INTERNATIONAL CIVIL AVIATION ORGANISATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
FOURTEENTH MEETING (APIRG/14)

(Yaounde, Cameroon 23-27 June 2003)

Agenda Item 4 :   **Air Navigation Issues**

   4.8.4 :   **Introduction of Safety and Quality Management System**
                    within AFI plans

(Presented by Cameroon)

Summary:

This paper presents the need for the introduction of safety Management System (SMS) and Total Quality Management (TQM) system within AFI Plans and procedures. The paper is supported by a presentation on the elements of an SMS, its inter-relationship to TQM and tools for developing an effective SMS/TQM protocol.

Action by APIRG/14 is contained in paragraph 5.

1.0 INTRODUCTION

1.1   Under Article 28 of the Chicago convention, each contracting state is responsible for the provision of facilities and services in its territory. The council has also recommended that these facilities and services should include those specified in the Air Navigation Plans (ANP).

1.2   The 32nd session of the Assembly directed the council to establish the ICAO Universal Safety Oversight Audit Program (USOP) covering the safety related SARPS, in Annex 1, 6, and 8 and in the 33rd session of the Assembly, resolved that the ICAO USOAP continued and be expanded to Annex II – Air Traffic services and Annex 14 – Aerodromes, as of 2004. Also during the 168th session, the council agreed the extension of USOAP to include Annex 13, in its entirety, commencing as of 2004.

1.3   In accordance with Annex 6 part 13.2 and relevant guidance material, in particular ICAO Doc 9422 – Accident Prevention Manual, the need for a safety management system is well established in flight operation auditing and certification of aircraft.

1.4   The principle of having in a place a safety management system was introduced by the Council, Amendment 41 to Annex 11- Air traffic services, which became applicable on 1 November 2001. Amendment 41 introduced a requirement for ATS providers and regulators to establish formal safety management programmes, and the council in Annex 14 – Aerodromes, extended a similar requirement. It demands that certified aerodromes should have in operation a safety management system, with the intention to have in place an organised and orderly approach in the management of aerodromes safety by the aerodrome operators.

2.0 SAFETY MANAGEMENT SYSTEM

2.1   Recognizing the key objection of ICAO, in particular Article 44, which among other goals, states the need to promote the safety of flights in international civil aviation and APIRG objectives to identify specific problems in the air navigation field and propose, in appropriate form, action aimed at solving these problems.

2.2   APIRG is accordingly assigned, among other tasks, the responsibility to monitor new developments in the air navigation field and when these have an effect on the AFI region, development proposals to meet the requirements resulting from these developments in a timely and evolutionary manner, (APIRG PROC Handbook – part 1 page 9)

2.3   ICAO experience so far from the USOAP indicate the strong need for a systematic approach to auditing of air navigational infrastructure provisions and procedures, in particular the need to institute the new requirement for a safety management system.

2.4   The focus of the ANP has been more on facilitating of aerodrome, air traffic management, search and rescue communications, navigation surveillance, meteorology, AIS and harmonisation of aeronautical charts. The planning process in APIRG so far does not include procedures to guarantee safety and quality management in the facilities provided.

3.0 Total quality Management System.

3.1   On June 23, 1998, the council approved a uniform methodology for the identification, assessment and reporting of air navigation deficiencies related to air navigation plans (AN-WP/7652). The need for this methodology followed evidence that improvements were necessary in the following areas: (a) Collection of information; (b) Safety assessments of reported problems; (c) Identification of suitable corrective actions (technical/operational/financial/organisational), both short term and long-term; and (d) method of reporting in the reports of ICAO planning and implementation regional groups (PIRGS).

3.2   This uniform methodology sets out the preliminary criteria for the institution of a quality management system in AFI plans. These criteria need to be expanded with the addition of performance standard and quality measures.

3.3   Article 15 of the convention permits states to charge for airports and air navigation facilities and in the council statement to states, on this matter (Doc 9082) the principles set forth in Doc 9082, stipulates the need to link cost-recovery charges with the quality of the facility and services.

4.0   CONCLUSION

4.1   The new ICAO SARPS have introduced the need for safety management system in facilities and service provision. APIRG needs to develop a methodology for the integrating AFI plans with ICAO experiences from the USOAP, new provisions in Annex 11, 14 and 13 and the guideline in AN-WP/7652.

4.2   It entails the development of generic processes that can enable the introduction of SMS and TQM into AFI plans and permit states to apply this processes. The generic process should be guided by the need for TQM, considering safety, system delays and cost performance criteria, and the eventual ISO certification of approved processes.

5.0   ACTION BY APIRG/14

- APIRG/14 is commended to note this paper and supporting technical presentation on SMS/TQM;
- Approve the creation of a sub-group on SMS/TQM application in AFI plans and;
- Approve and nominate a task force charge with developing the terms of reference for the sub-group SMS/TQM application in AFI plans.

6.0   APPENDIX: Presentation
- SMS
- TQM

– END –