

International Civil Aviation Organization

Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG)

Seventh Meeting (Cairo, 21-25 January 2002)

Agenda Item 6.1: Middle East CNS/ATM Implementation Plan and Related Activities - CNS/ATM/IC

REVIEW OF THE CNS/ATM/IC/SG/1 MEETING REPORT

(Presented by the Secretariat)

SUMMARY

This paper presents the report of the CNS/ATM/IC/SG/1 meeting held in Cairo from 5 to 9 November 2001. Action required is at paragraph 3.

REFERENCES

- MIDANPIRG/6 meeting report
- CNS/ATM/IC/SG/1 meeting report

1. INTRODUCTION

- 1.1 The Sixth Meeting of the Middle East Air Navigation and Implementation Regional Group (MIDANPIRG/6) while reviewing the Fourth Meeting Report of the Communications, Navigation and Surveillance/Air Traffic Management Sub-Group (CNS/ATM SG/4) agreed to change the title of the Sub-Group and its terms of reference to Communications, Navigation and Surveillance/Air Traffic Management/Implementation Coordination/ Sub-Group (CNS/ATM/IC/SG) in order for the Sub-Group to properly progress towards focusing on the implementation of the CNS/ATM Systems, in coordination with providers, users and international organizations.
- 1.2 Consequently, the MIDANPIRG/6 formulated Decision 6/27 (New Title And Revised Term Of Reference For The CNS/ATM Sub-Group), the new title and the revised term of reference is at **Appendix A.**

2. DISCUSSION

2.1 CNS/ATM/IC/SG/1 Meeting

2.1.1 The CNS/ATM/IC/SG/1 held

mber 2001.

The meeting was attended by a total of twenty-eight participants, which included delegates from six States and one International Organization.

2.2 Review Status of Conclusions and Decisions from MIDANPIRG/6 which are Relevant to CNS/ATM

- 2.2.1 The Sub-Group discussed conclusions/decisions of relevant subsidiary bodies of the MIDANPIRG related to CNS/ATM matters and agreed on two (2) Conclusions and one (1) Decision, attached at **Appendix B**.
- 2.2.2 The Sub-Group was presented with a list of conclusions/decisions adopted by MIDANPIRG/6 relevant to CNS/ATM matters and the follow-up actions taken, refer to WP/4. With regards to MIDANPIRG/6 Conclusion 6/1 (*Uniform Format for the Reporting of WGS-84 implementation*), the secretariat presented the Sub-Group with a list of the status of WGS-84 implementation and uniform format reporting as required by ICAO in the MID region at **Appendix C.**

2.3 Review of the AFS/ATN TF7 Report

- 2.3.1 The Sub-Group noted that the CNS tables to the report on Agenda Item 3 of the MIDANPIRG/6 meeting Conclusion 6/13 (*Initial Plan for the Ground Portion of the ATN in the MID Region*) were appropriate as reference documents to be used for technical and operational purposes within the framework of the planning and implementation sub-groups. Consequently, the Sub-Group was informed that since these tables are now incorporated in the MID ANP/FASID document, there is a need for harmonization with those of other Regions. The meeting agreed that the new table at **Appendix D** would be more suitable for incorporation in the MID ANP/FASID document and therefore, agreed to **Conclusion 1/1** (*Initial Plan for the Ground Portion of the ATN in the MID Region*) at **Appendix A** to this paper.
- 2.3.2 The Sub-Group reviewed the outcome of the Ground-to-Ground ATN Study Group; noted the interest of a number of States to introduce OLDI (On Line Data Interchange) as intermediate system until the availability of AIDC (ATS Interchange Data Communications). It was however recalled that although OLDI is not an ICAO system, it is already operational in Europe. The Sub-Group agreed that since the implementation of AIDC is only planned for a relatively undetermined date, the need arises to find a mechanism capable of covering the transition period and to consider other alternatives (OLDI etc.).

