



International Civil Aviation Organization

**Eighth Meeting of the MIDANPIRG AIM Sub-Group (AIM SG/8) and
Sixth Meeting of the MID Region AIM Database Task Force (MIDAD TF/6)**

(Virtual Meetings, 13 - 15 September 2021)

Agenda Item 3: MID Region AIM Database (MIDAD) Project

**AGENDA ITEM 3.1: MAIN OUTCOMES OF EAD-MIDAD COORDINATION MEETING (27
APRIL 2021)**

(Presented by the Secretariat)

SUMMARY
This paper presents the main outcomes of the EAD-MIDAD coordination meeting which took place on 27 April 2021.
Action by the meeting is at paragraph 3.
REFERENCES
- MIDANPIRG/18 report, (15-22 February 2021)

1. INTRODUCTION

1.1 The EAD-MIDAD coordination meeting took place virtually on the 27th of April 2021. All involved parties from ICAO MID and Eurocontrol-EAD attended the meeting, in addition to, the AIM SG and MIDAD TF which were represented by their respective Chairpersons.

1.2 The meeting was held under the auspices of the Acting Regional Director of the ICAO MID office, Mr. Mohamed Smaoui who was supported by Mr. Radhouan Aissaoui, (RO/IM) as Secretariat, Mr. Abdalla Al Rashidi (AIM SG Chairman), Mr. Imed Ben Saad (MIDAD TF Chairman), and from Eurocontrol-EAD Mrs. Roberta LUCCIOLI (European Aeronautical Information Service Manager) and Mr. Emmanuel DETTWILLER (EAD Customer Manager).

1.3 Mr. Mohamed Smaoui (A/RD) opened the meeting by providing a brief overview of the background to the meeting and its agenda.

1.4 It was recalled that the DGCA-MID/4 meeting agreed to the following way forward for the implementation of MIDAD Project:

- Phase A: Individual migration of MID States to EAD MID States;
- Phase B: Set-up of MIDAD Manager with EUROCONTROL (as advisor); and
- Phase C: Implementation of MIDAD system and service.

1.5 It was noted that the MIDANPIRG/17 and DGCA-MID/5 meetings agreed that the development of a detailed action plan for the implementation of the MIDAD Project Phase B should be initiated when at least 7 States individually complete their migration to EAD. The current status shows that Jordan and Qatar migrated and Iraq, Kuwait, Lebanon, Oman, Qatar and UAE have plans to migrate to EAD.

1.6 It was also noted that the MIDANPIRG/18 meeting held virtually, 15-22 February 2021, agreed through Conclusion 18/18 that the ICAO MID Office, with the support of concerned States, initiate discussions with EUROCONTROL/EAD, in order to reconsider the charging mechanism to add a lower/upper limit for charging States that are willing to migrate to EAD.

1.7 Therefore, the objective of the coordination meeting was to explore the possibilities to review and reconsider the charging mechanism to encourage a bigger number of MID States (at least 7) to migrate to EAD.

2. DISCUSSION

EUROCONTROL EAD CHARGING MECHANISM

2.1 The Meeting was provided with Eurocontrol presentation covering an overview of the EAD charging mechanism. Mr. Emmanuel DETTWILLER, explained that Member states entrusted Eurocontrol for the development and the operations of the EAD on their behalf and as per the Decision of the EUROCONTROL Permanent Commission N°83 and Decision N° 101 of 25 November 2003 governing the provision of aeronautical information to and by Eurocontrol for the operation of the European AIS Database (EAD) there are copyright and service charging policies. With regard to charging and cost of service provision, non Eurocontrol member States maybe charged for EAD user service that are provided. The amount of service charges shall be proportional to service provided. For doing this clients are divided in three categories:

Type 1 Clients Clients contributing either directly or indirectly to the budget of EUROCONTROL (principally ANSPs from Eurocontrol States and aircraft operators liable for air navigation charges).

Type 2 Clients, potentially MID States, who are not contributors to the budget of EUROCONTROL and consequently are subject to the payment of EAD services.

Type 3 Clients who are making business out of using information provided by the EAD. This may include Software applications using EAD data, Consultancy or software development services based on or using EAD data or any other service using the data.

