

	<p align="center">TANZANIA CIVIL AVIATION AUTHORITY</p> <p align="center">DIRECTORATE OF SAFETY REGULATIONS</p> <p align="center">AIR NAVIGATION INSPECTORATE</p>	<p>Revision: 3</p> <p>Advisory Circular</p>
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AIS/AERONAUTICAL CHARTS PERSONNEL ADEQUACY, EXPERIENCE AND FACILITY REQUIREMENTS

1.0 PURPOSE

This Advisory Circular (AC) provides guidelines to Aeronautical Information Services (AIS) and Aeronautical Chart Provider on the standard procedures for determining the required number of AIS/Charts personnel, as well as facilities including equipment necessary for the provision of Aeronautical Information Services and Aeronautical Charts.

2.0 REFERENCE

- a) Civil Aviation (Aeronautical Information Services) Regulations 2025
- b) Civil Aviation (Aeronautical Charts) Regulations 2017
- c) ICAO Doc 10066 – PANS - AIM;
- d) ICAO Doc 8126 - Aeronautical Information Services Manual;
- e) ICAO Doc 9868 - ICAO Training Manual;
- f) ICAO Doc 9683 - Human Factors Training Manual;
- g) ICAO DOC 999 - Manual on Aeronautical Information Services Training; and
- h) ICAO Doc 9995 - Manual on Evidence Based Training

3.0 GUIDANCE AND PROCEDURES

3.1 GENERAL

- 3.1.1 The objective of AIS is to ensure the flow of information necessary for the safety, regularity and efficiency of air navigation. Erroneous aeronautical information/data can potentially affect the safety of air navigation. To satisfy the uniformity and consistency in the provision of aeronautical information that is required for the operational use, AIS Provider shall ensure high standards in recruitment and training of personnel.
- 3.1.2 In order to satisfy these fundamental criteria, it is essential for the AIS Provider to determine the knowledge and skills requirements and develop a training program for AIS/ Aeronautical charts technical officers engaged in the provision of aeronautical information services and aeronautical charts services. The programme shall include initial, OJT, recurrent and refresher training.
- 3.1.3 The AIS Provider shall only deploy officers who have undergone the requisite training/OJT programme and have been duly designated as competent in the respective disciplines that they shall be offering the services.

3.2 PERSONNEL ADEQUACY

The staffing requirements for AIS and Aeronautical Charting units shall be determined to ensure that the number of personnel is sufficient and appropriate to support all services provided at the stations. The adequacy of personnel shall be based on the following key factors.

3.2.1 Operational Factors

- a) **Volume of Aircraft Operations:** A higher number of aircraft operations, indicating more complex traffic, necessitates more extensive information and thus more staff to process it.
- b) **Hours of Service:** Facilities operating 24/7 require a shift-based staffing model, which increases the overall personnel needed compared to a facility with fixed operational hours.
- c) **Scope of Services:** The extent of the AIS services provided by the service provider directly influences the amount of information to be handled and the complexity of the tasks, affecting staff numbers.

3.2.2 Information Management Factors

- a) **Amount and Type of Information:** The volume and complexity of data, such as Aeronautical Information Publications (AIPs), Notices to Airmen (NOTAMs), Pre-Flight Information Bulletins (PIBs), and Aeronautical Information Circulars (AICs), directly influence staffing requirements. Larger quantities of information demand more personnel for accurate collection, processing, and timely dissemination of information.
- b) **Level of Automation:** Increased automation within Aeronautical Information Services (AIS) and aeronautical charting systems can reduce the manual workload. However, qualified staff remain essential for system monitoring, maintenance, and managing cases where automation is inadequate or fails

3.2.3 Personnel Factors

- a) **Competency and Experience:** Staff must possess the appropriate knowledge, skills, and experience (competencies) for specific job roles. The required proficiency level and the need for ongoing training influence staffing needs.
- b) **Training Needs:** Analysis of competency gaps between current and expected performance helps identify training requirements, which in turn informs the number of staff needed, especially for specialized roles.
- c) **Task Analysis:** Detailed analysis of the tasks and duties required for each position helps define the necessary staffing levels and can be used to develop person specifications and job descriptions.

3.2.4 Regulatory and Planning Factors

- a) **Regulatory Requirements:** National and international (e.g., ICAO) standards, procedures, and operational requirements set the baseline for the quality and volume of information, which directly impacts the required staffing.
- b) **Human Resource Planning: Tools like the ICAO's Human Resources Planning** Guidance Manual provide frameworks for detailed analysis to determine both minimum and optimized staffing needs by assessing tasks, operational conditions, and staffing factors.

3.3 EXPERIENCE

When determining the scope and depth of skills required of AIS and Aeronautical charts personnel, the AIS Provider shall analyse the duties and tasks required of them to ascertain the requisite training and experience for effective execution of duties. This information shall be provided in the Manual of ANS operations Part III. The AIS/Aeronautical Charts Provider shall develop job descriptions and training programme for the technical staff, while ensuring that all training records for AIS and Aeronautical charts personnel are properly maintained and up to date.

3.4 FACILITIES AND EQUIPMENT

3.4.1 The AIS Provider shall endeavour to avail working tools that facilitate the effective and efficient delivery of services. In addition to the basic office furniture and stationery, the following minimum facilities and equipment shall be provided for each office: -

a) *International NOTAM Office (NOF), Aeronautical Telecommunication Centre and AIM Aerodrome Units*

- i) Adequate desktop Computers (PCs) for data processing;
- ii) Effective network (LAN) linked to the AFTN/AMHS;
- iii) Network Printers;
- iv) Effective internet connection;
- v) Aeronautical Data and Information Management Systems (NOTAM and Flight Plan Management systems);
- vi) Adequate table for plotting;
- vii) Ample office accommodation and seats
- viii) Adequate filing cabinets;
- ix) Photocopier
- x) Telephone (fixed lines and mobile phones);
- xi) Scanner;
- xii) Digital GPS Clock;
- xiii) Reference charts and documents to facilitate pre-flight briefing.

b) *Aeronautical Information Publication and Aeronautical chart Unit*

- i) Adequate desktop Computers (PCs) for data processing;
- ii) Effective network (LAN) linked to the AFTN;
- iii) Network Printers;
- iv) Effective internet connection;
- v) Aeronautical Data and Information Management Systems (AIP, Charting Systems, Procedure design expert software);
- vi) CD duplicators/writers;
- vii) Plotting table;
- viii) Photocopy;
- ix) Plotter;
- x) Telephones;
- xi) Scanner;
- xii) Digital Clock;
- xiii) Filing cabinets;

- xiv) Digitizing tables;
- xv) Ample office accommodation and seats.



Tanzania Civil Aviation Authority