the MID Region process for Mode S IC codes allocation to include the verification procedure and other developments. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 15/32: MID REGION PROCESS FOR MODE S IC CODES ALLOCATION

That, the Eurocontrol Document "Requirements process for the coordinated allocation and use of Mode S Interrogator Codes in the ICAO Middle East Region" (Edition 1.02 dated August 2014), be used for the allocation of the Mode S IC codes.

5.2.2.99 The meeting noted with appreciation that EUROCONTROL updated the MICA Application and users from MID States can access the application and perform the same functions as the users from EUR States. It was noted that by using the MICA application it is possible to extract the allocation and request for new mode S IC codes for their own radars, and revalidate the allocated codes. However, it is necessary that State users are registered in the MICA application which can be accessed through the link in the ICAO MID Regional Office website.

5.2.2.100 Based on the above, the meeting urged States to assign focal points, use the MICA application, and request training on the application, if needed. In this respect, the meeting reviewed and updated the Focal Points list as at **Appendix 5.2.2H**. The meeting urged the Focal Points to use the MICA application and perform all the required functions, as deemed necessary.

5.2.2.101 The meeting recognized that ADS-B is one of the key technologies included in the GANP which supports many ASBU Modules in particular ASUR, SNET, ASEP, and OPFL.

5.2.2.102 The meeting reiterated that States share surveillance data and mainly the ADS-B when available to enhance safety, increase efficiency and achieve seamless surveillance. Accordingly, the meeting requested States to provide their plans/progress reports related to ADS-B implementation, using the template at **Appendix 5.2.2I** and tasked the CNS SG to further review/update the template for the monitoring of the ADS-B out implementation.

Regional OPMET Centre (ROC)

5.2.2.103 The subject was addressed in WP/34 presented by the Secretariat providing an update on the implementation of ROC Jeddah and back-up ROC Bahrain.

5.2.2.104 The meeting recalled MIDANPIRG/14 Conclusion 14/30 that called for Saudi Arabia in coordination with ICAO to establish a MID ROC by the first half of 2015 to improve the regional and inter-regional OPMET efficiency. In addition, Bahrain in coordination with ICAO would establish a back-up ROC.

5.2.2.105 The meeting noted that an implementation plan was developed and adapted in two workshops: MID Regional OPMET Centre (ROC) Implementation Workshop held in Jeddah, Saudi Arabia from 31 August to 1 September 2014 and Inter-Regional OPMET Data Exchange Workshop held in Vienna, Austria from 23 to 24 October 2014 (www.icao.int/MID/Pages/meetings.aspx). The updated implementation plan is provided at **Appendix 5.2.2J**.

5.2.2.106 The implementation plan indicates that one-third of MID States have implemented the OPMET exchange scheme that supports ROC Jeddah and back-up ROC Bahrain. Another third of MID States have partially implemented the OPMET exchange scheme; and another third of MID States have not implemented the OPMET exchange scheme.

5.2.2.107 The meeting noted that ROC Jeddah has also begun implementing an efficient exchange of OPMET data with other Inter-Regional OPMET Gateways (IROG) such as Bangkok, Dakar, Pretoria, Vienna and Washington. Improving OPMET exchange with IROG Brasilia was still needed.

5.2.2.108 Detailed actions to support implementation of the OPMET exchange scheme that supports ROC Jeddah and back-up ROC Bahrain were developed at the BMG/5 meeting and provided at **Appendix 5.2.2K**.

5.2.2.109 The above efforts on the implementation of ROC Jeddah and back-up ROC Bahrain were commended by the meeting. Despite these efforts, the meeting noted many issues were still pending and urged States to address the outstanding issues. Given the above, the meeting agreed to the following Conclusion:

CONCLUSION 15/33: OPMET EXCHANGE SCHEME

*That States be urged to update their OPMET exchange scheme in coordination with ROC Jeddah and back-up ROC Bahrain in order to complete MID ROC implementation by **30 September 2015**.*

5.2.3 Environmental Protection

5.2.3.1 The subject was addressed in WP/35 presented by the Secretariat. The meeting was apprised of the global and regional developments related to environment based on the outcomes of the Second Meeting of the ATM Performance Measurement Task Force (APM TF/2) and ANSIG/1 meeting.

