

	TANZANIA CIVIL AVIATION AUTHORITY DIRECTORATE OF SAFETY REGULATIONS AIR NAVIGATION INSPECTORATE	Revision: 3 Advisory Circular
Document No: TCAA/QSP/SR/AC/ANI - 28	Title: Implementation of Quality Management System on AIS and Aeronautical Charts Services	Page 1 of 7

1.0 PURPOSE

This Advisory Circular (AC) provides information and guidance on establishment, implementation and maintenance of properly organized Quality Management System in Aeronautical Information and Aeronautical Charts Service provider (AIS Provider) acceptable to the Authority, comprising of procedures, processes and resources necessary to ensure a continued high quality services and products provision.

2.0 REFERENCES

- a) The Civil Aviation (Aeronautical Information Services) Regulations, 2025
- b) The Civil Aviation (Aeronautical Charts) Regulations, 2017 as amended
- c) The Civil Aviation (Certification of Air Navigation Services Providers) Regulations, 2017.

3.0 GUIDANCE AND PROCEDURES

3.1 General Information

The following key terms and phrases are defined to ensure a standard interpretation and understanding of the elements of a Quality System. These terms and definitions when used in the context of this AC have the following meanings:

- 3.1.1 Quality Management System** – is the documented internal activities and management functions of an AIS provider that determines the quality policy, objectives, responsibilities and their implementation through quality planning, quality control, quality assurance and quality improvement.
- 3.1.2 Quality Manual** – it is the document that describes the AIS Providers' quality system, it states the certificate holder's policy on, and commitment to, quality. It is the reference Manual that serves as a reference point in reviewing and evaluating an AIS Provider quality system by both the internal and Authority quality audits.
- 3.1.3 The Quality Policy** – An AIS Provider should establish a formal written Quality Policy Statement; this is a commitment by the Accountable Manager on behalf of the organization to what the Quality System is intended to achieve. The Quality Policy should reflect achievement and continued compliance with the Civil Aviation (Aeronautical Information Services) and (Aeronautical Charts) Regulations.
- 3.1.4 Purpose of a Quality System** – The Quality System enables the AIS Provider to monitor compliance with relevant Civil Aviation Regulations, the AIS Provider Manual of Operations and any other standards specified by the Authority, to ensure safe operations, quality services and products. And it is a function of the appointed Quality Officer/Manager to monitor and ensure the AIS/Aeronautical Charts section maintains compliance with the established quality standards.
- 3.1.5 The Quality Assurance Programme** – Shall include all planned and systematic actions necessary to provide confidence that all operations/activities are conducted and, services and products are

provided in accordance with all applicable requirements, standards and operational procedures. Quality Inspections, Quality Audits and Management Evaluations are the principal components of a Quality Assurance Programme.

3.1.6 Quality Inspections – The primary purpose of a quality inspection is to observe a particular event/action/document etc., in order to verify whether established operational procedures and requirements are followed during the accomplishment of that event and whether the required standard is achieved. Quality Inspections are referred to as Quality Control processes.

3.1.7 Quality Audits

- a) An audit differs from a quality inspection in that it is a systematic and independent comparison of the way in which an operation is being conducted against the way in which the published operational procedures say it should be conducted. Quality Audits are referred to as Quality Assurance processes.
- b) Unlike quality inspectors, auditors should not have any day-to-day involvement in the area of the service provisions, training, operation, and/or maintenance activity that is to be audited. The AIS/Aeronautical Charts Provider Quality Assurance Programme should identify the persons within the Section who have the experience, responsibility and authority to perform the audit functions and report to the Accountable Manager.
- c) Small organizations that may find it difficult to engage full-time dedicated audit personnel belonging to a separate quality department/section, may undertake the monitoring of specific areas or activities by the use of authorized part-time auditors.
- d) Where external auditors are used, it is essential that the external specialist is acceptable to the Authority and is familiar with the type of operation, activities, services and/or maintenance conducted by the AIS Provider.
- e) Whatever the case, the responsibilities of the auditors should be clearly defined in the relevant documentation.

3.1.8 Feedback System

- a) The quality system should include a feedback system to the Accountable Manager, as required by the regulations to ensure that corrective actions are both identified and promptly addressed. The feedback system should also specify who is required to rectify discrepancies and non-compliance in each particular case, and the procedure to be followed if corrective action is not completed within specified time limits.
- b) Any non-compliance identified as a result of monitoring should be communicated by the Quality Officer/Manager to the Manager responsible for taking corrective action or, if appropriate, to the Accountable Manager. Such non-compliance should be recorded, for the purpose of further investigation, in order to determine the cause and to enable the recommendation of appropriate corrective action.
- c) The quality system should include channels and procedures to receive and analyse feedback from operational personnel and external customers (services/products consumers) [*User Feedback System*] for taking appropriate action for a continual improvement.

