



International Civil Aviation Organization

MIDANPIRG ATM Sub-Group

Second Meeting (ATM SG/2)
(Cairo, Egypt, 30 November - 03 December 2015)

Agenda Item 3: Global and Regional Developments related to ATM and SAR

GLOBAL AND REGIONAL DEVELOPMENTS RELATED TO ATM

(Presented by the Secretariat)

SUMMARY

This paper presents the global and regional developments related to ATM.

Action by the meeting is at paragraph 3.

REFERENCES

- DGCA-MID/3 Report
- GANP DOC 9750
- ICAO Assembly 38th Session
- IRCM/4 Summary of Discussions

1. INTRODUCTION

1.1 The ICAO 39th Assembly will be held in Montreal, Canada, end of 2016, which is expected to endorse the Fifth Edition of Global Air Navigation Plan (GANP) Doc 9750.

2. DISCUSSION

2.1 The Fifth Edition of the GANP will update as much as possible the ASBU document, to reflect the changes in the relevant part of the GANP. The adjustment of dates for the blocks is the most visible change (B0 = 2013-2018, B1 = 2019 – 2024, B2 = 2025 – 2030, B3 = 2031 onward). This will allow better synchronization with the Assembly and ICAO publication cycles.

2.2 The new GANP includes introduction of the Performance-Based Approach (PBA) for the ASBU, guidance on financial aspects, notion of minimum path, iKits and standardization roadmap, global ATM logical architecture, ground automation roadmap, etc. as answers to recommendations or demands from States and do not change the ASBU methodology. They should help in the understanding, the planning and in the implementation of the modules.

2.3 To find a balance between consolidation and keeping pace with new developments, the GANP will have a more comprehensive update with the 2019 Edition, aligned with beginning of Block 1. Most of the work for the next triennium, announced in the present Edition, will drive the future changes (performance indicators for example). Finally, all comments from States for the 2019 Edition, collected during the 2016 review process, will ensure that the Global Air Navigation Plan remain the comprehensive overarching planning document for international aviation.

2.4 With a view to support States, ICAO will be introducing the new tool: ASBU-Performance Assessment Interactive Tool (A-PAINT). The tool will be released starting from 2017 and is expected to be completed by 2019.

2.5 The meeting may wish to recall that the 38th Assembly approved the Regional Performance Dashboards. These Dashboards aim to provide a glance of both Safety and Air Navigation Capacity and Efficiency strategic objectives, using a set of indicators and targets based on the regional implementation of the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP). The Dashboards are available on the ICAO website. The Air Navigation Performance Dashboard contains currently Indicators/Metrics related to PBN, ATFM and AIM implementation.

2.6 The ICAO MID Regionals Office is coordinating with ICAO Headquarters to 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 as a follow-up to MIDANPIRG/15 Conclusion 15/19.

2.7 The meeting may wish to note the Table below, which reflects the main amendments of the ICAO Annexes and Documents related to ATM, with effective date 10 November 2016 in addition to some new guidance materials and manuals which are still under review:

Topic	Affected Annex/Doc	Descriptions	Ref. State Letter
SIDs/STARs and Vectoring procedures	PANS-ATM (Doc 4444)	Update vectoring procedures and phraseology to make clear when the pilots would be expected to follow the level and speed restrictions on departure and arrival procedures.	AN 13/2.5 - 15/40 dated 10 June 2015
<ul style="list-style-type: none"> • Adherence to current FPL • Speed variations • Use of ADS-C 	Annex 2 PANS-ATM (Doc 4444)	<ul style="list-style-type: none"> • Pilots adhere to the most recent clearance received which is the current flight plan, not necessarily the flight plan filed prior to departure. • Annex 2 currently does not make a distinction between the cases where an aircraft has an assigned speed or not. PANS-ATM requires the pilot to report a change of speed when Mach number technique (MNT) is being applied • Pilots are not immediately aware which data is provided to ATC by means of ADS-C. Therefore it is not reasonable to require pilots to provide revisions to data that they are not immediately aware of. Specific identifier for ADS-C added to differentiate the application from ADS-B. 	AN 13/1.8 - 15/17 dated 13 March 2015
Lateral separation between tracks	Annex 2, PANS-ATM (Doc 4444)	Lateral separation between tracks reduced to 23NM in procedural airspace under certain circumstances.	