2.2 MIDAD States are type 2 clients.

2.3 The applicable charging scheme is described in Annex 5, Attachment C of the EAD agreement. This scheme provides a unique and standard way of a fair, equitable and transparent charging mechanism defined and agreed by the EAD Service and Royalties Charging Work Group composed of representatives from the EUROCONTROL Member States.

2.4 For the establishment of the EAD Charges, the following information is needed: The cost base for the provision of air traffic services financed through various invoicing mechanism, e.g. En-route air navigation charges for ANSPs and CAA, Terminal Air Navigation Charges or fees for airports, other specific fees or charges.

2.5 The above cost base is used for simulation of the overall contribution as if the State (and related ANSP) would be a member State of EUROCONTROL. To be able to do this, the cost base for Year – 2 is used to obtain the State's contribution to the EUROCONTROL budget as if this State would become a Eurocontrol member State. The derived EAD global contribution is subsequently is split according to service that are provided, as follows:

- International NOTAM operations (INO): 15 %
- Briefing and flight planning (BF & FPL): 10 %
- Aeronautical data maintenance operations (SDO/SDD): 65 %
- Published aeronautical information publication management service (PAMS): 10 %

2.6 It is worth noting that if a State elects to be a data provider, a discount of 50% is applied to the service as an incentive for the data provision. It is also be worth mentioning that, in any case, the maximum yearly cost would not exceed 300.000 Euros.

Q&A SESSION

2.7 This was then followed by a question-and-answer session with the participants. **Appendix A** to this working paper contains the meeting SoD including the main questions raised at this meeting triggered the widest and most fruitful discussions and the answers to which will help shape the way forward.

WAY FORWARD

2.8 It was agreed that some follow-up actions should be taken between the ICAO MID, in coordination with AIM SG, MIDAD TF, and EAD in order to collect maximum information about the subject, to promote the information provided and, share it with MID States and to prepare for a virtual meeting that involves all MID States and EAD. Therefore, the meeting has agreed to:

- prepare a questionnaire to be issued by ICAO MID office to collect pertinent information for the project;

- coordinate with MIDAD States to provide EUROCONTROL with Sates revenues mentioned in paragraph 2.4 above, for the year 2019 (or other pertinent financial information such as airport charges or other ANS revenues for States where the requested financial information is not readily available) to enable the simulation of repartition of the EAD budget on MIDAD States;

- organize the Sixth Meeting of the MID Region AIM Database Task Force (MIDAD TF/6) back to back with the Eighth Meeting of the MIDANPIRG AIM Sub-Group (AIM SG/8) on 13, 14-15 September 2021;

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the outcome of the EAD-MIDAD coordination meeting as summarized;
- b) discuss any relevant matters as appropriate.



EAD-MIDAD Coordination Meeting

(27 April 2021 10:00-12:00 UTC)

SUMMARY OF DISCUSSIONS

1. WELCOME AND INTRODUCTION

1.1 Attendees:

ICAO MID-MIDAD

Mr. Mohamed Smaoui (A/RD);

Mr. Abdalla Al Rashidi (AIM SG Chairman)

Mr Imed Ben saad (MIDAD TF Chairman)

Mr. Radhouan Aissaoui, (RO/IM);

Eurocontrol-EAD

Mrs. Roberta LUCCIOLI (European
Aeronautical Information Service
Manager)

Mr. Emmanuel DETTWILLER (EAD
Customer Manager)

1.2 Agenda:

The Agenda for the meeting included the followings:

- a. Welcome and Introduction
- b. Eurocontrol EAD charging mechanism
 - i. Presentation from Eurocontrol on EAD charging mechanism
 - ii. Q&A session
- c. AoB

1.3 Opening:

Mr. Mohamed Smaoui, the Acting Regional Director, ICAO MID Office, welcomed all participants to the EAD-MIDAD Virtual Coordination Meeting. To launch the discussion, Mr. Smaoui recalled that since the last EAD-MIDAD WORKSHOP held in Brussels, Belgium, 5-6 October 2017, the situation of MID States migration to EAD is Status quo for reasons that are largely related to finance.