3.1.9 Internal Audit Scheduling

The AIS Provider should establish a schedule of audits to be completed during a specified Financial Year. All aspects of the operation should be reviewed within every period of 12 months in accordance

with the programme. AIS Provider may increase the frequency of audits at his discretion but should not decrease the frequency without the agreement of the Authority.

3.1.10 Quality System

- a) The Quality System should be structured according to the scope (including size and complexity) of the operation or services to be monitored, and it shall incorporate the following quality attributes into the organization policies, procedures and processes:
 - i) Authority – There should be a clearly identifiable, qualified and knowledgeable person with the authority to establish and modify processes.
 - ii) Responsibility – There should be a clearly identifiable, qualified and knowledgeable person who is accountable for the quality of the processes.
 - iii) Procedures – There must be documented methods for accomplishing the processes.
 - iv) Controls – There should be checks and restraints designed into the AIS Provider's processes that assure the desired result are achieved.
 - v) Process Measurements – Methods identified to compel the AIS Provider to measure and assess its processes for the purpose of identifying and correcting problems or potential problems.
 - vi) Interfaces – It should be identifiable how the organization's policies and procedures interact between processes.
- b) As a minimum, the Quality System should address the following:
 - i) The provisions of Civil Aviation Regulations;
 - ii) Additional standards and operating procedures;
 - iii) Quality Policy (Mission Statement);
 - iv) Organizational structure;
 - v) Identification of those persons responsible for the development, establishment and management of the Quality System;
 - vi) Documentation, including manuals, operational logs, reports and records including a distribution list of controlled copies;
 - vii) Quality Procedures;
 - viii) The Quality Assurance Programme;
 - ix) The required financial, material, and human resources; and
 - x) Training requirements.
- c) Audit Scope – AIS Provider is required to monitor compliance with the operational procedures they have designed to ensure safe operations, quality services/products and the serviceability of both operational and safety equipment. In doing so they should as a minimum and as applicable, monitor:
 - i) Organization; Plans and Organization objectives;
 - ii) Operational Procedures;
 - iii) Organization certification (ANSPEC specification);

- iv) Supervision;
- v) Equipment performances;
- vi) Manuals, Logs, and Records;
- vii) Duty Time Limitations, Rest Requirements, and Scheduling;
- viii) Operational interface;
- ix) Personnel requirements; and
- x) Training.

d) Corrective action - Following the quality inspection/audit, the AIS Provider should establish:

- i) The seriousness of any findings and any need for immediate corrective action;
- ii) The origin/root cause of the finding;
- iii) What corrective actions are required to ensure that the non-compliance does not recur;
- iv) A schedule for corrective action;
- v) The identification of individuals responsible for implementing corrective action;
- vi) Allocation of resources by the Accountable Manager, where appropriate.

e) Recording - The AIS Provider should maintain accurate, complete, and readily accessible records documenting the results of the Quality Assurance Programme, as required by Regulations. Records are essential data to enable an AIS Provider to analyse and determine the root causes of non-conformity, so that areas of non-compliance can be identified and addressed. The following records should be retained for future audit purposes:

- i) Audit Schedules;
- ii) Quality inspections and Audit reports;
- iii) Responses to findings;
- iv) Corrective action reports;
- v) Follow-up and closure reports; and
- vi) Management Evaluation reports.

f) Quality Assurance of Sub-Contracted Activities

- i) Organizations may decide to sub-contract out certain activities to external agencies. However, the ultimate responsibility for the product or service provided by the sub-contractor remains with the organization. A written agreement should exist between the organization and the sub-contractor clearly defining the safety and quality related services to be provided. The sub-contractor's safety and quality related activities relevant to the agreement should be included in the Organization Quality Assurance Programme.
- ii) The organization should ensure that the sub-contractor has the necessary authorization/approval when required and commands the resources and competence necessary to undertake the task. If the organization requires the sub-contractor to conduct an activity that exceeds the sub-contractor's authorization/approval, the organization is responsible for ensuring that the sub-contractor's quality assurance takes account of such additional requirements.

g) Quality System Training - An AIS Provider should establish an effective, well-planned and resourced quality-related training for all personnel. Those responsible for managing the Quality System should receive training covering the following topics:

- i) An introduction to the concept of the Quality System;
- ii) Quality management;
- iii) The concept of Quality Assurance;
- iv) Quality manuals;
- v) Audit techniques;
- vi) Reporting and recording; and
- vii) The way in which the Quality System will function in the company.

