



International Civil Aviation Organization

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

Fourteenth Meeting
(Jeddah, Saudi Arabia, 15-19 December 2013)

Agenda Item 4: Performance Framework for Regional Air Navigation Planning and Implementation:
4.4 AIM

MIDAD PROJECT

(Presented by United Arab Emirates)

SUMMARY

This paper provides the contribution of UAE in the establishment of a regional aeronautical information database.

1. INTRODUCTION

1.1 The establishment of a regional aeronautical information database for the Middle East is considered to have a beneficial effect in harmonising the provision of aeronautical information services and in creating an environment of high quality assured and timely provided aeronautical data for the stakeholders.

1.2 Apart from these benefits, a regional aeronautical information database would facilitate and tighten the cooperation between the aeronautical information services in the region and would open the possibilities to interact with similar developments in other ICAO Regions (such as the European AIS Database – EAD).

2. DISCUSSION

2.1 Considerations on the MIDAD Establishment

2.1.1 The establishment of a regional aeronautical information database has a lot of benefits and the EAD is a living proof in this respect. It provides a harmonisation and a better quality control of the aeronautical data which is welcomed by the data users such as aircraft operators (AO), airports, ATM, data integrators, etc. In the same time it provides the means for a better cooperation between the national AIS organisations and it enhances the cross-border cooperation in the interest of civil aviation.

2.2 Considerations on the Participation of the UAE in MIDAD

2.2.1 UAE/GCAA is in an advanced implementation status technologically and process-wise, with a state-of-the-art AIXM 5.1 system and with an automated production of the electronic AIP based on the EUROCONTROL Specification for the eAIP, Edition 2.0 (February 2011). It has also established procedures and processes for exchanging aeronautical data with the UAE ACC, based on AIXM 5.1 snapshot messages.

2.2.2 The support for the development of and the participation in MIDAD should ensure UAE that the current system architecture and the processes in place, as well as the strategy for evolution towards a fully digital environment will be preserved.

2.2.3 The User Requirements and the Technical Requirements for MIDAD will have to take this into consideration and the proposed / implemented solutions will have to ensure the interoperability with the most advanced systems.

2.3 Financial impact of MIDAD

2.3.1 It should be noted, from the experience of establishing EAD in Europe that a centralized service such as MIDAD comes with a cost.

2.3.2 For each participating State, the funding of such a service (from the specification phase, to development, deployment and continuous provision of the service) should be identified and budgeted.

2.4 Continuity of Service and Contingency Procedures

2.4.1 One of the most important aspects of a centralised service such as MIDAD is the insurance of its availability and continuity. Therefore, the establishment of contingencies is one of the fundamental aspects to be addressed.

2.4.2 The continuity of service in extreme cases such as natural disasters, accidental interruptions in the infrastructure (electrical shortages, network glitches, catastrophic failure of the equipment) has to be mitigated by establishing a contingency system / site capable of taking over from the principal system in a manner defined by the performance criteria of a contingency plan.

2.4.3 There are different scenarios to address the contingency issues. For example, EAD operates two independent sites fully interoperable and located remotely one from another. The service provider is capable to switch from one site to the other and to provide the complete services at full capacity until the normal operations are resumed. More than that, the infrastructure and IT provider is located at a third site and has full redundancy capabilities.

2.4.4 Another example that may be considered in establishing the operation scenarios is the ATFM in Europe, provided by EUROCONTROL within its Network Manager Unit. The concept of operations is based on two completely independent sites (like EAD) with the addition that each site can operate remotely the facilities of the other site.

2.4.5 The level of redundancy and the contingency procedures should take into account the sensitivity and the criticality of the services provided (e.g. operating a static database, providing a centralised NOTAM function, etc.).

2.5 Phase 2 of the MIDAD Project

2.5.1 According to the *DGCA-MID/2 CONCLUSION 2/7*, Bahrain, Qatar, Saudi Arabia and UAE are designated to take the lead in carrying out the detailed MIDAD study (Phase 2), in close coordination with the MIDAD STG and supported by all the participating States signatories of the MOA.

2.5.2 In order to progress the task in the most efficient manner, the four leading States should develop and agree upon a set of TOR (Terms of Reference), establishing the roles and responsibilities, the review methodology of the calls for tender, the steering of the contractors, the means of

communication and meeting as well as the reporting mechanism, allowing full transparency on the process and also the possibility to receive the best level of support from the MIDAD STG and from the participating States.

2.5.3 As part of the references for the MIDAD Phase 2 (the detailed study), the latest ICAO developments should be considered, including the Aviation System Block Upgrade (ASBU) and especially the Performance Improvement Area 2 (Globally Interoperable Systems and Data), Digital ATM (B0-DATM) as well as the outcome of the ICAO General Assembly 38 (24 September to 4 October 2013).

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note and consider the information provided in this working paper in particular Paragraph 2.3; and
- b) discuss and adopt the draft ToR (Terms of Reference) refer to **Appendix A** to this working paper, and agree on a working methodology for the four States (Bahrain, Qatar, Saudi Arabia and UAE) leading the MIDAD Phase 2.

APPENDIX A

Draft ToR for the Saudi Arabia, Bahrain, Qatar and UAE Lead on the MIDAD Phase 2

Roles and Responsibilities

1. Develop a Call for Tender in order to select the Consultant, which will develop the Technical Specifications and the Call for Tender related to the MIDAD Detailed Study
2. Evaluate the offers received in response to the Call for Tender specified in 1.
3. Compile the individual evaluations into a consolidated report highlighting the outstanding elements of each offer and providing recommendations for the selection of the suitable candidate
4. Brief the MIDAD Study Group on the outcome of the evaluations
5. Agree on the award of the contract to the best suitable candidate to successfully deliver the contract
6. Monitor the progress of the execution of the contract and review each deliverable as it becomes available: functional and non-functional requirements, CONOPS, technical, commercial and legal documentation for the Detailed Study Call for Tender
7. Provide guidance and feedback during the project and consult with the MIDAD STG as required
8. Coordinate in order to endorse the deliverables of the contract, upon finalization as a pre-requisite of their acceptance
9. Review, adjust and agree on the timeframe of the next steps of Phase 2 for the launch of the Call for Tender for the MIDAD Detailed Study as required
10. Evaluate the offers received in response to the Call for Tender for the MIDAD Detailed Study
11. Review the reports of the evaluations performed by the Consultant supporting the Call for Tender for the Detailed Study and consult with the MIDAD Study Group as required
12. Analyse the recommendations of the Consultant regarding the selection of the candidate for the execution of the Detailed Study
13. Agree on the award of the contract to the best suitable candidate to successfully deliver the MIDAD Detailed Study
14. Together with the MIDAD Study Group steer the execution of the contract for the MIDAD Detailed Study
15. Review the deliverables of the MIDAD Detailed Study contract, together with the MIDAD STG and provide feedback as required
16. Provide the recommendations for the acceptance of the deliverables of the MIDAD Detailed Study contract
17. Prepare the necessary for the finalization and the high level acceptance of MIDAD Phase 2

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