



Agenda Item 2: Revision of AIM Projects in the SAM Region

- 2.1 Tasks proposed for the execution of AIM Projects G1, G2, and G3 in the SAM Region will be updated

Project G3: Development of quality specifications applicable to the AIM digital environment (SAM)

(Presented by the Secretariat)

Summary	
<p>This working paper describes the initial progress made in the project for the improvement of the guides on quality management in the AIM digital/electronic environment so that participating States may review the progress made and adjust the project description and the associated GANT to be submitted at the next meeting of the GREPECAS Programme and Project Review Committee.</p>	
References: <ul style="list-style-type: none">• ICAO Annex 15• SAM/AIM/2 Multilateral Meeting, Lima, Peru, 26-30 September 2011.	
ICAO strategic objectives:	<i>A – Safety</i> <i>C – Environmental protection</i>

1 Background

1.1 The SAM/AIM/2 meeting took note of the new organisation and work methodology adopted by GREPECAS/16, which is based on programmes and projects, and whereby Regional Officers would act as programme coordinators, and officials designated by the State would act as project coordinators, applying a methodology based on a project management approach.

2 Discussion

2.1 To date, three States of the Region, Chile, Ecuador and Paraguay, have attained the ISO 9001:2008 certification for AIM processes. Brazil has partially certified aeronautical information and mapping processes. Some processes are pending certification, which is expected in 2012.

2.2 Furthermore, some States are quite advanced in the certification process, while others are lagging quite behind in the process, which shall be definitely completed by December 2012.

3. **Suggested action**

3.1 Based on the above, the Meeting is requested to:

- a) review and update the description of the project in support of the implementation of improvements to the guides applicable to the quality management system in the AIM digital/electronic environment and the corresponding GANT shown in **Appendices A1 and A2**, and
- b) complete the quality self-assessment shown in the guide of **Appendix B** in the form contained in **Appendix C** to this working paper.

