



EAD MIDAD Workshop
Sharing EAD Experiences

NMD/NS/EAIM/5396

3 - 4 February 2015
Madrid- Torrejón, Spain
EAD Operational Centre

Participants

Bahrain	Civil Aviation Authority	Mohamed Nabeel Fatema Ali Mohamed
Islamic Republic of Iran	Iranian Airports Company	Javad Pashaei Ali Azami
Jordan	Civil Aviation Regulatory Commission	Hanan Qabartai
Qatar	Civil Aviation Authority	Ahmed Al-Eshaq Faisal Alqahtani Bernard Lucat
Saudi Arabia	General Authority of Civil Aviation	Ghorman A. Al Shehri Faisal Alzahrani
Sudan	Civil Aviation Authority	Hayder Mohamed Abdalla
United Arab Emirates	General Civil Aviation Authority	Abdalla Al Rashidi Razvan Guleac
ICAO	MID Regional Office (Cairo - Egypt)	Abbas Niknejad (<i>Facilitator</i>)
EUROCONTROL	NMD/NS/EAIM (HQ Brussels - Belgium)	Gaston Liegeois (<i>Facilitator</i>) Rebeca Hernandez Montero Boris Kummer (day 1)
	EAD Data Operations Service Provider (Madrid – Spain)	Oscar Centeno (<i>during DOP presentations and EAD ops room visits</i>) Ops manager +staff on duty (<i>during EAD ops room visits</i>)

Item No	Agenda item
1.00	<p>Setting the scene</p> <p>Welcome and agenda</p> <p><i>Related presentation: IT01-00-Welcome</i></p> <p>The workshop was attended by a total of thirteen (13) participants from seven (7) States (Bahrain, Islamic Republic of Iran, Jordan, Qatar, Saudi Arabia, Sudan, and United Arab Emirates), and representatives from two International Organizations (ICAO MID Regional Office and EUROCONTROL) including the EAD Data Operations Service Provider (GroupEAD) who have organised and coordinated the preparation and realization of the workshop.</p> <p>The facilitator board composed of Mr. Abbas Niknejad (Regional Officer AIM/ATM at ICAO MID Office), and Mr. Gaston Liegeois (Deputy Head of EAIM Unit at EUROCONTROL) welcomed the participants and wished them a successful and fruitful workshop.</p> <p>Mr. Niknejad expressed, on behalf of Mr. Khonji, the ICAO MID Regional Director and Mr. Smaoui, the Deputy Regional Director, his gratitude and deep thanks to EUROCONTROL for the efforts to arrange and host this workshop, and also to all MID States for the effort made to attend and support the workshop.</p> <p>He reiterated that the successful transition from AIS to AIM is a collective goal, and that there is continuous growing of recognition and awareness that aeronautical information will be a critical component of the future ATM system. Aviation is a global activity and the key to globalization is interoperability. Middle East States need to work with all stakeholders to develop standards and systems to ensure global exchange of aeronautical information.</p> <p>The MID Region AIM Database (MIDAD) could be an important enabler for the transition from AIS to AIM, and in this respect, the establishment of MIDAD is considered as one of the main challenging projects for the MID Region.</p> <p>The EAD-MIDAD Workshop is giving us opportunity to learn from an adjacent region having gained more than 10 years of experiences with the European AIS Database (EAD) in order to efficiently deal with challenges of the MIDAD.</p> <p>The agenda was presented and adopted by the participants.</p>

