



Agenda Item 2: Implementation of aeronautical information and data exchange systems (AIXM)

GREPECAS Project G2

(Presented by the Secretariat)

SUMMARY	
This working paper presents the status of implementation of GREPECAS Project G2 and the new proposed revision of the GREPECAS AIXM Project.	
REFERENCES	
<ul style="list-style-type: none"> • Annex 15 to the Convention on International Civil Aviation • SAM/AIM multilateral meetings • ISO 9000 • Standard IEEE-STD-830-1998 “Software requirement specifications” • EUROCONTROL “<i>Specification for the Electronic Aeronautical Information Publication (eAIP)</i>” guide model 	
ICAO strategic objectives	<i>A - Safety</i> <i>B - Air navigation capacity and efficiency</i> <i>E - Environmental protection</i>

1. Background

1.1 GREPECAS Project G2 continued to be implemented in 2018 in accordance with its work plan.

1.2 The status of implementation of Project G2 was presented at the GREPECAS/18 meeting.

1.3 The Project coordinator, with the support of the Secretariat, has developed guides and documents to facilitate AIXM implementation.

2. Discussion

2.1 GREPECAS/18 discussed the continuation of Project G2, noting that the first message exchange tests had been conducted. The work programme of Project G2 is described in **Appendix A** to this working paper.

2.2 The Meeting will recall that, as part of AIXM products to be analysed, the coordinator, with the support of the Secretariat, had translated four EUROCONTROL documents. Likewise, since previous meetings had been presented with the difficulties faced by States for the development of the technical specifications of aeronautical information management software (eAIP, e-TOD) compatible with aeronautical information exchange models (AIXM), the coordinator of the project had presented at the SAM/AIM/10 meeting, guidelines to be taken into account when developing the technical specifications for hiring or purchasing aeronautical information management software. The document prepared by the coordinator contained a detailed list of all aspects to be taken into account when preparing technical specification documents.

2.3 Based on the scheduled activities and the objective of Project G2, States need to be asked about the action plans for the implementation of data exchange systems. The Secretariat has prepared a template to ask States about the status of implementation of AIXM, which appears in **Appendix B** to this working paper. It would be important to update this template in order to follow up on the implementation of AIXM in the SAM Region.

2.4 Likewise, the SAM/AIM/10 meeting deemed it important to conduct other exchange tests between States that were in a position to do so. In this sense, Venezuela was to study the feasibility of conducting tests with Argentina and Brazil, following consultation with the company that was providing the software being implemented in this State. The date for defining the feasibility of this test was set for 6 October 2017. Unfortunately, no information has been received in this regard. In this sense, the delegates of Argentina, Brazil and Venezuela could provide information on tests during the Meeting.

2.5 Furthermore, the Meeting could consider working on a continuous basis with the communications area of their States in order to plan other exchange tests.

2.6 A very important point is training of AIM technical personnel in the use of the formats and the information to be exchanged. Initial and recurrent training should be contemplated in order to provide information on the use of the data exchange model.

2.1 The SAM/AIM/10 meeting deemed it important to request the Secretariat to make an effort to translate the EUROCONTROL document related to the preparation and dissemination of the electronic AIP (eAIP).

3. **Conclusions**

3.1 In view of the above, the States should be aware that AIXM implementation is an important step to achieve interoperable data and systems.

3.2 There is a need to have professional personnel available to advise AIM on the use of these formats and to train operators in the completion of the information to be exchanged.

4. **Suggested action:**

4.1 The Meeting is invited to:

- a) review the information contained in Appendix A and update Project G2 as appropriate;
- b) set dates for data exchange tests between those States in a position to do so; and

- c) provide the action plan for the implementation of data exchange systems of those States that have not done so yet.

APPENDIX A

SAM Region	PROJECT DESCRIPTION (DP)	DP N° G2	
<i>Programme</i>	Title of the Project	Start	End
<i>AIM</i> (ICAO Programme Coordinator: Jorge Armoa Cañete)	G2: Implementation of Aeronautical Information Exchange Systems (AIXM) (SAM) Project coordinator: Eng. Karina Calderón Experts contributing to the project: SAM/AIM/IG	01/03/12	01/12/17
Objective	Prepare an action plan to be implemented by States for the application of the aeronautical information/data exchange model.		
Scope	The scope of the project contemplates the evaluation and identification of automation levels associated to the integration of the aeronautical information and data exchange model in the Region, through surveys, the identification of database providers, and the follow-up on the development of SARPs on this matter.		
Metrics	Number of States that have implemented an Action Plan for data exchange systems.		
Goals	Complete all the documentation needed by States before 31/12/16. Achieve AIXM implementation in 40% of States for 2018. Achieve AIXM implementation in 75% of States for 2019.		
Strategy	Project activities will be coordinated among project members, the Project Coordinator, and the Programme Coordinator, mainly through teleconferences (<i>GoToMeeting</i> application). Seminars/meetings are scheduled in accordance with work programme activities. The Project Coordinator will coordinate with the Programme Coordinator for the inclusion of additional experts, if warranted by the tasks and work to be performed. Coordination will take place between the CAR and SAM Regions. The results of the work done will be submitted to the consideration and review of State experts in the form of a final consolidated document for analysis, review, and approval, and for presentation to the GREPECAS PPRC by the Programme Coordinator.		

Rationale	Integrate aeronautical information so as to permit the interoperability of ATM systems while preserving safety, applying the information exchange models.				
Related projects	This project is related to Project G3 “Implementation of the Quality Management Systems in the AIM units in SAM States”.				
Project deliverables	Relationship with the performance-based regional plan (PFF)	Responsible party	*Status of Implementation	Delivery date	Comments
Survey of the provision of IAIP, using a table.	D-ATM	ICAO coordinator		16/03/12	Finalised on schedule at the SAM/AIM meeting.
Circulation of IAIP survey to States	D-ATM	ICAO coordinator		16/03/12	Finalised on schedule at the SAM/AIM meeting.
Collection and updating	D-ATM	ICAO coordinator		16/03/12	Finalised on schedule at the SAM/AIM meeting.
Collection of experiences in SAM States with the electronic AIP	D-ATM	ICAO coordinator		16/03/12	Finalised on schedule at the SAM/AIM meeting.
Develop AIXM action plan	D-ATM	ICAO coordinator		24/04/15	Finalised on schedule.
AIXM documentation collection	D-ATM	ICAO coordinator		22/05/15	Finalised on schedule.
AIXM documentation translation	D-ATM	ICAO		10/07/15	Finalised on schedule.

AIXM documentation revision	D-ATM	ICAO coordinator		21/08/15	Finalised on schedule.
Documentation validation	D-ATM	ICAO coordinator		30/11/16	
Develop document describing AIXM tests steps	D-ATM	ICAO coordinator		December 2018	
AIXM tests	D-ATM	ICAO coordinator		December 2017	
Transmission and reception of tests results data	D-ATM	ICAO coordinator		19/05/18	
AIXM seminar	D-ATM	ICAO coordinator		02/10/15	Finalised on schedule.
Resources required	Designation of experts in the execution of some of the deliverables. Commitment by States to support the coordinators and experts.				

*Grey

Task not started

Green

Activity underway as scheduled

Yellow

Activity started with some delay but expected to be completed on time

Red

It has not been possible to implement this activity as scheduled; mitigating measures are required