Performance-based Horizontal Separation Minima	New manual	The manual will provide guidance on the monitoring of the performance-based horizontal separation minima which covers Performance Based Navigation (PBN), Performance-based surveillance (PBS) and Performance-based communication (PBC).	
Training for ATCO and ATSEP	Two new manuals PANS-Training (Doc 9868)	The manuals will include provisions on competence-based training for ATCO and ATSEP and supporting the amendment to PANS-Training (Doc 9868).	
Remote ATS	Annex 11 PANS-ATM (Doc 4444)	Update Annex 11 provisions on remotely operated ATS and PANS-ATM to include procedures for remotely operated ATS.	
Civil military cooperation (including, but not limited FUA)	Cir 330	Update of Cir 330 and upgrade the material to give it an ICAO Doc status.	
Stop bars	Annex 11 PANS-ATM (Doc 4444)	To include provisions for stop bars contingency procedures.	
Runway Safety	PANS-ATM (Doc 4444)	Update phraseology to include provisions stemming from the runway safety programme.	
Runway incursion warning system (ARIWS)	PANS-ATM (Doc 4444)	To include procedures relating to the runway incursion warning system (ARIWS).	AN 4/1.1.56 - 15/51 dated 10 July 2015
ATFM	Doc 9971	To include provisions related to exchange of information between ATFM systems, the training requirements and core competencies involved in the exercise of ATFM responsibilities.	
TO/TWO and FOR/FOUR	PANS-ATM (Doc 4444)	To amend the phraseology to remove of confusion in the use of TO/TWO and FOR/FOUR in levels and headings.	

IRCM/4 Meeting

2.8 The Fourth Inter-Regional Co-ordination Meeting (IRCM/4) on Interface Issues between the Asia/Pacific (APAC), European and North Atlantic (EUR/NAT) and Middle East (MID) Regional Offices of ICAO was held at the APAC Office in Bangkok, Thailand from 14 to 16 September 2015. The meeting noted with concern the low level of implementation of Civil/Military integration, Inter-Centre communications (AIDC/OLDI) and ATFM implementation in the three ICAO Regions.

2.9 The IRCM/4 meeting highlighted the need to enhance the inter-regional cooperation for the implementation of inter-regional ATS Route. Accordingly, the meeting agreed to the necessary steps for the establishment of the Advanced Inter-Regional ATS Route Development Task Forces (AIRAD/TF(s)) jointly by the EANPG and APANPIRG in 2016, in coordination with the MID Office as required. The meeting also supported the establishment of Inter-regional Task Forces (composed of relevant States, International Organizations and the three ICAO Regional Offices), when the circumstances necessitated.

2.10 The IRCM/4 meeting discussed the need to update the EMARSSH (Europe Middle East-Asia Route South of Himalaya) routes network implemented several years ago and accordingly,

and agreed that the three Regional Offices (APAC, EUR/NAT and MID) should work together to establish an EMARRSH-2 Routes Network within the three Regions, which could be managed within the work of the Advanced Inter-Regional ATS Route Development Task Force(s).

2.11 The IRCM/4 meeting agreed the need to enhance inter-regional coordination for the implementation of contingency arrangements, and discussed the challenges faced by some MID States at the inter-regional interfaces to get the signature of the contingency agreements. The meeting noted that States are required to develop contingency plans in consultation with other States according to Annex 11 and the Regional offices are facing challenges in getting States to develop and promulgate national contingency plans and engage in inter-States and regional contingency planning. The meeting recognized that there was lack of guidance in Annex 11 to clarify the requirements for an ATS contingency plan, and agreed that Regional Offices to coordinate with ICAO HQ to consider the review of Annex 11 provisions related to Contingency Planning, in order to provide clear guidance for States to establish contingency planning in harmonized manner with neighbouring States/Region.

