



Agenda Item 3: Review of Project H3 - Implementation of the MET information quality management system (QMS/MET)

Analysis of the implementation of QMS/MET in the SAM Region

(Presented by the Secretariat)

SUMMARY	
This working paper contains the status of the implementation of QMS/MET in the SAM Region	
REFERENCES	
<ul style="list-style-type: none"> • Annex 3 - <i>Meteorological Service for International Air Navigation</i> • Guide for the Implementation of the Quality Management System for the CAR/SAM Regions 	
ICAO strategic objectives:	<i>A - Safety</i> <i>B – Air navigation capacity and efficiency</i> <i>E – Environmental protection</i>

1. Background

1.1 ICAO Annex 3, Chapter 2, 2.2.2 states that "Each Contracting State shall ensure that the designated meteorological authority referred to in 2.1.4 establishes and implements a properly organized quality system comprising the procedures, processes and resources required to provide the quality management of the meteorological information to be provided to the users indicated in 2.1.2".

1.2 In point 2.2.3, Annex 3 recommends that the quality system established, in accordance with point 2.2.2, should conform to the quality assurance standards of the 9000 series of the International Organization for Standardization (ISO) and should be subject to certification by an approved organization.

1.3 The Standard stipulated in 2.2.2 should have been implemented in the States since November 12, 2012.

1.4 The ISO 9001 Standard is the model recommended by ICAO Annex 3 and has undergone changes, which have been published on September 15, 2015.

1.5 The GREPECAS/18 Meeting analyzed the issue of the implementation of the QMS/MET in the States of the SAM Region.

2. Analysis

2.1 The CRPP/4 observed that the change of the ISO 9001 Standard in September 2015 leads to rethink the implementation plans of the States that have not yet done so, and to revise the previously implemented QMS/MET to adapt to the new requirements included.

2.2 The CRPP/4 Meeting has once again indicated the need for greater support in the States, translated into the provision of budgets for the contracting of certification companies of the Quality Management Systems implemented. The Meeting should also consider the support received in the Region from the World Meteorological Organization (WMO) through the organization of seminars and the participation of the WMO Officer in seminars organized by ICAO, as a presenter; in addition, ICAO support through GAP analysis carried out in the States under the auspices of ICAO.

2.3 The MP/2 Meeting had observed the current status of implementation of the QMS/MET in the SAM Region. The States took note that all implementations must be carried out with the 2015 version of ISO 9001. In addition, the Secretariat reminded States that the certification of the QMS/MET should be extended to all meteorological units of all international airports that are listed in the AOP Table of the CAR/SAM e-ANP.

2.4 Additionally, the change of the ISO 9001 Standard was observed in September 2015, which introduced new requirements. In this context, until the end of 2018, the States that had implemented and certified their QMS/MET, including the new requirements, were: **Brazil, Chile, Panama, Paraguay and Peru.**

2.5 The Secretariat has also observed that progress has been made in the implementations in **Uruguay, Ecuador, Guyana, Bolivia and Venezuela**, but without completing the process or certification.

2.6 The States of Argentina, Colombia and Suriname had certified with the ISO 9001: 2008 Standard. Until the end of 2018, they have not reported the re-certification of the same. Argentina had reported that they had a plan to extend the implementation to the entire National Meteorological Service, provider of the aeronautical meteorological service, and for this reason the process would be delayed until the first semester of 2019. Colombia has not provided information on the current status of implementation of the QMS/MET, both in IDEAM and in the MET Group of the UAEAC.

2.7 Table 1 shows the current implementation status:

Table 1: Current status of QMS/MET Implementation in the SAM Region

QMS/MET Implementation – SAM Region			
Status	Implemented	Certified	In process of certification
Argentina	In process to adapt to the 2015 version of ISO 9001		
Bolivia	In process of implementation		20%
Brazil	✓	✓	
Chile	✓	✓	
Colombia	No information	No information	
Ecuador	In process of implementation		Not started
Guyana	✓	In process	Not started
French Guyana	✓	✓	
Panama	✓	✓	30%
Paraguay	✓	✓	
Peru	✓	✓	
Suriname	No information in relation to the adaptation to the 2015 version of ISO 90001	No information in relation to the adaptation to the 2015 version of ISO 90001	
Uruguay	✓	No information in relation to the adaptation to the 2015 version of ISO 90001	
Venezuela	✓		Not started

2.8 Regarding the Project, the Coordinator of the Project has withdrawn from the ANAC - Argentina, so a new coordinator must be defined.

2.9 In **Appendix A** to this working paper, the activities that must be carried out within Project H3 are observed with changes suggested by the Secretary.

3. **Conclusion**

3.1 The Meeting should analyze all the information detailed in this working paper in order to consider the planning of the completion of the implementation processes of the QMS / MET.

3.2 The States that have completed the processes of implementation and certification of the QMS/MET in the aeronautical meteorological services provided in the main airports, should consider the planning of an extension of the implementation in all the airports that appear in the Table AOP of the e-ANP/CAR/SAM.