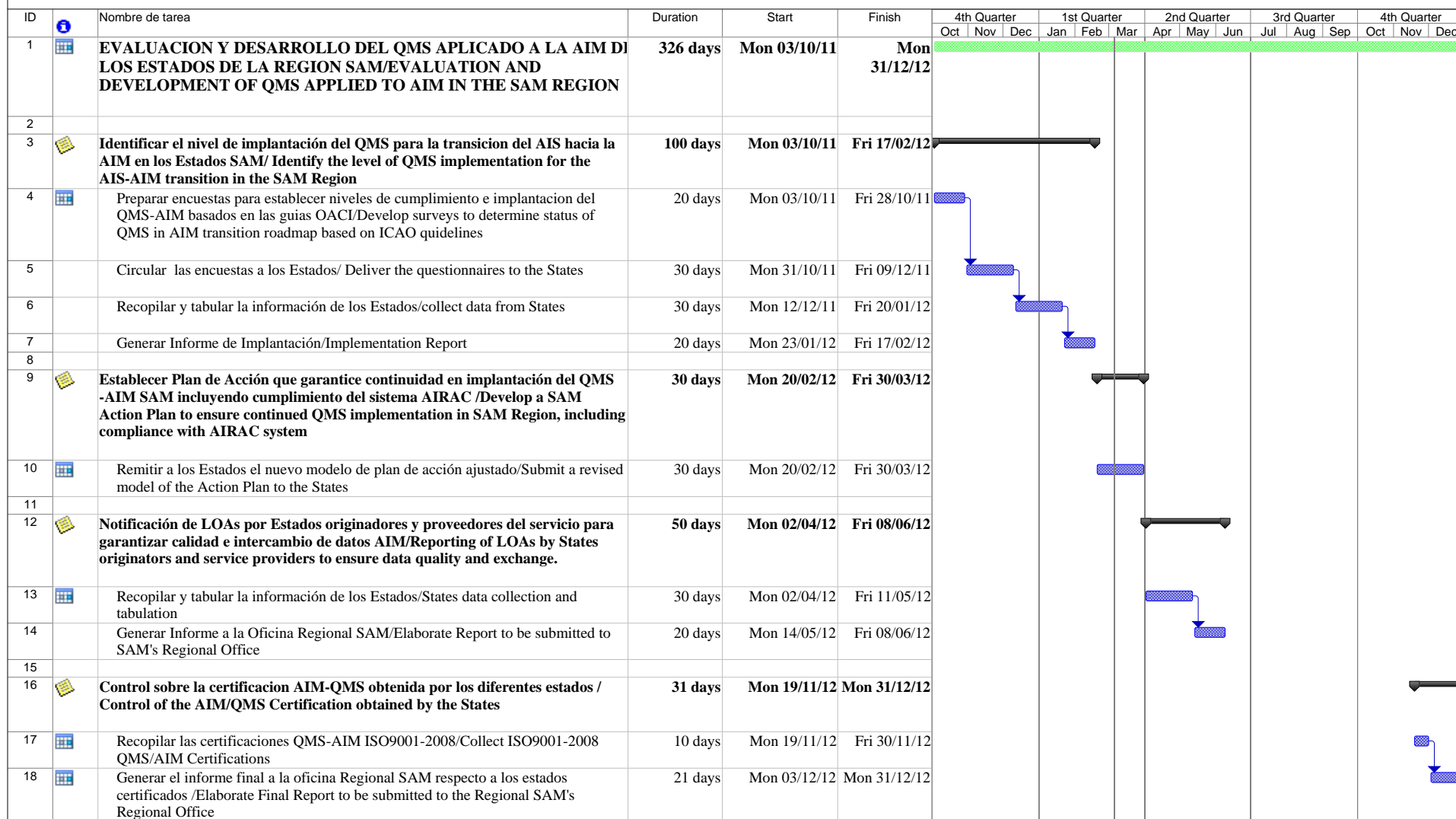
* * * * *

APPENDIX A1

PROJECT PLAN, DELIVERABLES, EXPECTED LIFE CYCLE, AND STATUS

Name of the project	G3: Development of quality specifications applicable to the AIM digital environment (SAM)
Name of project coordinator	LIDIA CACERES (Paraguay)
Rationale	The AIM quality management system must give users the assurance that the disseminated aeronautical information/data meets quality requirements in terms of accuracy, resolution, and integrity.
Objective	To support the implementation of improvements to the guides on the quality management system in the AIM digital/electronic environment in the SAM Region, based on the regional performance objectives of the performance-based implementation plan for the SAM Region.
Scope	The scope of the project contemplates the assessment and identification of the status of implementation of quality management in AIM services of the region. Drafting of an action plan and guides for the implementation of QMS in the AIM digital/electronic environment.
Implementation strategy	Project activities will be coordinated amongst project members, the project coordinator, and the programme coordinator, mainly through teleconferencing (<i>GoToMeeting</i> application), and at meetings that may be held during work programme activities. The project coordinator will coordinate with the programme coordinator the incorporation of additional experts if warranted by the tasks and work to be performed.
Deliverables	Updated analysis of the situation in the region Checklist of ISO 9001:2008 procedures Action plan
Expected life cycle	Analysis - 2011 Drafting of the action plan -2012 Completion - 2013
Issues and risks	Deficiencies of State databases Lack of support by States in terms of economic, human and other resources. Different variables; political changes, natural disasters, etc.
Status	The current phase is that of research, with some defined activities and a tentative timetable for planning purposes. A preliminary GANT template is attached. Project activities have not officially started yet, although some States have already made progress in QMS implementation.

— END —



PLANIFICACIÓN AIS: PROYECTO G3	Tarea		Tareas externas		Resumen inactivo		Sólo el comienzo	
	División		Hito externo		Tarea manual		Sólo fin	
	Hito		Tarea inactiva		Sólo duración		Progreso	
	Resumen		Tarea inactiva		Informe de resumen manual		Fecha límite	
	Resumen del proyecto		Hito inactivo		Resumen manual			

APPENDIX B

Self-assessment by SAM States

1. Introduction

Self-assessment is a carefully planned assessment that results in an opinion or judgment regarding the efficacy and efficiency of the organisation and the maturity of the quality management system. The purpose of this self-assessment is to provide fact-based guidelines on the structure and maturity of the quality management system. The purpose of this self-assessment is to provide factual guidelines that will provide the organisation and ICAO a more accurate knowledge of where should emphasis be placed to improve the implementation of the quality management system in meteorological services.

The self-assessment methodology described herein is intended to provide a simple and user-friendly approach to determining the relative maturity of the quality management system of the organisation and identifying the main areas for improvement.

The structure and criteria for assessing the maturity of the quality management system under each of the main chapters of the ISO 9001:2008 standard are based on a scale ranging from 1 (without a formal system) to 5 (the best class of performance).

2. Performance maturity levels

The performance maturity levels used in this self-assessment approach are shown in the following table:

Level of maturity	Level of performance	Guidance
1	Without a formal approach	There is no evident systematic approach; with no results, poor results or unpredictable results.
2	Reactive approach	Systematic approach based on the problem or on prevention; minimum data available on the outcome of the improvement.
3	Stable formal system approach	Systematic approach based on the process, early stage of systematic improvement; data available on compliance with objectives and existence of improvement trends.
4	Emphasis on continuous improvement	Improvement process underway; good results and a continuous improvement tendency.
5	“Best-in-class” performance	Highly-integrated improvement process; “Best-in-class” results shown through comparative studies (benchmarking).

