



Agenda Item 8: Implementation of MET quality system

(Presented by the Secretariat)

SUMMARY

This working paper contains information on the requirements related to quality management with regard to quality assurance and quality control of meteorological information provided to users.

References

- Secretary General State Letter AN 10/1-09/01 dated 23 January 2009;
- SAM COM/MET/09 Implementation Meeting (Lima, Perú, 10 - 12 August 2009); and
- Ninth Meeting of the GREPECAS Aeronautical Meteorology Subgroup (AERMETSG/9 - Lima, Perú 23 to 27 June 2008).

1. Introduction

1.1 On 23 January 2009, ICAO's Secretary General sent the State Letter AN 10/1-09/01 with proposal for amendment to Annex 3 – *Meteorological Service for International Air Navigation*, among others, requesting comments from States, which should reach Montreal on 24 April of the same year. The afore-mentioned proposal for amendment makes part of Amendment 75 to Annex 3, which applicability is foreseen for 18 November 2010.

2. Discussion

2.1 The Meeting may recall that proposal for amendment to Annex 3 addresses, among others, provisions related to quality management systems. In this regard, the Air Navigation Commission, during its preliminary review and in order to have a better understanding of where the States are in the implementation process, requested that States be asked the following:

- a) have quality management systems (QMS) been implemented in your State? If not, please evaluate the time required to have them in place?

- b) do you foresee significant cost and efforts to implement Standard 2.2.2 in your State? (Only consider costs related to meteorological service for international air navigation); and
- c) do you envisage changes to the level of charging for your meteorological services to international air navigation as a result of the implementation of QMS?

2.2 In this regard, **Appendix A** includes Attachment C enclosed to ICAO's Secretary General letter. The Subgroup could take note that SAM COM/MET/09 Implementation Meeting (10-12 August 2009), updated the information requested by ICAO's Secretary, which is presented in **Appendix B** to this working paper, so that, if necessary, it is updated and/or completed by the Meeting.

2.3 In addition, the Meeting could recall that during its ninth meeting (AERMETSG/9), Decision 9/22 - Establishment of the MET Quality Management Task Force was formulated, with the main task of developing, in coordination with the Secretariat, a draft Guide with the procedures and instructions for MET service in line with Standard ISO 9000 and Doc 9873 - *Manual on the Quality Management System for the Provision of Meteorological Service to International Air Navigation*.

2.4 The Secretariat has met several times with the MET Quality Management Task Force Rapporteur in order to coordinate the development of the guide, however, in view of the volume of the work, only the working instructions for meteorological watch offices have been completed. The results will be presented by the Task Force Rapporteur.

2.5 The Meeting could take note that Project RLA/06/901, which objective is to assist the nine (9) States of the SAM Region participating in the project in the implementation of the ATM operational concept and the corresponding technological support in communications, navigation and surveillance (CNS), has considered Aeronautical Meteorology (MET), reason for which the development of the complete Guide will be made within the framework of this project. In this regard, it is expected to hire an expert for its development and to carry out a seminar/workshop in April 2010 so that the States could standardize the procedures and instructions for MET service. **Appendix C** presents the terms of reference for the MET expert.

2.6 With regard to CAR Region, letters N 1-8.4.16 – EMX0908 dated 21 September 2009 and LT 13/12.5 – SA678 dated 29 September 2009 were sent to English speaking CAR/SAM States, inviting them to participate in the Seminar/Workshop on the Meteorological Services for Air Navigation for the NAM/CAR/SAM Regions, "*Development of a Quality Assurance System for the enhancement of the Aeronautical Meteorological Service*" (Montego Bay, Jamaica, 25 -27 November 2009) – in English only.

3. **Actions proposed to the meeting:**

The meeting is invited to:

- a) take note of the information contained in this working paper;
- b) review and, if necessary, update and/or complete Appendix B to this working paper; and
- c) formulate other actions resulting from the discussion of this working paper.

APPENDIX A

ATTACHMENT C to State letter AN 10/1-09/1

RESPONSE FORM CONCERNING PROPOSED AMENDMENT TO ANNEX 3
RELATED TO QUALITY MANAGEMENT SYSTEMS
(Ref. paragraph 4 of the State letter)

TO BE COMPLETED AND RETURNED TO ICAO

To: The Secretary General
International Civil Aviation Organization
999 University Street
Montreal, Quebec
Canada H3C 5H7

(State) _____

Please encircle

Have quality management systems (QMS) been implemented in your State? Y N
If not, please evaluate the time required to have them in place?