Global Developments

5.2.3.2 The meeting was apprised of the global developments related to environment, in particular the provisions of the ICAO 38th General Assembly Resolutions A38-17 and A38-18. In this respect, it was highlighted that States are encouraged to voluntarily submit more complete and robust data in their action plans to facilitate the compilation of global emissions data by ICAO. The level of information contained in an action plan should be sufficient to demonstrate the effectiveness of actions and to enable ICAO to measure progress towards meeting the global goals set by Assembly Resolution A38-18.

5.2.3.3 The meeting noted that Bahrain, Iraq, Jordan, Sudan and UAE have provided their action plans. In this respect and taking into consideration MIDANPIRG/14 Conclusion 14/29, and the ICAO State Letter Ref.: ENV 4/1-15/38 dated 27 May 2015 on ICAO Voluntary States' Action Plans, the meeting encouraged States to:

a) develop/update their Action Plans for CO_2 emissions and submit them to ICAO through the APER website on the ICAO Portal, with a copy to the ICAO MID Regional Office by **30 June 2015**; and

b) contact ICAO, should technical assistance for the action plan be needed.

5.2.3.4 In connection with the above, the meeting noted that ICAO conducted Market Base Measures (MBM) Global Aviation Dialogues (GLADs) in April 2015 in five ICAO Regions, including one in Cairo, Egypt from 20 to 21 April 2015, to share up-to-date information on the work of ICAO related to the development of a global MBM scheme for international aviation, and provide an important opportunity for ICAO to receive feedback from all its Member States and relevant organizations.

5.2.3.5 ICAO convened also a series of back-to-back Seminars in 2014 and 2015 on International Aviation and Environment and on States' Action Plans, including the Seminar held in Dubai, United Arab Emirates (UAE), from 10 to 12 March 2015. The material presented during the Seminar is available on the ICAO action plan website:
http://www.icao.int/Meetings/EnvironmentalWorkshops/Pages/2014-Seminars.aspx

5.2.3.6 The meeting noted with appreciation that ICAO developed an updated version of the ICAO Guidance on the Development of States' Action Plans on CO2 Emissions Reduction Activities (ICAO Doc 9988), which is available in draft format to the designated Action Plan focal points on the Action Plan on Emissions Reduction (APER) portal.

5.2.3.7 In connection with the above, the meeting noted also that ICAO developed the Operational Opportunities to Reduce Fuel Burn and Emissions Manual (ICAO Doc 10013) and the Guidance on Environmental Assessment of Proposed Air Traffic Management Operational Changes Manual (ICAO Doc 10031).

5.2.3.8 Based on the above, the meeting encouraged States and Users to use the guidelines provided in the above mentioned ICAO Documents when planning for the implementation of operational improvements and developing their Action Plans and the associated environmental assessments.

Climate Change

5.2.3.9 The meeting recalled that the 38th ICAO Assembly requested the Council to ensure that ICAO exercise continuous leadership on environmental issues relating to international civil aviation, including greenhouse gas (GHG) emissions**.**

5.2.3.10 The meeting noted that the ICAO Council, during its 204th Session, was informed of the results of the 20th Session of the Conference of the Parties (COP20) to the United Nations Framework Convention on Climate Change (UNFCCC)**.**

5.2.3.11 ICAO issued State Letter Ref.: E 2/58 – 15/37 dated 27 May 2015, encouraging the Civil Aviation Authorities to liaise and coordinate with their government representatives to COP21 regarding the statements and positions of their State vis-à-vis international civil aviation and the inclusion of aviation experts in their national delegations to COP21, which will be held in Paris, France from 30 November to 11 December 2015. Accordingly, the meeting encouraged States to respond to the mentioned State Letter.

Regional Developments

5.2.3.12 The meeting recalled that the implementation of operational improvements will generally have benefits in areas such as improved airport and airspace capacity, shorter cruise, climb and descent times through the use of more optimized routes and an increase of unimpeded taxi times. These improvements have the potential to reduce fuel burn and lower levels of pollutants.

5.2.3.13 The meeting noted with concern that the provisions of the MIDANPIRG/14 Conclusion 14/29 have not been implemented, despite the follow-up actions undertaken by the ICAO MID Regional Office, in particular the issuance of the State Letter Ref: AN 6/15-14/247 dated 23 September 2014, urging States and Users to provide the ICAO MID Regional Office with their data related to the environmental benefits accrued from the implementation of operational improvements, before 20 October 2014, in order to be incorporated in the Second MID Air Navigation Environmental Report, which was supposed to be developed by the APM TF/2 meeting.

