



*International Civil Aviation Organization*

**MID Region AIS Database Study Group**

**First Meeting (MIDAD SG\*/1)**  
*(Cairo, Egypt, 20 – 22 February 2012)*

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**Agenda Item 8: Legal & Institutional Issues Associated with the MIDAD Implementation**

**BUSINESS MODEL & LEGAL FRAMEWORK**

*(Presented by MIDAD Support Team)*

**SUMMARY**

This working paper provides some thoughts about a possible Business Model for preparation of the call for tender, the procurement and the operation of the MIDAD. It also addresses the legal framework.

Action by the meeting is at paragraph 3.

**REFERENCES**

- AIS/MAP TF/6 Report
- ATM/SAR/AIS SG/12 Report
- DGCA-MID/1 Report
- ICAO Aviation Systems Block Upgrades B0-30
- ICAO Strategic objective “Safety (A2)” and “Environment ...” (C31)”

**1 INTRODUCTION**

1.1 The Terms of Reference of the MIDADSG request, inter-alia that the Study Group monitors the MIDAD Business Case and addresses Legal Issues.

1.2 The business model for the provision of aeronautical information according to ICAO Annex 4 and Annex 15 and for the required changes as described in the ICAO Global ATM Operational Concept<sup>1</sup> (Doc 9854) and the ICAO Global Air Navigation Plan<sup>2</sup> (Doc 9750) is a monopoly business model by nature. There is no other legal entity responsible as the respective State according to the ICAO Convention.

1.3 The establishment of the MIDAD shall be an activity of cost-recovery nature. The service could be operated by a service provider on behalf of the Middle East States which are the owner of the service.

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<sup>1</sup> See ICAO Global ATM Operational Concept (Doc 9854), Paragraph 2.9.12 to 2.9.14

<sup>2</sup> See ICAO Global Air Navigation Plan (Doc 9750), GPI-18 and GPI-20

## 2 DISCUSSION

### 2.1 ICAO Policies on Air Navigation Services Economics

2.1.1 Aeronautical Information Services (AIS) fall by definition under “Air navigation services” in sense of Charges<sup>3</sup>. Therefore the ICAO Manual on Air Navigation Services Economics (Doc 9161) shall be used as a guideline for identifying the cost for MIDAD. The organisational and international cooperative aspects of Appendix D to the Global Air Navigation Plan (Doc 9750) shall also be taken into account as the MIDAD:

1. will be a multinational facility and service implementation;
2. will need an international operating agency;
3. will need a joint charges collecting agency; and
4. will need joint financing arrangements.

2.1.2 The MIDAD activity is therefore full in line with Assembly Resolution A36-13, Appendix J, L, and W, as cooperative efforts between Contracting States could lead to more efficient Air Traffic Management, taking into account the need for cost-effective introduction and operation of CNS/ATM systems, States give consideration to cooperative efforts for introducing more efficient airspace management, in particular, in the upper airspace.

### 2.2 Legal Framework

2.2.1 The initial establishment of an organisational kernel of the MIDAD is very important to be able start work on the program and to establish initial funding. Currently this kernel is composed of the MIDAD Study Group (MIDAD SG), assisted by the MIDAD Support Team (MIDAD ST).

2.2.2 During further set-up time a legal entity can be inaugurated where all MID States have the eligibility to join. This legal entity will be funded by the members and has to be identified in the financial model, eventually by alternative funding (see 1.27 to 1.34 of ICAO Global Air Navigation Plan). The alternative funding could be e.g. organised through the Islamic Development Bank Group, where a number of ICAO MID States are members.

2.2.3 Other international source of financing<sup>4</sup> could be assessed.

2.2.4 At a later stage, and according to the financial model, added value services might be offered to users which may generate an additional revenue stream. However, the principle of cost-recovery needs to be adhered not to allow double charges.

2.2.5

2.2.6 Figure 2-1 shows an initial legal framework which needs further development, but it is intended to give an initial overview and to open discussion:

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<sup>3</sup> See ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082/8), Appendix 3.

