

## Sixth Meeting of CNS/MET Sub-Group of APANPIRG

Bangkok, Thailand, 15 – 19 July 2002

## Agenda Item 13: Quality assurance/performance monitoring in MET Field

# IMPLEMENTATION OF A QUALITY SYSTEM IN HONG KONG, CHINA

(Presented by Hong Kong, China)

### **SUMMARY**

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

#### 1. Introduction

- 1.1 Adopted in 2001, Amendment 72 to ICAO Annex 3 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

- 2.1 Prior to the implementation of the quality system, the HKO has already in place documented operational procedures on weather observation and forecasting, quality procedures in message logging and in format and consistency checking, as well as such quality assurance measures as regular customer surveys, customer liaison meetings, internal meetings on process improvement and day-to-day verification of weather forecasts in support of international air navigation.
- 2.2 The implementation began in late 2001 with the appointment of a certified ISO consultant, who first reviewed the existing procedures and facilities for the provision of aviation weather service. They identified areas requiring further work in order to obtain ISO 9000 certification. Following the review, the quality policy and objectives for the provision of aviation weather service were formulated and established.
- 2.3 ISO 9000 certification involves the following steps:
  - (i) training and appointment of management representatives;
  - (ii) establishment of quality documentation;
  - (iii) implementation of a quality management system;
  - (iv) commissioning of certification body:
  - (v) internal audits; and
  - (vi) certification audit.

- 2.4 With the consultant's assistance, ISO 9000 awareness training was provided to all relevant staff. Such training was important in ensuring the full understanding and commitment of all staff, not just the management. This was followed by the appointment of management representatives within HKO in early 2002 to lead the quality system implementation and certification process.
- 2.5 Quality documentation (para. 2.3(ii)) consists of three 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.
- After establishment of the quality documentation, the consultant conducted briefings to ensure that the staff understood their respective roles, as well as the role of the management representatives, in the implementation. Training was also provided in advance to prepare prospective auditors within HKO for internal audits later in the year.
- With the completion of the above steps, the quality management system was implemented in March 2002. Documents for this 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 quality system itself entails: (i) processes to identify customer requirements; (ii) procedures to realize customer requirements into products; (iii) processes to monitor and measure the quality of the products and customer satisfaction; (iv) processes to analyse such data; (v) management review of these data to identify ways for continual improvement; and (vi) processes 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 auditing of the quality system will be completed by the certification body in late 2002.
- 2.9 As the quality system was built on the existing framework (i.e. with documented operational procedures, quality procedures, and quality assurance measures already in place), the cost involved in implementing the quality system, including consultancy and certification, turns out to be not as expensive as originally anticipated. The cost required for maintaining the certification on a yearly basis is also acceptable.

#### 3. Action

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

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