5.2.3.14 In connection with the above, the meeting raised concern related to the low level of attendance to the APM TF meetings by the MID States.

5.2.3.15 Based on the above, the meeting emphasized that the contribution of States and Users to the work programme of the APM TF is essential in particular for the development of the Air Navigation Environmental Report. Accordingly, the meeting urged Sates and Users to support the Task Force and ensure the implementation of the provisions of the MIDANPIRG/14 Conclusion 14/29.

5.2.3.16 Based on the above, the meeting agreed that the Second MID Region Air Navigation Environmental Report should be developed by the APM TF/3 meeting.

5.2.3.17 The meeting noted with appreciation that Bahrain issued AIP SUP Nr. 17/14 effective date 14 November 2014, related to the implementation of Single Engine Taxi Operations at Bahrain International Airport. In accordance with the survey conducted by Bahrain, emissions may vary between 22,000kg for medium category two engines aircraft and 88,000kg for heavy four engines aircraft. Accordingly, the meeting encouraged States to consider the implementation, as practicable, of Single Engine Taxi Operations at their International Aerodromes.

5.2.3.18 Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 15/34: SINGLE ENGINE TAXI OPERATIONS

That, States be encouraged to:

a) consider the implementation of Single Engine Taxi Operations at their International Aerodromes,; as a possible measure for the reduction of CO_2 emissions, as practicable (decision to be supported by a safety assessment); and

b) share their experience on the subject with other States, as required.

5.2.3.19 The meeting encouraged States to organize at national level workshops related to the estimation of environmental benefits accrued from operational improvements with the support of ICAO and other interested stakeholders.

Noise Management

5.2.3.20 The subject was addressed in WP/37 presented by the Secretariat. The meeting noted that the aircraft noise is the most significant cause of adverse community reaction related to the operation and expansion of airports that could have a negative influence on the future growth of the aviation industry. The meeting was informed of the Assembly Resolution A38-17 parts related to aircraft noise and the ICAO environment-related technical activities which are undertaken by the Committee on Aviation and Environmental Protection (CAEP).

5.2.3.21 The meeting was apprised of the status of implementation of Noise Abatement Operational Procedures and Noise Monitoring Systems at International Aerodromes in the MID Region. It was noted that the magnitude and scope of the utilization of specific noise abatement operational procedures to achieve noise reduction should be determined through a comprehensive noise study, taking into consideration all positive and negative impacts on safety and environment.

5.2.3.22 The meeting noted that airport management plan can be a valuable tool to help estimate future noise levels. Management plan includes information about air traffic at present and for a planned period into the future. Management plan also includes information on the number of people affected by aircraft noise, or other environmental indicators within certain zones surrounding the airport, and any land-use restrictions already in place within those zones. Housing requirements and restrictions and noise contours for current and planned traffic corresponding to the noise index used for establishing the above-mentioned housing restrictions may also be part of the management plan.

5.2.3.23 The meeting noted that the objective of land use planning and management is to direct incompatible land use (such as houses and schools) away from the airport environs and to encourage compatible land use (such as industrial and commercial use) to locate around airport facilities. The meeting stressed that airport authority should work closely with those authorities responsible for land-use management to educate them regarding the noise impact of aviation operations. It was highlighted that civil aviation authorities should provide a leadership role by encouraging local authorities to implement land-use planning and management around airports through appropriate early action and cooperative mechanisms between interested stakeholders, such as coordination committees.

5.2.3.24 The meeting was apprised of the outcome of the DGCA-MID/3 meeting related to Noise Management. In accordance with the DGCA-MID/3 meeting Conclusion 3/6, the meeting urged States to conduct a comprehensive noise study in order to identify the airports where mitigation measures are necessary to minimize the number of people affected by aircraft noise and develop associated plans of action, accordingly; and send an update on the results of the study and actions implemented/planned to the ICAO MID Regional Office by **December 2015**.

REPORT ON AGENDA ITEM 6: AIR NAVIGATION DEFICIENCIES

Review of deficiencies in the air navigation fields

6.1 The subject was addressed in WP/37 presented by the Secretariat. The meeting recalled that MIDANPIRG/14, through Conclusion 14/32, agreed that a deficiency would be eliminated only when a State submit a formal Letter to the ICAO MID Regional Office containing the evidence(s) that mitigation measures have been implemented for the elimination of this deficiency.