<sup>4</sup> See Appendix 4 and 5 Doc 9161/4

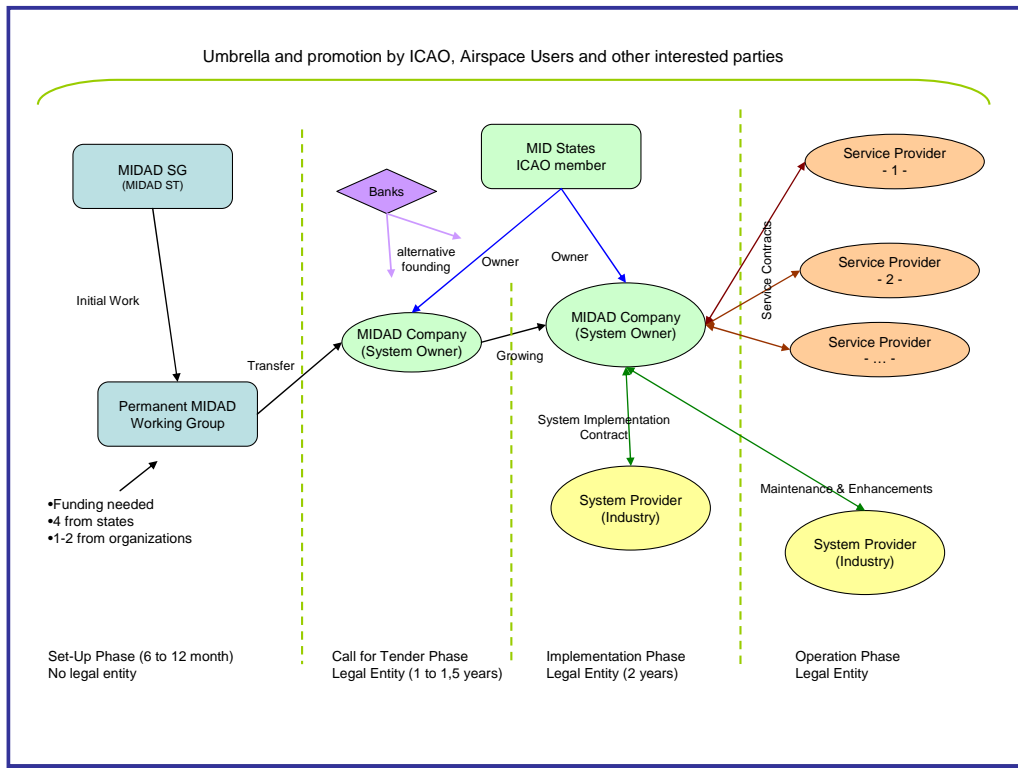


Figure 2-1: Legal Framework Set-Up

### 2.3 Business Model

2.3.1 The classical business model requires defining of the Value Proposition, the Added Value and the Earnings of the MIDAD. In the non profit environment of cost recovery of the ICAO model, in which the MIDAD shall be operated, the cost planning is very important.

2.3.2 The Cost assessment can be done generally in the following structure:

1. Identification of direct set-up cost (set-up phase, funding by interested bank)
  - a. Setting up the legal structure according to
  - b. Figure 2-1.
  - c. Office, management, specialists from the region, administrations.
  - d. Writing the concept, preparing the documents.
2. Identification of the Call for Tender Cost (company operating cost, e.g. Ltd.)
  - a. Company cost structure planning: personnel cost, infrastructure cost, travel, etc.
  - b. Personnel cost (staffing) related to the Call for Tender planning.
  - c. Co-financing by banks possible (e.g. loan)
  - d. Planning of the budget for the:
    - i. Systems Contract, including training centres;
    - ii. Service Contract, including training (Operating cost at 10 years); and
    - iii. Maintenance and Enhancement (10 years).

3. Identification of Implementation Phase cost (company operating cost).
  - a. Company cost structure planning: personnel cost, infrastructure cost, travel, etc.
  - b. Personnel cost (staffing) related to the Call for Tender planning.
  - c. Co-financing by banks possible (e.g. loan).
  - d. Re-planning/update Operation Phase:
    - i. Systems Contract, including training centres;
    - ii. Service Contract, including training (Operating cost at 10 years); and
    - iii. Maintenance and Enhancement (10 years).
4. Update of Operation Phase cost.

2.3.3 The Business Cost Model is the basis before doing the next steps. It forms the basis for the set-up. It will need to be shown that the capital needed to cover the cost will bring earnings. Therefore, the Value Proposition, the Added Value and Earnings shall be carefully developed. Also non financial advantages which cannot be valued in cost advantage for users shall be identified and described.

2.3.4 The Value Proposition for the MIDAD is probably the most important part for the users of the MIDAD. Examples for the Value Propositions are:

1. Electronic aeronautical data, obstacle data, terrain data from one source
2. Single access point
3. Consistent data
4. Online availability
5. Higher availability of services
6. Better quality, etc..

2.3.5 The Added Values of the MIDAD for the MID and other States are for instance:

1. Sharing of cost
2. Sharing of knowhow
3. Harmonisation of planning and work
4. Better trained personnel; etc.

2.3.6 The Earnings of the MIDAD for the MID States might be but not limited to the following:

1. Cost saving through common operation
2. Cost saving through common training
3. Cost saving through common procurement
4. May be later selling of additional service as far as ICAO's Policies on Charges for Air Navigation Services allows this.

## 2.4 Existing International Cooperations and International Operating Agencies

2.4.1 The Middle East Regional Monitoring Agency (MIDRMA) is a recognized International Cooperation in the frame of a sub-regional activity<sup>5</sup>. The Gulf Coordination Council (GCC) is a political and economic union.

<sup>5</sup> See ICAO Global ANP (Doc 9750-AN/963), 3rd Edition – 2007, page App D-5.

2.4.2 In the coming discussions and the Set-Up Phase the position of MIDRMA and GCC might be exploited and it could be assessed how the experience of both can be leveraged for the MIDAD.

2.4.3 Both are possible candidate to assist or operate an Operation Centre and/or Training Centre because they have experience in working based on agreements for the mutual benefit.

## **2.5 Advantage or Users**

2.5.1 The Business Model shall also contain, as already shortly mentioned in paragraph 2.3.4, what advantage the User have from the implementation of the MIDAD. Important advantages are the implementation of the “Aeronautical Information Requirements” of the ICAO ATM Operational Concept<sup>6</sup>. (paragraph 2.9.12 to 2.9.16) and the implementation of the Global Plan Initiatives “(GPI-18) Aeronautical Information” and “(GPI-20) WGS-84” of the ICAO Global ANP<sup>7</sup>

2.6 This, amongst other things, shall be contained in the Business Model document.

## **3 ACTION BY THE MEETING**

3.1 The MIDAD SG is invited to:

- a) note the content of this paper; and take it into account when moving forward in advancing the business model and legal framework of the MIDAD systems and services; and
- b) take appropriate action with regard to the development of the MIDAD business model and legal framework.

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<sup>6</sup> See ICAO Global ATM Operational Concept (Doc 9854-AN/458, 1st Edition – 2005, paragraph 2.9.12 to 2.9.16

<sup>7</sup> See ICAO Global ANP (Doc 9750-AN/963), 3rd Edition – 2007, paragraph 1.83, 1.84, 1.88, and 1.89.