Item No	Agenda item
1.01	<p><i>EAD Overview and Background:</i> <i>Related presentation: IT01-01-EAD Overview</i></p> <p>G, Liegeois presented an overview of the EAD system/services by describing the following items:</p> <ul style="list-style-type: none"> • Main objectives and benefits of the EAD system/service • Overview of the concept and principles <ul style="list-style-type: none"> ○ AIS process with EAD ○ Data Provider (DP)/User (DU) functions ○ EAD interfaces ○ Operational areas, data content and usage • EAD service provision organisation • DP / DU Client migration overview <p>The following suggestions/questions were raised:</p> <ul style="list-style-type: none"> • H. Qabartai suggested EUROCONTROL to not make distinction between ECAC and non-ECAC states migrated to EAD, showing a more global perspective. • H. Qabartai also expressed that Middle East States do not use IFPS for flight plan management and asked EUROCONTROL how it should be taken into consideration in the future. EUROCONTROL has proposed to investigate with NM IFPS experts in order to get some advice for MIDAD. • A. Al Rashidi asked how was decided which static data should be in the EAD, and from where MIDAD should start. EUROCONTROL replied that EAD data content has been extracted from the ICAO Annex 15 that is describing mainly the data part of an AIP. This was in 2000, but today, due to the continuous evolution and enlarged scope, we need to accommodate more information. • B. Lucat indicated that he understood that EUROCONTROL through its Provisional Council (Member States delegations) is responsible to provide the EAD service, but what are the rules for non-EUROCONTROL member States. In addition through the European Commission, more and more implementing rules have to be followed by the European States. EUROCONTROL indicated that in the EAD decision approved by the Provisional Council about the provision of the EAD service, it is indicated that EUROCONTROL can conclude agreement with national administrations and/or Air Navigation Service Providers of the EUROCONTROL member States as well as other providers of aeronautical information and users. Niknejad said that for the Middle East, it would be beneficial to have a regulatory body similar to EC/ EASA/ EUROCONTROL for Europe; as that would set the legal framework. EUROCONTROL gave some examples on how other regions were working with EAD without the legal framework existing in Europe.

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1.02	<p>MIDAD Project Status</p> <p><i>Related presentation: IT01-02-MIDAD Project Status</i></p> <p>A Niknejad presented the actual status of the MIDAD project by reminding to the participants the different major decisions and phases that took place including activities for the next coming months.</p> <ul style="list-style-type: none"> • DGCA-MID/1 meeting (Abu Dhabi, UAE, 22 - 24 March 2011) • MIDAD Initial Study – Phase 1, having as objectives: <ul style="list-style-type: none"> ○ To collect data from States in order to get a realistic and sound picture of the situation in the AIS Offices in the Region ○ To identify the States' commitment, support and interest in MIDAD and its inclusion in the planning process for the transition to AIM. • Signature in May 2014 of a Memorandum of Agreement (MoA) reflecting the commitment to the MIDAD Project by Bahrain, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE and Yemen. • MIDAD Detailed Study – Phase 2 having as objective to develop technical specifications about concept of operations, institutional/legal issues, implementation plan, etc., in order to select a company, via a call for tender, to prepare the full set of documents according to the detailed study, required to launch a call for tender to implement MIDAD. <p>A Niknejad indicated that current challenges are Legal issues, funding and possible revenue generation models, unstable situation in some States and that 3 States (Egypt, Libya and Syria) have not yet signed the MoA.</p> <p>Finally, A. Niknejad has indicated that ICAO MID office will support the next MIDAD TF/2 meeting that will take place at Cairo, Egypt, 3-5 March 2015.</p> <p>Al Rashidi indicated that one very important and complex aspect of MIDAD is the size of the project. It will need a clear and proper organization set-up at all level (legal, technical, etc.). For Europe it is different because there is EUROCONTROL, but for MIDAD, the implementation part has to be clarified, and more specially the legal framework, data liability, governance, funding, etc.</p>
# 2	<p>EAD Management: Legal - Financial framework</p> <p><i>Related presentation: IT02-01-EAD Management</i></p> <p>G. Liegeois presented the legal framework applied to EAD, and the associated financial model:</p> <ul style="list-style-type: none"> • Legal framework and contractual relationship <ul style="list-style-type: none"> ○ Service outsourcing and Service level Specifications ○ Client agreement and data ownership • EAD Financial model <ul style="list-style-type: none"> ○ Licensing and user fees ○ Service and royalty charging concept