3.3 The States that have not completed the implementation process of the QMS / MET, should put the maximum effort in this task and complete it. The process has already been extended for almost ten years, and it is imperative to close it or promote a new project that promotes the implementation and certification of the QMS/MET in the States that have not yet done so and helps those who have already implemented it to continue with the cycle of continuous improvements to achieve re-certifications.

4. **Suggested action**

4.1 The Meeting is invited to:

- a) take note of the information provided in this working paper;
- b) review the table of activities presented in Appendix A;
- c) review and analyze Table 1 and update it if deemed appropriate; and
- d) agree on the actions it deems necessary

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APPENDIX A

PROJECT FOR THE IMPLEMENTATION OF THE MET INFORMATION QUALITY MANAGEMENT SYSTEM (QMS/MET)

SAM Region	PROJECT DESCRIPTION (DP)	DP N° H3	
Programme	Title of the Project	Start	End
Aeronautical Meteorology (Programme coordinator: Jorge Armoa)	Implementation of the QMS/MET <i>Project coordinator: Pablo Malvé (Argentina)</i> <i>Experts contributing to the project: César Acosta (Ecuador)</i> <i>Baldomero Thomas (Panamá)</i> <i>Jorge Sánchez (Paraguay)</i> <i>Hugo Rosado (Perú)</i> <i>Ricardo Reyes (Perú)</i> <i>Edward León (Venezuela)</i>	January 2016	December 2020
Objective	Assist States in the implementation of the QMS/MET and certification, where applicable, and establish guidelines for the transition to the standard ISO 9001: 2015, aligned to ASBU and projected to the interoperability of meteorological information, in compliance with Annex 3.		
Scope	Establishment and application of a quality management system of meteorological data safety-oriented at each MET unit of all SAM aerodromes listed in CAR/SAM ANP and compliance with the standards and recommended practices of Annex 3 and the CAR/SAM e-ANP, Vol. I and Vol. II.		
Metrics	Number of AOP aerodromes certified under ISO 9001 in force.		
Strategy	All tasks will be carried out by experts nominated by SAM States participating in the project, led by the Project Coordinator and under the supervision of the MET Programme Coordinator through the “GoToMeeting” tool. Upon completion of the tasks, the results will be sent to the MET Programme Coordinator as a final document for submission to, and if necessary approval by, the GREPECAS CRPP through the GREPECAS fast-track procedure. For the purpose of collaborative decision-making, meetings will be held with the areas involved.		
Goals	a) 100% of SAM States have established QMS/MET system in accordance with standard ISO 9001:2008 on 30 June 2016; b) 70% of SAM States apply and certify QMS/MET system in accordance with standard ISO 9001:2015 on 31 December 2017; and c) 100% of SAM States have QMS/MET system certified by an organization in accordance with standard ISO 9001:2015 in June 2019.		
Rationale	More accurate and timely meteorological information will optimise flight path planning and prediction, thus improving ATM safety and efficiency; improved aerodrome reports and forecasts will optimise the use of available aerodrome capacity; and meteorological information will minimise the environmental impact of air traffic. Performance management will be an important part of meteorological information quality assurance.		
Related projects	<ul style="list-style-type: none"> ➤ Automation ➤ Improved ATM situational awareness 		

Project Deliverables	Relationship with the regional performance-based plan (PFF)	Responsible Party	Status of ¹ Implementation	Date of Delivery	Comments
Guidelines for the transition to Standard ISO 9001:2015	PFF SAM MET 02, 03, and 04	MET programme coordinator and project director		September 2016	The guidelines will facilitate the drafting of ISO 9001: 2015 documentation by MET service provider States.
Survey to States on MET personnel completed	PFF SAM MET 02, 03, and 04	MET programme coordinator and project director		November 2016	One of the main problems facing MET service provider States is the lack of personnel with the qualifications and competencies required by WMO and ICAO. State requirements will be officially communicated to ICAO contracting States.
Prepare the assessment plan of personnel competency, qualifications, professional education and aeronautical meteorology personnel training.				Diciembre 2019	Follow up on the tasks related to this item in order to take note of compliance of Standard 2.1.5 of Annex 3 and to the requirements of WMO Technical Regulations No. 49, Part V and Part VI.
Table of compliance with Eanp CAR/SAM, Part VI – MET, Vol I.	PFF SAM MET 02, 03, and 04	MET programme coordinator and project director		June 2016	Close monitoring of compliance with Part MET of Volume I of the e-ANP CAR/SAM.
Report of the MET service risk management workshop	PFF SAM MET 02, 03, and 04	MET programme coordinator and project director		August 2016	June 2016 has been scheduled as a possible date for the development of the workshop seminar on “Risk Analysis”.
Update course in Leader Auditor	PFF SAM MET 02, 03, and 04	Project Director		October 2017	An update course for the auditors trained under the standards of ISO 9001:2008 should be developed in order to have the required knowledge in the new standards introduced in version 2015.
Resources needed	Availability for GoTo Meeting teleconferences is required.				

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Grey Task not started yet
Green Activity being implemented as scheduled
Yellow Activity started with some delay, but will be implemented on time
Red Activity not implemented on time; mitigation measures are required