Remarks:

Do you foresee significant cost and efforts to implement the Standard 2.2.2 in your State? Y N
(Only consider costs related to meteorological service for international air navigation)

Remarks

Do you envisage changes to the level of charging for your meteorological services
to international air navigation as a result of the implementation of QMS? Y N

Remarks:

Signature _____ Date _____

APÉNDICE / APPENDIX B

ADJUNTO C a la comunicación AN 10/1-09/1 / ATTACHMENT C to letter AN 10/1-09/1

FORMULARIO DE RESPUESTA SOBRE LA ENMIENDA DEL ANEXO 3 RELATIVA A LOS SISTEMAS DE GESTIÓN DE LA CALIDAD /

REPLY FORM ON AMENDMENT TO ANNEX 3 RELATED TO QUALITY MANAGEMENT SYSTEMS

(Ref.: párrafo 4 de la comunicación a los Estados) / (Re.: State letter, paragraph 4)

		Sí/ Yes	No	Observaciones/ Remarks		Sí/ Yes	No	Observaciones/ Remarks		Sí/ Yes	No	Observaciones/ Remarks
	A ¹			B ²	C ³				D ⁴			
Argentina			X			X			X			
Bolivia			X	Se estima hasta 2012 / Estimated until 2012				No se puede estimar / Cannot be estimated			X	
Brasil			X	Se prevé para fines de 2014/ Foreseen for end of 2014		X					X	
Ecuador			X	Se estima hasta 2012		X	X				X	
Chile		X				X						
Colombia			X	No hay estimado / No estimate available		X		No hay estimado / No estimate available			X	
Guyana												
French Guiana												
Panamá												
Paraguay			X	Final de 2012 / End of 2012		X		No se puede estimar/ Cannot be estimated			X	
Perú		X		Final de 2012 / End of 2012			X				X	
Suriname			X									
Uruguay												
Venezuela			X	Se estima hasta 2012/ Estimated until 2012			X				X	

¹ A: ¿Se han implantado en su Estado sistemas de gestión de la calidad (QMS)? / Have quality management systems (QMS) been implemented in your State?

² B: ¿Cuánto tiempo se requeriría para implantarlo? / How long would it require to implement it?

³ C: ¿Prevé que la aplicación de la Norma 2.2.2 en su Estado exigirá costos y esfuerzos considerables? (Estime únicamente los costos relacionados con el servicio meteorológico para la navegación aérea internacional) / Do you foresee that the application of Standard 2.2.2 in your State will require considerable cost and effort? (please estimate only the costs related with the international air navigation meteorological services).

⁴ D: ¿Prevé que la implantación de los QMS requerirá cambiar los derechos correspondientes a la prestación de sus servicios meteorológicos a la navegación aérea internacional? / Do you foresee that the implementation of QMS will require changing the rights corresponding to the provision of International air navigation meteorological services?

APPENDIX C

TERMS OF REFERENCE FOR MET EXPERT

1. Support States to implement a Quality Management System in the MET Services, developing a guide of procedures for implementing the Quality Management System for MET Services, including the documented procedures required by ISO 9001:2008 and guidance of the ICAO/WMO joint *Manual on the Quality Management System for the Provision of Meteorological Service to International Air Navigation* (Doc 9873), as well as the documentary system for the provision of aeronautical meteorological service.

2. Develop of Documentary system:
 - a) MET Quality Policy and Security;
 - b) MET Quality Management and Security Handbook;
 - c) Documented MET procedures required by Standard ISO 9001, in the context of safety:
 - Control of documents;
 - Control of Records;
 - Internal Audits;
 - Control of the Non-compliant product;
 - Control of risk and contingency plans;
 - Preventive actions;
 - Corrective actions.

 - d) Procedures or working instructions for effective operation in aeronautical meteorology and risk assessment:
 - Procedures of aeronautical meteorology;
 - Instructive work of the meteorological station;
 - Instructive work of the aerodrome meteorological office;
 - Instructive work of the meteorological watch office;
 - Instructive work of aeronautical climatology;
 - Instructive work with the international OPMET data bank of Brasilia;
 - Instructive work with the volcanic ash advisories centre (VAAC) of Buenos Aires;
 - Instructive work with the volcanic ash advisories centre (VAAC) of Washington;
 - Instructional work with the centre of tropical cyclone warnings Miami (CAGR);
 - Instructive work with the national vulcanological Centers;
 - Instructive work to coordinate with Regional ICAO Office

 - e) Complementary procedures
 - Preparation and submission of documents;
 - Management review;
 - Indicators of quality management;
 - Competencies and training

- Installation, maintenance and calibration of measuring equipment;
- Purchase of products or services;
- Cost Recovery of MET services.