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	<p>To the question is there a possibility to join the EAD system/service if you are not member of EUROCONTROL, raised by H. Mohamed Abdalla, EUROCONTROL replied positively. For Non-member States, an EAD service charge is calculated as if the State joining the EAD would be member of EUROCONTROL, and this service charge contribution is going back to the EUROCONTROL budget and therefore reduces the overall member State contribution to the EUROCONTROL budget.</p> <p>To the question raised by J. Pashaei asking what were the reasons that EAD is a non-profit based service, it was replied that EUROCONTROL is an international governmental organization.</p>
# 3	<p>IT Service Provision - SW Maintenance and evolution</p> <p><i>Related presentation: IT03-01-ITP</i></p> <p>B. Kummer presented an overview of the IT Infrastructure in place with the associated management process, and the overview of management of the EAD software maintenance and evolution:</p> <ul style="list-style-type: none"> • ITP service <ul style="list-style-type: none"> ○ EAD Technical solution, and overall architecture: ○ IT service management & monitoring ○ SLS, Monitoring and reporting • EAD Maintenance and evolution <ul style="list-style-type: none"> ○ EAD Products and tools ○ Sub-system and Maintenance concept ○ Evolution – Change and Release Management <p>Open discussion took place in order to clarify the different points as difference between safety, security, service desk activities, impact of certification on the software development method used in EAD, etc.</p> <p>EUROCONTROL indicated that management of software release for EAD is requiring more and more resources in order to comply with all requirements and especially now with the European Commission AIS Data Quality Implementing Rule (ADQ IR).</p> <p>F. Alzahrani raised the question about the number of persons working for EAD, and EUROCONTROL indicated that approximately 100 persons are involved in the provision of the IT service and software maintenance, and 50 persons to the data operation service. From EUROCONTROL, ± 10 persons are managing the oversight of EAD</p>
# 4	<p>Data Operation Service Provision</p> <p><i>Related presentation: IT04-01-Description of EAD OPS</i></p> <p>O. Centeno presented an overview of the Data Operation Service encompassing:</p> <ul style="list-style-type: none"> • Description of EAD Operations (SDO, INO and PAMS) <ul style="list-style-type: none"> ○ Data operations by Providers and Users ○ Data operations by Data Operations Provider • Other services: Service desk and training • DOP service management, monitoring and reporting <p>After the presentation, a visit to the EAD operations room took place in order to have a first contact with the operational staff, and discover the different services that have been described during the presentation.</p>

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# 5	<p>Setting the scene – Day 2</p> <p>The facilitator board welcomed the participants for the second day of the workshop, and presented the agenda of the day.</p>
# 6	<p>EAD Oversight</p> <p><i>Related presentation: IT06-01-EAD Oversight</i></p> <p>G, Liegeois presented the history of EAD starting from the decision of the EUROCONTROL Provisional Council to start the development and implementation of the EAD system and service based on an outsourcing model up to now.</p> <p>He also introduced the future of EAD that should be gradually merged with additional data and services related to Network Management under the banner of the European ATM information Management service (EAIMS) project.</p> <p>The principle of the EAD Oversight Management by EUROCONTROL was presented knowing that EUROCONTROL is ultimately responsible for the successful and effective provision of the service. The major tasks of the team ensuring the oversight of the EAD were described:</p> <ul style="list-style-type: none"> • Monitor the provision of the EAD service against contractual SLS KPIs; • Carry out regular efficiency measurements and benchmark analyses; • Guarantee the continuity of the EAD service, • Prepare and manage the re-tendering of the provision of the service • Ensure that the EAD meets the needs of its stakeholders; • Keep up with state-of-the-art technologies, new regulations (e.g. ADQ IR), and international standards and agreements. • Support the migration of clients to the EAD; • Manage the dialogue with all involved stakeholders. <p>Finally, a list of current major challenges related to service outsourcing and quality of provided services were discussed as the evolution to CS5-EAIMS, the certification of EAD service, complete data migration of European States, and user relation.</p>