ICAO AFI/MID ASBU Implementation Workshop

2.12 The meeting may wish to note that the AFI/MID ASBU Implementation Workshop was held at the ICAO MID Regional Office Cairo, Egypt 23-26 November 2015. The Workshop was organized jointly by ICAO Cairo and Nairobi Offices. The Workshop main objective was to bring together all air navigation stakeholders, from both the Eastern and Southern African (ESAF) and Middle East (MID) Regions, to review the regional Air Navigation priorities and targets, get a clear understanding of the needs of airspace users towards a harmonized implementation across States and Regions and development of associated action plans and regional technology/infrastructure baseline, based on the ASBU methodology, users' requirements, major traffic flows, cost effectiveness, and global/regional objectives/priorities.

2.13 The Workshop provided a unique opportunity where participants worked together towards a harmonized ASBU implementation across States and Regions. The Workshop underlined the need for harmonized implementation, interregional coordination and interoperability taking into consideration users' needs will be highlighted.

2.14 The Workshop materials are available on the ICAO MID Regional Office website: <http://www.icao.int/MID/Pages/meetings.aspx>.

DGCA-MID/3 Meeting

2.15 The meeting may wish to note that the Third Meeting of the Directors General-Middle East (DGCA-MID/3, Doha, Qatar, 27-29 April 2015), endorsed the Declaration on Aviation Safety and Air Navigation in the MID Region 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). The objective of the Declaration is to expedite the achievement of the main Aviation Safety and Air Navigation Targets in the MID Region.

MID ATM Enhancement Programme (MAEP)

2.16 The DGCA-MID/3 meeting was provided with a progress report related to the establishment of MAEP. The meeting reviewed and endorsed the MAEP Memorandum of Agreement (MOA). More details related to MAEP are presented in WP/7.

Contingency Planning

2.17 The DGCA-MID/3 meeting was apprised of the regional and inter-regional developments related to contingency planning. The meeting noted that some airspace users continue to circumnavigate Baghdad, Damascus, Sana'a, and Tripoli Flight Information Regions (FIRs), due to the conflicts zones. In this respect, the meeting noted with appreciation that contingency measures have been successfully implemented by the concerned States.

2.18 The DGCA-MID/3 meeting noted that in accordance with 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.

2.19 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.

International Civil Aviation and the Environment

2.20 The DGCA-MID/3 meeting was provided with a summary of the main developments on the actions requested by the 38th Session of the ICAO Assembly in the field of international aviation and climate change, in particular those actions relating to the following key areas: 1) technological and operational measures; 2) sustainable alternative fuels for aviation; 3) market-based measures; 4) States' action plans; and 5) assistance to States.

2.21 The DGCA-MID/3 meeting noted in particular that ICAO conducted 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.

2.22 The DGCA-MID/3 meeting recognized that climate change will remain the major challenge of the ICAO environmental activities in the upcoming years. The meeting noted the availability of further assistance by ICAO in the preparation and submission of voluntary States' action plans.

2.23 The DGCA-MID/3 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, urging States and Users to provide their data related to the environmental benefits accrued from the implementation of operational improvements, 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. The meeting noted that, through Draft Conclusion 1/6, the ANSIG/1 meeting agreed that the Draft Second MID Region Air Navigation Environmental Report would be consolidated by the Secretariat based on the inputs received from States and Users and presented to the MIDANPIRG/15 meeting for endorsement. Accordingly, the meeting urged States to implement the provision of the MIDANPIRG Conclusion 14/29 and that the Second MID Region Air Navigation Environmental Report should be developed by the APM TF/3 meeting (Cairo, Egypt, 24 October 2016).

Noise Management

2.24 The DGCA-MID/3 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).

2.25 The DGCA-MID/3 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.

2.26 The DGCA-MID/3 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.

2.27 The DGCA-MID/3 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 States 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. Accordingly, the meeting agreed to the following Conclusion:

DGCA-MID/3 CONCLUSION 3/6 NOISE MONITORING AND CONTROL

That, States be urged to:

- a) 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*
- b) send an update on the results of the study and actions implemented/planned to the ICAO MID Regional Office by December 2015.*

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this Working Paper; and
- b) urge States to implement the provisions of MIDANPIRG Conclusion 14/29 and provide the necessary inputs to the ICAO MID Regional Office by **1 September 2016**;
- c) take into consideration the global and regional developments related to ATM when developing their national plans.