6.2 The meeting reviewed the outcome of the different MIDANPIRG subsidiary bodies related to air navigation deficiencies. It was highlighted that in accordance with MIDANPIRG/14 directives, special consideration was given to the methodology used for the prioritization of the air navigation deficiencies and the interference/overlapping between the air navigation deficiencies and the USOAP-CMA findings. In this respect, the meeting recalled that the deficiencies priority "U" have a **direct** impact on safety and require **immediate** corrective measures.

6.3 The meeting reviewed and updated 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.cairo.icao.int. The meeting noted that the total number of air navigation deficiencies recorded in MANDD is **127** deficiencies compared to **122** deficiencies approved by MIDANPIRG/14.

6.4 The meeting highlighted the following:

- In the AOP field, four (4) new deficiencies have been added; three of them are Priority "A" and one (1) Priority "B". Two deficiencies have been eliminated; one (1) Priority "U" and one (1) Priority "A". The total number of deficiencies in the AOP field has increased from 11 to 13 since MIDANPIRG/14. The lack of implementation of aerodrome certification represents more than 80% of these deficiencies.

- In the AIM field, seven (7) deficiencies have been eliminated; six (6) of them are Priority "A" and one (1) Priority "B". The lack of required Obstacle Datasets for eTOD Area 1 and Area 4 followed by the lack of implementation of a Quality Management System, the non-production of aeronautical charts and lack of AIS automation represent more than 70% of reported deficiencies. The total number of deficiencies in the AIM Field has increased from 33 to 53 since MIDANPIRG/14, due to the inclusion of thirteen (13) new deficiencies related to eTOD and seven (7) new deficiencies related to Libya and Sudan, further to their transfer from the AFI to the MID ANP.

- In the ATM field, one (1) deficiency priority "A" was eliminated. The current total number of deficiencies is thirty (30); eleven (11) are related to the non-implementation of planned regional ATS Routes; thirteen (13) related to the signature of contingency agreements and six (6) related to RVSM safety monitoring.

- In the CNS field, three (3) deficiencies were eliminated. The total number of deficiencies in the CNS field decreased from thirteen (13) to ten (10) deficiencies since MIDANPIRG/14. The main reported deficiencies are related to the AFTN and direct speech circuits.

- In the MET field, the total number of deficiencies has increased from zero (0) to nine (9) since MIDANPIRG/14. Seven (7) new deficiencies are related to the

implementation of QMS and two (2) deficiencies are related to the non-availability of METAR and/or 30-hour TAF.

- In the SAR field, twenty four (24) deficiencies have been eliminated, since they are fully addressed under the USAOP-CMA framework. However, two (2) new deficiencies were reported. The current total number of SAR deficiencies is twelve (12) related mainly to the lack of SAR provisions and non-compliance with the carriage of Emergency Locator Transmitter (ELT) requirements.

6.5 Based on the above, the meeting agreed to the following Conclusion to replace and supersede the MIDANPIRG/14 Conclusion 14/32:

CONCLUSION 15/35: AIR NAVIGATION DEFICIENCIES

That, States be urged to:

a) use the MID Air Navigation Deficiency Database (MANDD) for the submission of requests for addition, update, and elimination of Air Navigation Deficiencies, including the submission of a specific Corrective Action Plan (CAP) for each deficiency; and

b) submit a Formal Letter to the ICAO MID Regional Office containing the evidence(s) that mitigation measures have been implemented for the elimination of deficiency(ies) when requesting the elimination of deficiency(ies) from the MANDD.

REPORT ON AGENDA ITEM 7: FUTURE WORK PROGRAMME

MIDANPIRG Procedural Handbook

7.1 The subject was addressed in WP/38 presented by the Secretariat.

7.2 The meeting recalled that MIDANPIRG/14, through Decision 14/2, endorsed the Seventh Edition of the MIDANPIRG Procedural Handbook, which included the new MIDANPIRG Organizational Structure and revised version of the Terms of Reference (TORs) of the subsidiary bodies.

7.3 The meeting reviewed and endorsed the revised TORs of the MSG, CNS SG and PBN SG, as at **Appendices 7A**, **7B** and **7C**, respectively and agreed that the MIDANPIRG Procedural Handbook should be amended accordingly.

