Civil Aviation Safety Authority
of Papua New Guinea

Advisory Circular

AC175-4

Quality Management System (QMS)

Initial Issue

01 November 2024

GENERAL

Civil Aviation Authority Advisory Circulars (AC) contain information about standards, practices and procedures that the Director has found to be an Acceptable Means of Compliance (AMC) with the associated rule.

An AMC is not intended to be the only means of compliance with a rule, and consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices or procedures are found to be acceptable, they will be added to the appropriate Advisory Circular.

PURPOSE

This Advisory Circular provides methods, acceptable to the Director, for showing compliance with the aerodrome certification exposition requirements of Part 175 and explanatory material to assist in showing compliance.

RELATED CAR

This AC relates specifically to Civil Aviation Rule 175.71 Quality Management System (QMS) – Subpart B – Certification Requirements.

CHANGE NOTICE

There was no previous issue of this AC and consequently no change is in effect.

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CHAPTER 1 – Quality Management System

1.1 General

1.1.1 Quality Management Systems (QMS) shall be implemented and maintained encompassing all functions of an AIS Service.

1.1.2 The execution of such quality management systems shall be made demonstrable for each function stage.

1.1.3 The general requirements for a QMS shall be to:

(1) develop a quality manual that includes the scope of a QMS as applied to AIM processes;

(2) identify the processes needed for the QMS;

(3) determine the sequence and interaction of these processes;

(4) determine criteria and methods required to ensure the effective operation and control of these processes;

(5) ensure the availability of information necessary to support the operation and monitoring of these processes;

(6) measure, monitor and analyse these processes, and implement action necessary to achieve planned results and continual improvement; and

(7) maintain appropriate records that are necessary to provide confidence of conformity of the processes and resulting product.

1.1.4 The quality management system should follow the ISO 9000 series of quality assurance standards and be certified by an accredited certification body.

1.1.5 The possession of an ISO 9000 series certificate does not automatically give the assumption of compliance with requirements of this regulation.

1.1.6 The International Organization for Standardization (ISO) 9000 series of quality assurance standards provide a basic framework for the development of a quality assurance programme.

1.1.7 Guidance material is contained in the Manual on the Quality Management System for Aeronautical Information Services (Doc 9839).

1.2 Multiple QMS

1.2.1 Quality management may be provided by a single QMS or a series of integrated QMS.

1.3 Traceability throughout the management system

1.3.1 The quality management system shall include the necessary policies, processes and procedures, including those for the use of metadata, to ensure and verify that aeronautical data is traceable throughout the aeronautical information data chain so as to allow any data anomalies or errors detected in use to be identified by root cause, corrected and communicated to affected users.

1.3.2 The established quality management system shall provide users with the necessary assurance and confidence that distributed aeronautical data and aeronautical information satisfy the aeronautical data quality requirements.

1.4 Aeronautical Data Chain

1.4.1 Quality management shall be applicable to the whole aeronautical data chain from data origination to distribution to the next intended user, taking into consideration the intended use of data.

1.4.2 Formal arrangements concerning data quality between the originator and the aeronautical information service (AIS) and between the AIS and the next intended user may be used to manage the aeronautical information data chain.

1.5 Competency of QMS personnel

1.5.1 Within the context of the established quality management system, the competencies and the associated knowledge, skills and abilities required for each function shall be identified, and personnel assigned to perform those functions shall be appropriately trained.

1.5.2 Processes shall be in place to ensure that personnel possess the competencies required to perform specific assigned functions.

1.5.3 Appropriate records shall be maintained so that the qualifications of personnel can be confirmed.

1.5.4 Initial and periodic assessments shall be established that require personnel to demonstrate the required competencies. Periodic assessments of personnel shall be used as a means to detect and correct shortfalls in knowledge, skills and abilities.

1.6 Training Methodology

1.6.1 Guidance material concerning a training methodology to ensure the competency of personnel is contained in the ***Aeronautical Information Management Training Development Manual (Doc 9991).***

1.6.2 The AIS training shall include, but not limited to the following topics, based on the type of service(s) provided:

(1) AIP including AIP Supplements and AIP Amendments

(2) AIC

(3) NOTAM origination, processing and publication

(4) Aeronautical Charts

(5) Flight Planning

(6) AMHS

(7) Aeronautical Information Exchange Model (AIXM)

(8) Aeronautical Data & Aeronautical Information Quality

(9) Electronic Terrain and Obstacle Data (e-TOD) ***included in CAR 175.51(c)***

1.7 Compliance and Continuous improvement

1.7.1 All necessary measures shall be taken to monitor compliance with the quality management system in place.

1.7.2 Demonstration of compliance of the quality management system applied shall be by audit. If nonconformity is identified, initiating action to correct its cause shall be determined and taken

without undue delay. All audit observations and remedial actions shall be evidenced and properly documented. In the framework of the QMS, a user feedback system shall be defined and implemented.

1.8 Human Factors considerations

1.8.1 The organization of an AIS as well as the design, contents, processing and distribution of aeronautical data and aeronautical information shall take into consideration human factors principles which facilitate their optimum utilization.

1.8.2 Due consideration shall be given to the integrity of information where human interaction is required and mitigating steps taken where risks are identified.

1.8.3 This may be accomplished through the design of systems, operating procedures or improvements in the operating environment.

1.9 Safety Management System Requirements

1.9.1 Each applicant for the grant of an Aeronautical Information Service Certificate shall establish a Safety Management System in accordance with CAR 175.69

1.9.2 Each Aeronautical Information Service provider must, as part of its SMS, establish target levels of safety/key performance indicators for at least the following safety areas:

(1) Data Quality monitoring,

(2) AIRAC Adherence monitoring, and

(3) NOTAM monitoring.

1.9.3 Service Providers shall record the measurements above and report to the Authority at the end of March and September of each year.

(a) The following information shall be shown on the face of each chart unless otherwise stated in the specification of the chart concerned:

(1) designation or title of the chart series;

(2) name and reference of the sheet;

(3) on each margin an indication of the adjoining sheet (when applicable).

Note. — The title may be abbreviated.

(b) A legend to the symbols and abbreviations used shall be provided. The legend shall be on the face or reverse of each chart except that, where it is impracticable for reasons of space, a legend may be published separately.

(c) The name and adequate address of the producing agency shall be shown in the margin of the chart except that, where the chart is published as part of an aeronautical document, this information may be placed in the front of that document.