3. Self-assessment questions

This self-assessment provides a simple approach to assessing the maturity of the organisation, based on chapters 4 to 8 of ISO 9001:2008 international standard.

Question 1: System and process management (4.1)

- a) How does AIM service management apply the process-based approach for achieving effective control? Has the cycle been completed so that the improvement can be appreciated?

Question 2: Documentation (4.2)

- a) How is the Quality Manual used in support of the AIM system in your organisation? If still underway, indicate the date of implementation.
- b) How is the document control procedure being used in support of the AIM system? If still underway, indicate the date of implementation.
- c) How is the record control procedure being used in support of the AIM system? If still underway, indicate the date of implementation.
- d) How are documents and records being used in support of an effective and efficient operation of the processes of the organisation?

Question 3: Responsibility of management. General guidance (5.1)

- a) How does top management demonstrate its leadership, commitment, and involvement?
- b) How does the quality management system of your organisation contribute to the safety, continuity and efficiency of its operations?

Question 4: Needs and expectations of stakeholders (5.2)

- a) How does the organisation identify customer needs and expectations?
- b) How does the organisation identify satisfaction at work, competence, and development of knowledge of its personnel?
- c) How does the organisation identify the needs and expectations of other stakeholders that might impact the establishment of objectives?
- d) How does the organisation make sure that legal and regulatory requirements are taken into account?

Question 5 – Quality policy (5.3)

- a) How does the quality policy ensure that customer needs and requirements are understood and met?
- b) How does the quality policy ensure that the needs and expectations of other stakeholders are understood?
- c) How is the quality policy conducive to visible and expected improvements?
- d) How does the quality policy take into account the future vision of the organisation?

Question 6: Planning (5.4)

- a) How do objectives translate the quality policy into measurable goals?
- b) How are objectives communicated at each level to ensure the contribution of individuals to their achievement?
- c) How does management make sure that the resources required for achieving the objectives are available?

Question 7 – Responsibility, authority, and communication (5.5)

- a) How does top management make sure that the responsibilities of the personnel of the organisation are defined and communicated?
- b) How does the communication of quality requirements, objectives and achievements contribute to the improvement of AIM service performance?

Question 8 – Managerial review (5.6)

- a) How does top management ensure the availability of valid inputs for review by management?
- b) How do you rate the information review activity performed by management to improve the efficacy and efficiency of AIM processes in the organisation?

Question 9 – Resource management. General guidance (6.1)

- a) How does top management plan for timely availability of resources?
- b) How does management plan, provide, control and monitor its financial resources to maintain an effective and efficient quality management system and to ensure that quality objectives are achieved?
- c) How does management make sure that the personnel is aware of the link between quality and cost?
- d) How does management make sure that the appropriate information is readily available for making fact-based decisions?
- e) How does management engage providers in the identification of procurement needs and in the development of a joint strategy?

Question 10 –Personnel (6.2)

- a) ¿How does management encourage individuals to get involved and improve the efficacy and efficiency in the organisation?
- b) How does management make sure that the level of competence of each individual is appropriate for current and future needs?

Question 11 – Infrastructure (6.3)

- a) How does management make sure that the infrastructure is appropriate for achieving the objectives of the organisation?
- b) How does management take into account safety aspects related to infrastructure?

Question 12 – Work environment (6.4)

- a) How does management make sure that the work environment motivates and promotes satisfaction, development and performance amongst its personnel?

Question 13 – Product development. General guidance (7.1)

- a) How does top management apply the process-based approach to ensure an effective and efficient operation of production and support processes and the associated process network?

Question 14 – Processes related to stakeholders (7.2)

- a) How has management defined customer-related processes to make sure that customer needs are taken into account?
- b) How has management defined the processes of other stakeholders to make sure that needs and expectations are taken into account?

Question 15 – Procurement (7.4)

- a) How has top management defined the procurement processes to make sure that the products bought meet the needs of the organisation?
- b) How are procurement processes managed in practice?
- c) How does the organisation ensure product compliance, from specification to acceptance?

Question 16 – Service production and provision (7.5)

- a) How does top management make sure that production inputs take into account customer and other stakeholder needs?
- b) How are production processes managed in practice, from input to output?
- c) How are quality-related activities, such as control, checking and validation, considered in the production processes?