4.0 QUALITY SYSTEMS FOR SMALL ORGANIZATIONS

4.1 The requirement to establish and document a Quality System and to employ a Quality Officer/Manager applies to all Organization. In the context of quality systems, organizations should be categorized according to the number of full-time staff employees.

4.2 Scale of Operation – organizations who employ less than 20 full time employees are regarded as ‘small’ operators as far as quality systems are concerned. Full-time in this context means employed for not less than 40 hours per week excluding vacation periods.

4.3 Complex quality systems could be inappropriate for small organisations and the clerical effort required drawing up manuals and quality procedures for a complex system may stretch their resources. It is therefore accepted that such organization should tailor their quality systems to suit the size and complexity of their operation and allocate resources accordingly.

4.4 For small organizations it may be appropriate to develop a Quality Assurance Programme that employs a checklist. The checklist should have a supporting schedule that requires completion of all checklist items within a specified timescale, together with a statement acknowledging completion of a periodic review by top management. An occasional independent overview of the checklist content and achievement of the Quality Assurance should be undertaken.

4.5 The ‘small’ organization may decide to use internal or external auditors or a combination of the two. In these circumstances it would be acceptable for external specialists and/or qualified organizations to perform the quality audits on behalf of the Quality Officer/Manager.

4.6 If external auditors are conducting the independent quality audit function, the audit schedule should be shown in the relevant documentation.

4.7 Whatever arrangements are made, the organization retains the ultimate responsibility for the quality system and especially the completion and follow-up of corrective actions.



Tanzania Civil Aviation Authority

APPENDIX A
CONTENT OUTLINE OF A COMPLIANT QUALITY MANUAL
(QUALITY MANUAL STRUCTURE)

PRELIMINARY PAGES

- 0.1 Foreword including approval/authorization signature
- 0.2 Preface
- 0.3 Purpose
- 0.4 Normative references
- 0.5 Compliance Statement (including reference to compliance checklist)
- 0.6 Distribution List (Authorised Holders)
- 0.7 Record of Amendments/Revisions
- 0.8 Checklist of effective pages
- 0.9 Table of contents
- 0.10 Definitions
- 0.11 Abbreviations

1.0 CHAPTER 1: CONTEXT OF THE ORGANIZATION

- 1.1 Understanding the Organisation and its context
- 1.2 Understanding the needs and expectations of interested parties
- 1.3 The scope of the quality management system in the organisation
- 1.4 Quality management system and its processes for each Organization's functional area

2.0 CHAPTER 2: LEADERSHIP

- 2.1 Leadership and Commitment (to Apply Uniform Quality System)
- 2.2 Quality Policy
- 2.3 Operator Organization Structure
- 2.4 Organization's Quality management roles, responsibilities and authorities

3.0 CHAPTER 3: PLANNING

- 3.1 Managing risks and opportunities
- 3.2 Quality objectives and planning to achieve them
- 3.3 Management of Change

4.0 CHAPTER 4: SUPPORT

- 4.1 Resources
- 4.2 Training and Competence
- 4.3 Awareness
- 4.4 Communication

4.5 Documented information

5.0 CHAPTER 5: OPERATION

- 5.1 Operational planning and control
- 5.2 Requirements for products and services
 - i) Procedure for handling customer complaints
 - ii) User feedback system
- 5.3 Design and development of products and services
- 5.4 Control of externally provided processes, products and services
- 5.5 Production and service provision
- 5.6 Release of products and services
- 5.7 Control of nonconforming outputs

6.0 CHAPTER 6: PERFORMANCE EVALUATION

- 6.1 Monitoring, measurement, analysis and evaluation
- 6.2 Internal and External audit
- 6.3 Management review/evaluation

7.0 CHAPTER 7: IMPROVEMENT

- 7.1 General
- 7.2 Nonconformity and corrective action
- 7.3 Continual improvement

8.0 CHAPTER 8: SAFETY MANAGEMENT SYSTEM (SMS) AND QMS

- 8.1 Introduction to SMS
- 8.2 Relationship between SMS and QMS
- 8.3 Integration Principle and Method of QMS and SMS

9.0 ATTACHMENTS

- 9.1 Processes
- 9.2 Procedures

10.0 APPENDICES

- 10.1 Forms
- 10.2 Record