2.4 Matters Related to Traffic Forecasting Activities

2.4.1 The Sub-Group was presented with a report on the activities undertaken by the Middle East Regional Traffic Forecasting Group (MER TFG) since CNS/ATM SG/4 meeting 6-10 March 2000. The secretariat also presented the outcome of the of MER TFG/4 meeting which included preliminary aircraft movement forecasts for the MID region up to the year 2015. The Sub-Group reviewed MIDANPIRG/6 meeting Conclusion 6/22 (*Traffic Forecasting Requirements For CNS/ATM Planning*) and agreed to request the MER TFG to provide the required data since that the Group has been re-constituted to include both ATC and Air Transport experts, refer to WP/13.

2.5 Implementation of RNP/RNAV in the MID Region

2.5.1 The Sub-Group was informed that pursuant to MIDANPIRG/6 meeting Conclusion 6/17 ((Priority Routes for the Introduction of RNP 5) under a) States concerned should implement RNP 5 on the routes listed in Appendix 4.3A to the report on Agenda Item 4.3, on 22 March 2001) the Phase1 Implementation Strategy, which consisted of the implementation of RNP 5 on selected priority routes, has been successfully implemented with effect from 14 June 2001. The Fifth Meeting of the RNP/RNAV Task Force (RNP/RNAV TF/5), which was held in Cairo from 10 to 13 June 2001, established the second implementation phase which is based on the establishment of RNP/RNAV areas instead of RNP/RNAV routes. The Sub-Group also noted with appreciation that although the tentative date for the implementation of RNP/RNAV areas is 28 November 2002, many States in the Region have already adopted this new approach. The meeting also noted the need for ensuring interregional co-ordination with a view to harmonize the implementation process with adjacent ICAO Regions.

2.5.2 Concerns were raised on the rationale for the use of GNSS as a supplemental means for navigation as proposed by the RNP/RNAV TF/5 meeting. It was pointed out that taking into account the experiences gained with the implementation of GNSS in other parts of the world, the MID Region should instead plan for the use of GNSS as a primary means of navigation. This issue would be further discussed at the next GNSS Task Force meeting (9-11 January 2002), refer to WP/6 and WP/12.

2.6 Implementation of RVSM in the MID Region

- 2.6.1 The Sub-Group noted that the MIDANPIRG/6 meeting under Conclusion 6/8 (*Planning for Congestion Reduction Measures in the MID Region*) recognized that the implementation of RVSM would contribute towards the reduction of congestion problems in the region. The MIDANPIRG/6 under Conclusion 6/9 (*Establishment of a MID RVSM Task Force*) had planned for the evolutionary implementation of RVSM in the MID Region in year 2003.
- 2.6.2 The Sub-Group was accordingly apprised of the outcome of the three RVSM Task Force meetings. It was pointed out that the conclusions deriving from the Task Force meetings were reviewed by the ATM/SAR/AIS SG/5 meeting, which was held in Cairo from 30 October to 2 November 2001, refer to WP/6.
- 2.7 Review of Recent Developments, Research, Trials and Demonstrations in Relation with the Implementation of the CNS/ATM Systems and Global/Regional Plans
- 2.7.1 The Sub-Group was presented with an overview of the technical and operational developments related to CNS/ATM systems in year 2000 and up to April 2001, refer to WP/3.
- 2.7.2 The following States i.e. Bahrain, Egypt, Iran, Jordan, Kuwait and Yemen presented briefly their recent CNS/ATM implementation activities, these are at **Appendix E**.
- 2.7.3 The Sub-Air Navigation Plan for CNS/

on 15 June 2001 (Council Working Paper/11609); highlighting the changes and the sources the amendment materials stemmed from, refer to WP/11.