Mr Emmanuel Dettwiller clarified that during this meeting the applicable charging scheme was presented to the participants in an open and transparent manner. This charging scheme is applicable to all clients other than Type 1. MIDAD States were invited to provide EUROCONTROL with their revenue for the provision of Air Traffic Services, by the end of November 2017 at the latest, and

EUROCONTROL committed to finalize individual offers by the end of the year (2017). Further to this meeting, only UAE and Saudi Arabia provided the requested information.

Consequently, EUROCONTROL could establish EAD charges only for the following States: UAE and Saudi Arabia (information provided by the participants), Jordan and Qatar (already EAD users), Egypt (estimation established with Air Navigation Charges invoiced by EUROCONTROL CRCO).

It was recalled that the DGCA-MID/4 meeting agreed to the following way forward for the implementation of MIDAD Project:

- Phase A: Individual migration of MID States to EAD MID States
- Phase B: Set-up of MIDAD Manager with EUROCONTROL (as advisor) and
- Phase C: Implementation of MIDAD system and service

It was noted that the MIDANPIRG/17 and DGCA-MID/5 meetings agreed that the development of a detailed action plan for the implementation of the MIDAD Project Phase B should be initiated when at least 7 States individually complete their migration to EAD. The current status shows that Jordan and Qatar migrated and Iraq, Kuwait, Lebanon, Oman, Qatar and UAE have plans to migrate to EAD.

It was also noted that the MIDANPIRG/18 meeting held virtually, 15-22 February 2021, agreed through Conclusion 18/18 that the ICAO MID Office, with the support of concerned States, initiate discussions with EUROCONTROL/EAD, in order to reconsider the charging mechanism to add a lower/upper limit for charging States that are willing to migrate to EAD.

Therefore, the objective of the coordination meeting was to explore the possibilities to review and reconsider the charging mechanism to encourage a bigger number of MID States (at least 7) to migrate to EAD.

2. DISCUSSIONS

2.1 Eurocontrol EAD charging mechanism

2.1 The Meeting was provided with Eurocontrol presentation covering an overview of the EAD charging mechanism. Mr. Emmanuel DETTWILLER, highlighted that the EAD is the world's largest aeronautical information management (AIM) system, cheapest, reliable and cost-effective integrated AIS solution that meets user needs. He explained that Member states entrusted Eurocontrol for the development and the operations of the EAD on their behalf and as per the Decision of the EUROCONTROL Permanent Commission N°83 and Decision N° 101 of 25 November 2003 governing the provision of aeronautical information to and by Eurocontrol for the operation of the European AIS Database (EAD) there are copyright and service charging policies. With regard to charging and cost of service provision as indicated in item 4 non Eurocontrol member States maybe charged for EAD user service that are provided. The amount of service charges shall be proportional to service provided. For doing this clients are divided in three categories:

Type 1 Clients Eurocontrol member States who are reliable for paying EAD charges to by direct contribution to the budget of Eurocontrol.

Type 2 Clients, potentially MID States, who are not contributor to the budget of Eurocontrol and are subject to the payment of EAD services.

Type 3 Clients who are making business out of using information provided by the EAD. This may include Software applications using EAD data, Consultancy or software development services based on or using EAD data or any other service using the data.

MIDAD States are type 2 clients.

For the establishment of the EAD Charges, the following information is needed: The cost base for the provision of air navigation services financed through various invoicing mechanism, e.g. En-route air navigation charges for ANSPs and CAA, Terminal Air Navigation Charges or fees for airports, other specific fees or charges.

The applicable charging scheme is described in Annex 5, Attachment C of the EAD agreement. This scheme provides a unique and standard way of a fair, equitable and transparent charging mechanism defined and agreed by the EAD Service and Royalties Charging Work Group composed of representatives from the EUROCONTROL Member States.