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# 7	<p>Data Operations – Static Data (SDO) and AIP Library (PAMS) <i>Related presentations: IT07-01-SDO and IT07-01-PAMS</i></p> <p>O. Centeno presented an overview of the Data Operation Service related to Static Data (SDO), and AIP library (PAMS) maintenance.</p> <p>The objective of the SDO service is to provide a database of validated, up-to-date, consistent and harmonised static data for clients that can further use this “data backbone” for other sub-systems like AIP production, chart production, NOAM validation, or any other ATM services requesting such data.</p> <p>The major activities related to the SDO service are to:</p> <ul style="list-style-type: none"> • Coordinate the data provider SDO maintenance activities • Maintain world-wide static data • Coordinate static data download/upload • Monitoring static data consistency review and completeness <p>For the PAMS service, the objective is to make available a library of published English version of AIPs, AIP Amendments, AIP Supplements and AICs in digital format for the complete ECAC area.</p> <p>The major activities related to the PAMS service are to:</p> <ul style="list-style-type: none"> • Ensure that the AIP library is updated with the last available Publications for ECAC States which are not yet migrated (knowing that once migrated to EAD, data providers are the responsible body to keep their publications up to date in EAD) • Continuously monitor the timely reception of the publications. • Monitoring AIP library consistency review and completeness <p>For both services, O. Centeno explained by some examples the Service Level Specifications (SLS) and associated Key Performance Indicators (KPI) in place allowing EUROCONTROL to monitor the quality of the service provided by the Data Operation Service Provider.</p>
# 8	<p>Data Operations – Demo in EAD Ops Room</p> <p>In coordination with the EAD operation manager, a visit to the EAD operations room took place in order to demonstrate by real example the SDO and PAMS services. Fruitful open discussions took place between the participants and the EAD staff.</p>

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# 9	<p>Data Operations – Dynamic Data and Briefing Facility (INO – BF) <i>Related presentation: IT09-01-INO</i></p> <p>O. Centeno presented another major activities part of the Data Operation Service related to International NOTAM Operations (INO).</p> <p>The objective of the INO service is to facilitate the exchange between States of the different types of TAM messages like NOTAM, SNOWTAM, ASHTAM, etc. The INO service shall operate as a 'NOTAM processing Unit' and shall process all TAM in accordance with the OPADD guidelines.</p> <p>The major activities related to the INO service are to:</p> <ul style="list-style-type: none"> • Ensure that all worldwide TAM messages received via the AFTN channel are validated, coherent, in the recommended format, and that syntax and structure of messages are compliant to ICAO Annex 15 and OPADD, before storage in EAD, and further distribution. • Monitoring TAM data consistency review and completeness <p>O. Centeno explained by some examples the Service Level Specifications (SLS) and associated Key Performance Indicators (KPI) in place allowing EUROCONTROL to monitor the quality of the service provided by the Data Operation Service Provider.</p>
# 10	<p>Data Operations – Demo in EAD Ops Room</p> <p>In coordination with the EAD operation manager, a visit to the EAD operations room took place in order to demonstrate by real example the INO service. Fruitful open discussions took place between the participants and the EAD staff.</p>
# 11	<p>Mutual benefits and cooperation</p> <p>Open discussion took place. G. Liegeois suggested to analyse how EAD and MIDAD could work more closely, and already started data exchange, improve data quality, and local AIS/AIM services.</p> <p>He also indicated that this should take place before the end of MIDAD implementation that will probably not be in operation before minimum 3 years.</p> <p>He suggested to analyse the feasibility to already start the transition to the MIDAD system/service by having a first step with EAD where it will be possible to prepare the data at the level of completeness, quality, exchange format, etc.</p> <p>Once MIDAD will become ready, the population of MIDAD will be facilitated by making it from EAD, and MIDAD states will simply transfer their system connection to MIDAD in order to continue to data maintenance in MIDAD. Data synchronisation mechanism between the 2 systems will be realised by automatic backend processes implemented in MIDAD and EAD.</p>
	<p>Close-out</p> <p>A round table took place in order to clarify last questions and receive participant feedback from the workshop in general (organization, presentation, etc.), At unanimity, participants indicated that this workshop was greatly appreciated, to the point in order to measure the work made by EAD to deliver such service, and that is now in front of the MIDAD project. All presentations, related discussions in the workshop and in the ops room were very useful in the context of the future work that will take place during 2015 related to MIDAD project.</p> <p>Mr. Niknejad thanked again EUROCONTROL and its Data Operation Service provider, and reminded the participants to register to the next MIDAD TF/2 meeting that will take place at Cairo, Egypt, 3-5 March 2015.</p>