- 2.7.4 The Sub-Group was apprised of the detailed review of the IATA/AACO CNS/ATM user-driven transition implementation plan and the CNS/ATM Implementation Plan for Middle East Region which was carried out by IATA with a view to identify areas in the MID Region Implementation Plan where improvements are needed.
- 2.7.5 The meeting noted that the IATA/AACO CNS/ATM transition plan is based on implementation of FANS 1/A packages, and is structured around ARINC 622 specifications for ACARS, which permits ATS applications over the ACARS air/ground network. It was pointed out that although IATA has been an active partner in the elaboration of the ICAO CNS/ATM implementation plan since its inception, this non ATN compliant approach was not endorsed by all States of the MID Region as a transition towards full implementation of CNS/ATM. The Sub-Group however, agreed that the CNS/ATM Implementation Plan for MID Region indicates a requirement for implementation of initial ADS through FANS 1/A (or equivalent) packages (*Table 8.4 ATM requirements for surveillance*), but was of the view that the matter should be further supported by cost-benefit considerations and the commitment by IATA to finance the ground element of the system through user charges. IATA had reservations on the funding aspects of the ground elements and will provide an updated list of FANS/1A equipped aircraft operating within the MID Region to justify the urgent need for using FANS1/A functionalities in the Region.

2.7.6 The Sub-Group was further informed that the IATA/AACO transition plan comprises of 6 to 8 phases which gradually migrates from the current systems to the final ATN based configurations based on the requirements of the ATS providers and availability of compliant aircraft population.

2.8 CNS/ATM Training Requirements

- 2.8.1 As a follow-up to MIDANPIRG/6 Decision 6/25 (Development of Regional CNS/ATM Training Requirements), a CNS/ATM Training Task Force was established by the meeting with a view to develop a detailed statement of the training requirements for the MID Region for incorporation in the CNS/ATM Plan for the MID Region.
- 2.8.2 The Sub-Group was of the view that there was a need to expedite the processing of the proposed Terms of Reference (TOR) and Work Programme of the future Task Force. It was agreed that adjustments would be carried out after consultations/comments from States on the draft proposal. Moreover, It was emphasized that this complete and integrated task should be analyzed by members having high-level expertise in the management and elaboration of training requirements in the aviation fields, in particular relating to CNS/ATM systems implementation. The Sub-Group agreed to **Decision 1/2** (Establishment of the CNS/ATM Human Resource Development and Training Task Force for the MID Region) at Appendix A and its TOR is at Appendix F.

2.9 Review and Further Update the CNS/ATM Implementation Plan for the Middle East Region

2.9.1 The Sub-Group was presented with the list of accomplished tasks by the CNS/ATM Sub-Group in association with the eleven step-by-step approach for planning ATM requirements and CNS infrastructure. Moreover, the Sub-

the previous eleven step-by-step approach for planning ATM requirements and CNS infrastructure had been modified to twelve steps as indicated at **Appendix G** and WP/11.

- 2.9.2 The Sub-Group noted that some of the tasks of the twelve step-by-step approach would require to be accomplished by States, either individually or in-group of States, particularly for States which have not yet done so. After reviewing the above, the Sub-Group agreed to **Conclusion 1/3** (The Step-by-Step Approach for Planning ATM requirements and CNS infrastructure in the MID Region).
- 2.9.3 The Sub-Group was also presented with the CNS/ATM Implementation Plan for the Middle East Region (First Edition, of September 2000), which had some inconsistencies in the timelines as indicated in the MIDANPIRG/6 report. MIDANPIRG/6 had urged those States who had not yet submitted their Plans and who had updates, to submit them as soon as possible to the ICAO MID Regional Office, in order to be incorporated in the Second Edition of the CNS/ATM Implementation Plan for the Middle East Region. However, as no correspondence on this matter was received, the Sub-Group decided to update the timelines accordingly, refer to WP/10.

3. ACTION BY THE MEETING

- 3.1 The MIDANPIRG/7 is invited to:
 - a) note the report of the CNS/ATM/IC/SG/1 meeting and Appendices A, C, E and G;
 - b) adopt the Conclusions and Decision as at Appendix B;
 - c) agree to Appendices D and F.
