



International Civil Aviation Organization

INFORMATION PAPER

**TWENTIETH MEETING OF THE METEOROLOGY SUB-GROUP
(MET SG/20) OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING
AND IMPLEMENTATION REGIONAL GROUP (APANPIRG)**

Bangkok, Thailand, 6 – 9 June 2016

Agenda Item 6: Research, development and implementation issues in the MET field

**6.5 Governance and training (incl. quality management, cost recovery,
qualification and competencies of meteorological personnel)**

**COMPLIANCE WITH WMO AND ICAO REQUIREMENTS FOR QMS, COMPETENCY
AND QUALIFICATION**

(Presented by the World Meteorological Organization)

SUMMARY

This paper presents information on the monitoring by WMO of the compliance with the requirements for QMS, competency and qualification of personnel for the ICAOP APAC Region.

1. INTRODUCTION

1.1 During the recent years several requirements have been introduced by ICAO and WMO aimed at ensuring proper management of the aeronautical meteorology service provision. The understanding is that these requirements are related to the performance of the MET service providers and their ability to provide sustainable good service to their users.

1.2 According to the working arrangements between WMO and ICAO, WMO has the responsibility for defining education and training requirements, which since the 16th Congress (2011) have been formulated in terms of competency and qualification of the aeronautical meteorological personnel.

2. DISCUSSION

Implementation of QMS

2.1 WMO has been promoting and monitoring the implementation of the quality management system by the MET service providers of WMO Members and reporting this information regularly to the WMO Executive Council (EC). Several Congress and EC resolutions have been

adopted calling for the provision of technical and institutional assistance to Members in the implementation of QMS. The last WMO Congress 17 (July 2015) acknowledged as a success that the QMS for the provision of aeronautical meteorological service has been implemented at almost 110 WMO Members (about 58% of the Members); in terms of services for the busy air routes, more than 90% of relevant MET providers operate under QMS majority of them with ISO 9001:2008 certification.

2.2 The number of MET service providers achieving ISO 9000 certification is growing, however, there are still some providers having difficulties to bring the implementation process to the end mostly due to resource limitations. For the APAC region, a specific problem exists with the SIDS in the SW Pacific, where the funding for the last stage – external audit by an ISO certifying body. The recently conducted QMS training for the SIDS in Fiji, funded by JICA and coordinated with the WMO, would provide additional help for the finalization of the QMS implementation in the SW Pacific States.

2.3 In September 2015, ISO introduced a new QMS standard 9001:2015 to replace the previous standard 9001:2008. Holders of a 2008 certificate will have to migrate their QMS by September 2018, and new applicants for certification will have to use the 2015 revision of the standard. WMO is preparing an update of the guidance material on QMS implementation (WMO-No.1001 and WMO-No.1100) for publication in early 2017.

Competency of Aeronautical Meteorological Personnel (AMP)

2.4 WMO requirements for competency of AMP, both for aeronautical meteorological observers (AMO) and aeronautical meteorological forecasters (AMF) became a standard practice as of December 2013 (reference – WMO Technical Regulations, Volume I, Chapter 5, 1.2.2). Member States have been requested to undertake competency assessment (CA) of their AMP following the guidance developed by the Expert Team on Education, Training and Competency (ET-ETC) of the Commission for Aeronautical Meteorology (CAeM) (reference: <https://www.wmo.int/aemp/node/55>). The monitoring results have been collected through several surveys and through individual contacts with Member States, however, they are not yet complete. Nevertheless, it is clear that some States experience difficulties in the establishment of CA routine and will need further assistance. The best practice is to consider the CA as part of the QMS and to establish a schedule for recurrent CA checks with intervals of 2-3 years (it is up to the States to define the most appropriate interval for their local circumstances).

Qualification of Aeronautical Meteorological Forecasters (AMF)

2.5 The WMO qualification requirement for the aeronautical meteorological forecasters (AMF) included in the WMO Technical Regulations, Volume I (WMO-No. 49) will become a standard requirement as of 1 December 2016. To assist Members achieve conformity with this requirement, the CAeM ET-ETC has developed guidance material in the form of a "compliance flow chart" and "frequently asked questions". This material was sent to all Members through a circular letter on 28 January 2016. Members were also requested to provide information on the status of compliance with the AMF qualification standard. The letter with the attached materials is available here: <https://www.wmo.int/aemp/node/95>.

Summary results of conformity with QMS, competency and qualification requirements

2.6 The table in the appendix to this document provides some interim results of the monitoring process with WMO Member States for the ICAO Asia/Pacific Region.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a. Note the information contained in this paper; and
- b. Provide updates if any by 8 August 2016 to the table in the Appendix.

Appendix

**Status of compliance of the APAC States with the requirements for QMS,
 competency and qualification of AMP**

(date: 4 June 2016)

	State	QMS	comment	COMP	comment	QUAL	comment
1	Afghanistan	N		N	0		
2	Australia	Y		Y	3		
3	Bangladesh	N		N	1	Replied	33/8
4	Bhutan	N		N	0		
5	Brunei Darussalam	no info		no info			
6	Cambodia	N		N	0		
7	China	Y	Not ISO	Y	3	Replied	1469/29
8	Cook Islands	N		Y	3		
9	DPR of Korea	no info		no info			
10	Fiji	Y		N		Replied	7/3
11	French Polynesia	Y		Y	4 (As part of M-F)		
12	Hong Kong, China	Y		Y	4	Replied	18/0
13	India	Y		N	1		
14	Indonesia	Y		N	2		
15	Japan	Y	Not ISO	Y	4	Replied	260/0
16	Kiribati	N		N	0		
17	Lao PDR	N		N	0		
18	Macao, China	Y		Y	3	Replied	12/0
19	Malaysia	Y		Y	4		
20	Maldives	N		N	1	Replied	6/4
21	Micronesia	N		N	0		
22	Mongolia	N		N	0		
23	Myanmar	N		N	0		
24	Nepal	N		N	0		
25	New Caledonia	Y		Y	4 (As part of M-F)		

26	New Zealand	Y		Y	4	Replied	63/0
27	Niue	N		N	0		
28	Pakistan	Y		N	0		
29	Papua New Guinea	N		N	0		
30	Philippines	Y		N	0	Replied	26/5
31	Republic of Korea	Y		N	2	Replied	66/0
32	Samoa	N		N	0		
33	Singapore	Y		Y	3	Replied	24/0
34	Solomon Islands	N		Y	3		
35	Sri Lanka	N		N	0		
36	Thailand	Y		N	2	Replied	49/0
37	Timor-Leste	N		N	0		
38	Tonga	N		N	0		
39	Tuvalu	N		N	0		
40	United States of America	Y		Y	4	Replied	2200/0
41	Vanuatu	Y		N	0		
42	Viet Nam	Y		Y	3		