

Meteorology (MET) Divisional Meeting (2002) Commission for Aeronautical Meteorology Twelfth Session

## Montreal, 9 to 27 September 2002

# Agenda Item 4: Institutional changes and trends in the provision of meteorological services to international air navigation

(Presented by China)

#### SUMMARY

This paper presents the progress of implementation of a quality system in Hong Kong, China.

#### 1. **INTRODUCTION**

1.1 As adopted by ICAO in 2001 the Amendment 72 to ICAO Annex  $3^1$  contains a recommendation (2.2.2) in respect of the establishment and implementation of a quality system by the designated meteorological authority. The system should be in conformity with the ISO 9000 series of quality assurance standards and certified by an approved organization (recommendation 2.2.3).

1.2 As the designated meteorological authority in Hong Kong, China, the Hong Kong Observatory (HKO) proceeded in late 2001 with the implementation of a quality system for its aviation weather service in support of international air navigation. This paper describes the progress of the implementation so far.

#### 2. **PROGRESS OF IMPLEMENTATION**

2.1 Prior to the implementation process, the HKO has already in place documented operational procedures on weather observation and forecasting, quality procedures in format and consistency checking and in message logging, as well as such quality assurance measures as regular customer survey, customer liaison meetings, internal meetings on process improvement and day-to-day verification of weather forecasts for international air navigation.

2.2 The process began in late 2001 with the appointment of an ISO consultant, who first reviewed the existing procedures and facilities for the provision of aviation weather service and pointed to areas requiring further work in order to obtain ISO9000 certification. Following the review, the quality policy and objectives for the provision of aviation weather service were formulated and established.

<sup>&</sup>lt;sup>1</sup> All references to Annex 3 apply equally to WMO Technical Regulations [C.3.1].

2.3 The IS09000 certification process can be roughly divided into 6 steps, namely, training and appointment of management representatives; establishment of quality documentation; implementation of a quality management system; commissioning of certification body; internal audits; and certification audit.

2.4 With the consultant's assistance, IS09000 awareness training was provided to all relevant staff. Such training was important in ensuring the full understanding and commitment of all staff, not just those from top management. This was followed by the appointment of management representatives within HKO in early 2002.

2.5 Quality documentation consists of 3 layers — quality manual, quality system procedures and records. Based on the earlier review on procedures and facilities, the quality manual and quality system procedures were developed around the existing framework, in such a way as to ensure that all records are kept and could be easily retrieved in conformity with ISO requirements.

2.6 After establishment of the quality documentation, the consultant conducted briefings to ensure that the staff understood their roles, as well as the role of the management representatives, in the implementation. Training was also provided in advance to prepare prospective internal auditors for internal audits later in the year.

2.7 With the completion of the above, the quality management system was implemented in March 2002. Documents for the system comprise the quality policy and objectives (para. 2.2), the quality manual, the quality system procedures (para. 2.5), and the documented operational procedures on weather observation and forecasting (para. 2.1). The system itself requires the following processes: process to identify customer requirements; procedures to realize customer requirements into products; process to monitor and measure the quality of the products and customer satisfaction; process to analysis such data; management review of these data to identify ways for continual improvement; and process to ensure the necessary resources are provided for the implementation and maintenance of the quality management system as well as its continued improvement.

2.8 An accredited certification body was appointed in April 2002 to provide the certification audit service. On the present schedule, it is expected that the quality system will be audited by the certification body in late 2002.

2.9 As the quality system was developed around the existing framework (i.e. with documented operational procedures, quality procedures, and quality assurance measures etc. already in place), the cost involved in implementing the quality system, including consultancy and certification, turns out to be not as expensive as expected. The cost required for maintaining the certification on a yearly basis is also acceptable.

### 3. **ACTION BY THE MEETING**

3.1 The meeting is invited to note the information contained in this document.

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