7.4 The meeting was apprised of the outcome of the RASG-MID/4 meeting (Jeddah, Saudi Arabia, 30 March – 1 April 2015) related to the amendment of the RASG-MID Procedural Handbook procedure related to the election of the Chairpersons of RASG-MID, which is similar to the MIDANPIRG procedure. The meeting agreed with the RASG-MID/4 meeting that this procedure might represent a constraint for the normal proceedings and efficiency of the Group. Accordingly, and in order to ensure better continuity and support to MIDANPIRG, the meeting agreed that paragraph 6.1 of Part III of the MIDANPIRG Procedural Handbook be amended as follows:

> *In order to ensure the necessary continuity in the work of the Group ~~and unless otherwise determined by special circumstances~~, the Chairperson, the First Vice-Chairperson and Second Vice-Chairperson of the Group should assume their functions at the end of the meeting at which they are elected and serve for three ~~cycles~~ meetings, unless otherwise decided ~~re-elected, in that case the term would be limited to one additional cycle only~~.*

7.5 The meeting agreed that the MIDANPIRG Procedural Handbook should be amended before December 2015 to include the agreed coordination mechanism between MIDANPIRG and RASG-MID.

7.6 Considering the increase in the number of documents promulgated by MIDANPIRG (Regional Strategies, Plans, Handbook, Guidance Material, etc), the meeting agreed to add a Section to the MIDANPIRG Procedural Handbook related to the guidelines on the publication and amendment of MID Documents (MID Doc XXX) as at **Appendix 7D**.

7.7 Based on all of the above, the meeting agreed that a new Edition of the MIDANPIRG Procedural Handbook (Eighth Edition) be consolidated by the Secretariat before the end of 2015 to incorporate all the agreed amendments.

Dates and venue of the MIDANPIRG/16 meeting

7.8 The meeting noted with appreciation the offer made by Kuwait to host the MIDANPIRG/16 meeting in December 2016. The exact dates will be determined, after coordination between the ICAO MID Regional Office, Kuwait and the Chairperson of MIDANPIRG.

7.9 The meeting recalled that the MSG/4 meeting, based on a proposal by Iran, agreed that the MSG/5 meeting be held in Iran during the second Quarter of 2016. The exact dates and venue will be coordinated between the ICAO MID Regional Office, Iran and the Chairperson of MIDANPIRG.

REPORT ON AGENDA ITEM 8: ANY OTHER BUSINESS

Telecommunication Service Charges for overflight permissions

8.1 IATA raised concern regarding the issue of AFTN Telecommunication Service Charges for overflight permissions that had been imposed by one State in the MID Region. The meeting agreed to task the CNS Sub-Group with the review of the reason for charging in order to reach an agreeable solution to resolve the issue.

Farewell to Mr. Khonji

8.2 Mr. Ali Ahmed, the Chairman of MIDANPIRG and Director Air Navigation, Civil Aviation Affairs, Bahrain, bid a fond farewell to Mr. Mohamed R. M. Khonji, ICAO Middle East Regional Director, who would retire end of December 2015. The Chairman mentioned that the MIDANPIRG/15 meeting was Mr. Khonji's last MIDANPIRG meeting. The Chairman addressed the meeting recalling with appreciation Mr. Khonji's contributions to the ICAO Middle East Region and to the ICAO Middle East Regional Office. He stated that under the leadership of Mr. Khonji and his vision to bring the MID Region to the forefront, MIDANPIRG and the Middle East Regional Office have improved a lot and he commended all the achievements and success stories during the past ten (10) years as the Regional Director. He wished him a very happy retirement after a long and rich career in civil aviation with Bahrain Civil Aviation Affairs and ICAO.

8.3 Mr. Khonji thanked the Chairman for the gracious words and expressed his gratitude and appreciation to him personally and to the Civil Aviation Affairs of Bahrain, for the excellent arrangements made towards successful conduct of the meeting and the warm hospitality extended to all delegates. He congratulated the Chairman for the excellent conduct and management of the meeting. He expressed his gratitude to all participants from States and International/Regional Organizations for their attendance, support and contributions. Mr. Khonji wished success to all future MIDANPIRG meetings.

Closing of the Meeting

8.4 The meeting ended expressing its gratitude and appreciation to Bahrain for the excellent arrangements made towards successful conduct of the meeting and the warm hospitality extended to all delegates throughout their stay in Bahrain. Thanks were also conveyed to the Chairperson for the excellent conduct and management of the meeting and to the ICAOMID Regional Office for the good preparation, coordination and secretariat work.