Question 17 – Control of follow-up and measuring devices (7.6)

- a) How does management control its follow-up and measuring devices to ensure that appropriate data is being captured and used?

Question 18 – Measurement, analysis, and improvement. General guidance (8.1)

- a) How is the importance of measurement, analysis, and improvement activities emphasised to make sure that the performance of the organisation is satisfactory to stakeholders?

Question 19 – Follow up and measurement (8.2)

- a) How does management ensure the collection of customer-related data for analysis and improvements?
- b) How is information from other stakeholders obtained for analysis and possible improvements?
- c) How does the organisation apply self-assessment methodologies in the quality management system to improve overall efficacy and efficiency of the organisation?

Question 20 – Control of non-conformities (8.3)

- a) How does the organisation control process and product non-conformities?
- b) How does the organisation analyse non-conformities for the purpose of learning and improving the process and the product?

Question 21 – Data analysis (8.4)

- a) How does the organisation analyse data for the purpose of assessing and eliminating issues affecting its performance?

Question 22 – Improvement (8.5)

- a) How does management apply corrective action for the purpose of assessing and eliminating issues affecting its performance?
- b) How does management apply preventive action for the purpose of preventing operational accidents?
- c) How does management ensure the systematic use of methods and tools to improve the performance of the organisation?

APÉNDICE/APPENDIX C

AUTOEVALUACIÓN DE CALIDAD / QUALITY ASSURANCE SELF-ASSESSMENT

ESTADO/STATE:					
Referencia Norma ISO Ref. ISO Standard	Nº Pregunta Question Nº	Observaciones reales del desempeño Actual performance remarks	Escala Scale	Acción de Mejora Improvement Action	Requerimiento de apoyo OACI Requirement for ICAO Support
4.1	1(a)	<p>EJEMPLO: Estamos en la fase de estructuración del sistema de gestión de calidad, se han determinado los procesos y sus interacciones y los proveedores internos. El servicio actualmente no tiene un control eficaz de los proveedores internos.</p> <p>EXAMPLE: We are in the phase of structuring quality assurance system, the processes and have been determined as well as their interactions with internal providers. Currently, the service does not have an effective control of internal providers.</p>	2	Establecer los requisitos a los proveedores internos. Determinar sus responsabilidades y establecer un procedimiento del control al proveedor. Establish requirements to internal providers. Determine their responsibilities and establish a procedure to control provider.	Sin requerimiento Without requirement.
4.2	2(a)	<p>EJEMPLO: Se ha desarrollado el Manual de Calidad y su concepción ha permitido construir una buena estructura documentaria.</p>	3	Revisar el manual en cada etapa de implantación para determinar oportunidades de mejora. Review the manual in each implementation stage to determine improvement opportunities.	Sin requerimiento Without requirement.
4.2	2(b)				
4.2	2(c)				
4.2	2(d)				
5.1	3(a)				
5.1	3(b)				
5.2	4(a)				
5.2	4(b)				

ESTADO/STATE:					
Referencia Norma ISO Ref. ISO Standard	Nº Pregunta Question Nº	Observaciones reales del desempeño Actual performance remarks	Escala Scale	Acción de Mejora Improvement Action	Requerimiento de apoyo OACI Requirement for ICAO Support
5.2	4(c)				
5.2	4(d)				
5.3	5(a)				
5.3	5(b)				
5.3	5(c)				
5.3	5(d)				
5.4	6(a)				
5.4	6(b)				
5.4	6(c)				
5.5	7(a)				
5.5	7(b)				
5.6	8(a)				
5.6	8(b)				
6.1	9(a)				
6.1	9(b)				
6.1	9(c)				
6.1	9(d)				
6.1	9(e)				
6.2	10(a)				
6.2	10(b)				
6.3	11(a)				
6.3	11(b)				
6.4	12(a)				
7.1	13(a)				
7.2	14(a)				
7.2	14(b)				
7.4	15(a)				
7.4	15(b)				
7.4	15(c)				
7.5	16(a)				

ESTADO/STATE:					
Referencia Norma ISO Ref. ISO Standard	Nº Pregunta Question Nº	Observaciones reales del desempeño Actual performance remarks	Escala Scale	Acción de Mejora Improvement Action	Requerimiento de apoyo OACI Requirement for ICAO Support
7.5	16(b)				
7.5	16(c)				
7.6	17(a)				
8.1	18(a)				
8.2	19(a)				
8.2	19(b)				
8.2	19(c)				
8.3	20(a)				
8.3	20(b)				
8.4	21(a)				
8.5	22(a)				
8.5	22(b)				
8.5	22(c)				