The above cost base is used for simulation as if the State would become a member State of Eurocontrol. To be able to do this, the cost base for Year – 2 is used to obtain the State contribution to Eurocontrol budget as this State would become a Eurocontrol member State. The derived EAD global contribution is subsequently is split according to service that are provided, as follows:

- | | | |
|--|---|------|
| - International NOTAM operations (INO) | : | 15 % |
| - Briefing and flight planning (BF & FPL) | : | 10 % |
| - Aeronautical data maintenance operations (SDO/SDD) | : | 65 % |
| - Published aeronautical information publication management service (PAMS) | : | 10 % |

It was noted that the EAD charges are for the services that are made available not for the aeronautical information (AI). AI is free of charge by definition. Services that are made available include the use of the systems and services, business continuity, data maintenance...etc. There are also further criteria to fine-tune the global charges including:

- The use of the BF service implies the mandatory use of INO.
- One service only is used: surcharge of 30%
- Two services only: surcharge of 15%

It is worth noting that if a State elects to be a data provider a discount of 50% is applied. It is also be worth mentioning that, in any case, the maximum cost would not exceed 300.000 Euros.

It was pointed out that Eurocontrol is a nonprofit organization and not a business-oriented organization. EAD charges consequently cover exclusively the costs incurred for the provision of the services to the customers, i.e. without any financial profit for the organization.

It was highlighted that the service cost, whether B2B or B2C does not include the interfaces and connection costs. For B2B and except costs related to connection cost (Internet or NEW PENS), VPN and system security, there is no additional costs since the EAD is accessible through an interface that allows a system-to-system connection to the EAD, based on Web services (AIM Service Layer) free of charge.

2.2 Q&A session

The main questions raised at this meeting to trigger the widest and most fruitful discussions were:

- Is there a standard and unique charging mechanism applied to all States?

There is indeed a standard and unique charging mechanism applicable to Data Providers and Data Users for non-EUROCONTROL member States.

- What is the charging mechanism for each option (B2B and B2C)?

The charging mechanism is identical irrespective of the type of connection (B2B or B2C). EAD charges are for the use of the services. The difference between B2B & B2C lies with the licenses costs for the software used to connect to EAD.

- Estimate of the cost to EAD migration for B2B and B2C for MID States?

This requires information to be provided by each of the MIDAD States (For each State, Cost Base for the provision of Air Traffic Services).

- Can we have min and max charge (upper and lower limits) for MID States considering that some MID States have low overflight or no overflight traffic at all and some States have high GDP and high volume of traffic?

The applicable charging scheme has already a minimum and maximum charge, which is applicable for all customers.

- Are there possibilities to charge for specific EAD services instead of full package?

EAD has a standard charging mechanism as highlighted above. It will not be possible to implement a charging scheme specifically for MIDAD States.

- Cost benefits analysis considering that many States have invested in purchasing state of the art AIM systems.

The European aeronautical information services database (EAD) is a centralized reference database of quality-assured aeronautical information that enables users to retrieve and download AIS data in real time. The EAD is a full aeronautical information management (AIM) system compliant with latest ICAO SARPs, ISO certified, has a business continuity process (yearly availability of 99.975%) which provides access to worldwide data set and has one of the best flight briefing system available in the market.

Comparing the cost of migration to EAD to the cost related to the purchase of an AIM system (estimated costs around 5 to 7 M\$) with the yearly maintenance of the system budget, budget for the staff to operate, contract with supplier, etc... ; EAD appears to be a more cost effective and efficient solution than purchasing a local AIM system.

- In case one State is connected B2B or B2C and would like to make exchange data with another State, which is not connected to EAD, is it possible to make the exchange of data or not?

Contractually you can make the AI provided by EAD available to customer free of charge. If an ANSP would request the other State to pay for it then this would not be possible unless this ANSP becomes a type 3 customer and would see its EAD charges increased accordingly.

Annex 15 states that one copy of each of the following aeronautical information products (where available) that have been requested by the AIS of a Contracting State shall be made available by the originating State and provided in the mutually agreed form(s), without charge, even where authority for publication/storage and distribution has been delegated to a non-governmental agency.

This is also applicable for EAD, airline operators can get the AI through EAD not for free because airlines pay airport and air navigation services charges. The overhead cost of collecting and compiling aeronautical data and aeronautical information are included in the cost basis for airport and air

navigation services charges, as appropriate, in accordance with the principles contained in ICAO's Policies on Charges for Airports and Air Navigation Services.

- Does EAD support AIXM 4.5 or AIXM 5.1 format?

It was explained that EAD is using AIXM format. One principal database in AIXM 4.5 to which all States are still connected. In addition, another database in AIXM 5.1 is also available. EAD is doing forward and backward mapping between the databases. This will allow the provision of AI in AIXM 5.1, which is a forward mapping from AIXM 4.5, which means that the transition to AIXM 5.1 is not yet completed. Eurocontrol is currently running a project of migrating all data providers to AIXM 5.1 database (transition). This would be achieved by end of 2024. A process is currently put in place to allow new data providers to directly migrate to the AIXM 5.1 database. If a MIDAD State would join EAD now it will be migrated directly to AIXM 5.1.

- The meeting requested EAD team to provide some updates on EAD development with regard to the implementation of digital datasets and if the migration to EAD would support the implementation of digital datasets in a cost-efficient manner with the necessary technical support from Eurocontrol and EAD?

It was highlighted that the provision of digital datasets requires precise rules for the coding of each data element, in order to ensure that the recipients are able to process and use them in a seamless way. However, up to now there is no clear guidance in terms of data coding specifications, descriptions, standards,...etc.

It was agreed that Eurocontrol to share their plan for the provision of digital datasets.

- If a State is connected with EAD as B2C, could it be possible to use the AIM database with different ATM systems (ATC systems, PANS-OPS software,...etc.)?

Based on the above specific cases, it was clarified that connection from EAD directly to State ATM systems is not possible. However, as interim solution, a State can deploy a hybrid system consisting of a local AIM database to be used for local purposes (B2B solution). This database shall be maintained regularly by downloading the information from EAD. This aspect requires however further investigation on a case-by-case basis.

2.3 Way forward

It was agreed that some follow-up actions should be taken between the ICAO MID, in coordination with MIDAD and EAD team in order to collect maximum information about the subject, to promote the information provided and, share it with MID States and to prepare for a virtual meeting that involves all MID States and EAD. Therefore, the meeting has agreed to proceed as follows:

- To prepare a questionnaire to be issued by ICAO MID office to collect pertinent information for the project;
- To coordinate with MIDAD States to provide EUROCONTROL with States revenues from En-route ATS services, for the year 2019 (or other financial information such as airport charges or other ANS revenues for States with little air traffic) to enable the simulation of repartition of the EAD budget on MIDAD States;
- To organize the Sixth Meeting of the MID Region AIM Database Task Force (MIDAD TF/6) back to back with the Eighth Meeting of the MIDANPIRG AIM Sub-Group (AIM SG/8) on 13, 14-15 September 2021;
- To plan a preparation meeting prior to the MIDAD TF/6 in August 2021. Exact date will be determined/coordinated at a later stage.

The meeting developed an Action Plan based on the agreed action items arising from the discussions and assigned tasks to each member as follows:

	Action	Deliverable	Responsible	Timeline	Status
1	To share Eurocontrol plan for the provision of digital datasets	Eurocontrol plan for the provision of digital data sets	EAD	TBD	Not Started
2	To develop a questionnaire to gather feedback from States on their plans to migrate to EAD	Questionnaire	ICAO MID +EAD	ASAP	Not Started
3	To issue the questionnaire and collect information from States including the States revenue for En-route ATS services	SL to be issued	ICAO MID	TBD	Not Started
4	To simulate the repartition of the EAD budget on MIDAD States and provide individual States with the cost of migration	the cost of migration of individual States	EAD	TBD	Not Started
5	To organize the Sixth Meeting of the MID Region AIM Database Task Force (MIDAD TF/6) on 13 September 2021.	Invitation letter	ICAO MID+ MIDAD TF and EAD	July 2021	Not Started
5	To plan a preparation meeting prior to the MIDAD TF/6 in August 2021.	MIDAD – EAD Coordination meeting	ICAO MID+ MIDAD TF and EAD	August 2021	Not Started

3. Next meeting

The Meeting was closed by Mr. Mohamed Smaoui, ICAO MID Acting Regional Director, who thanked participants for their active contributions.

The date of the next EAD-MIDAD Coordination Meeting will be coordinated as soon as possible, tentatively planned in August 2021, focusing on preparations of the MIDAD TF/6 virtual meeting to be held in September 13, 2021.

-----END-----