



SCAA

DOC No: AC-011-007

**AERONAUTICAL CHARTS
SERVICE PROVIDERS FRAME WORK
NOVEMBER 2022**

Issued and Published under the Authority of the Director General

SUDAN CIVIL AVIATION AUTHORITY
THE REPUBLIC OF SUDAN
NOVEMBER 2022



Title: Aeronautical Charts Service Providers Frame Work

Target Audience: Air Navigation Services and Aerodromes.

1.0 General

Civil Aviation Authority Advisory Circulars 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.

An Advisory Circular may also include guidance material (GM) to facilitate compliance with the rule requirements. Guidance material must not be regarded as an acceptable means of compliance.

2.0 Purpose

This AC describes the rules governing the operation of the entities' providing Aeronautical Charts used for air navigation within the republic of Sudan as designated by the civil aviation authority.

3.0 References

This Advisory Circular relates specifically to the requirement and technical regulations of charts provision detailed in the Sudan Civil Aviation Regulations (SUCAR_PART 4), ICAO DOC 8697 (Charts manual) and ICAO specimen charts, the charts service provider shall also comply with other related procedures such as: -

- a) ICAO DOC 8697 (Charts manual) and ICAO specimen charts.
- b) ICAO DOC 9674 world geodetic system -1984 (WGS-84) manual.
- c) SUCAR_PART15 (Aeronautical Information services).
- d) SUCAR_PART 14 (Aerodromes).
- e) ICAO DOC 10066 (Aeronautical Information Management).
- f) ICAO DOC 7192 (Aeronautical information services personnel).
- g) ICAO Document 8168 (Aircraft Operations) :
 - i. Volume I — Flight Procedures
 - ii. Volume II — Construction of Visual and Instrument Flight Procedures).

4.0 Applicability

The obligation described in this AC applies to Air navigation services, Aerodromes and any entity providing aeronautical charts for the republic of Sudan.

5.0 Guidance and procedures

All aeronautical charts service providers shall comply with the following requirements:

5.1 Personnel requirements

5.1.1 Any entity providing aeronautical charts shall employ sufficient personnel to collect, collate, check, coordinate, edit, and amend aeronautical charts.

5.1.1.1 No person shall provide Aeronautical Charts services for Sudan unless the following requirements are met:

- a) A survey engineer or equivalent with basic knowledge of aviation.
- b) Basic knowledge of Aeronautical data (collection, verification and validation) and WGS84 manual requirements.
- c) ICAO aeronautical cartography certificates 022 (Basic and Advance).



ISSUED AND PUBLISHED UNDER THE AUTHORITY OF THE DIRECTOR GENERAL OF CIVIL AVIATION

- d) Quality management background.
- 5.2 Facility requirement
Aeronautical charts service providers shall establish an appropriate office with all the facilities that enable chart production.
- 5.3 Documentation
- 5.3.1 Each Aeronautical chart service provider shall: -
- 5.3.1.1 prepare a document contains:
- Description of the organization and its main objectives.
 - Duties and responsibility of the staff.
 - Training program demonstrates the basic, advanced; specialized, recurrent and on job training that meet the requirement listed in (2.1).
 - List of charts to be provided under their responsibility (see attachment A).
 - Procedures of collection, verification and validation of the aeronautical information used to produce the charts.
 - Procedures of production and maintenance of each chart listed in (d).
- 5.3.1.2 Establish a system of maintaining documents such as charts products and training records.
- 5.4 Hold a current copy of all relevant references and guidance Materials. Charts approval and publication
- 5.4.1 All aeronautical charts produced by the services provider shall be submitted to the authority for an approval prior the publication.
- 5.4.2 all chart shall be submitted in the format of the ICAO specimen charts within a file contains:
- A technical report detailing the Aeronautical information used to produce the particular chart. (Guidance for preparing the technical report is detailed in DOC 9674 –WGS84).
- **Note: - the technical report submitted with the files for the approval of the Instrument flight procedure design is sufficient for the charts approval.**
- A verification certificate of the survey data complies with the aeronautical charts data quality requirements signed from the official survey authority.
 - A soft and hard copy of the particular chart.
- 5.5 Chart maintenance
- 5.5.1 Each chart approved by the Sudan civil aviation authority be revised as follows:
- When a significant change occurs requiring an amendment of a chart.
 - To comply with amendments to applicable ICAO provisions and other international and national standards and recommended practices.
- 5.5.2 Any amendment or maintenance of an aeronautical chart is subject to approval by the Sudan civil aviation authority.
- 5.6 Coordination
Aeronautical charts providers shall, where applicable coordinate with the following entities: -
- Air Navigation Services Providers (AIM, ATC, PANS-OPS...etc.).
 - Directorate of Aerodromes Safety and Standards (DASS).
 - All concerned Aerodromes stakeholders.
 - Sudanese Survey Authority.



Sudan Civil Aviation Authority
ADVISORY CIRCULAR
AC-011-007

ISSUED AND PUBLISHED UNDER THE AUTHORITY OF THE DIRECTOR GENERAL OF CIVIL AVIATION

6.0 Attachments

The table below describes all types of charts as detailed in SUCAR part 4 (Aeronautical Charts) and ICAO Doc 8697 (Aeronautical Charts Manual) and each chart provider.

No.	Chart	Classification	Providers
1-	Aerodrome Obstacle Chart — ICAO Type A.	Mandatory	ANS
2-	Precision Approach Terrain Chart — ICAO.	Mandatory	ANS
3-	En-Route Chart — ICAO.	Mandatory	ANS
4-	Instrument Approach Chart — ICAO.	Mandatory	ANS
5-	Aerodrome/Heliport Chart — ICAO.	Mandatory	Aerodromes
6-	World Aeronautical Chart — ICAO, 1:1000000.	Mandatory	ANS
7-	Aerodrome Obstacle Chart — ICAO Type B.	Non-Mandatory	ANS
8-	The Aerodrome Ground Movement Chart — ICAO.	Non-Mandatory	Aerodromes
9-	The Aircraft Parking/Docking Chart — ICAO.	Non-Mandatory	Aerodromes
10-	The Aeronautical Chart — ICAO 1:500000.	Non-Mandatory	ANS
11-	Plotting Chart — ICAO.	Non-Mandatory	ANS
12-	The Area Chart — ICAO.	Conditional	ANS
13-	The Standard Departure Chart — Instrument (SID) — ICAO.	Conditional	ANS
14-	The Standard Arrival Chart — Instrument (STAR) — ICAO.	Conditional	ANS
15-	The Visual Approach Chart — ICAO.	Conditional	ANS
16-	1Aerodrome Terrain and Obstacle Chart — ICAO (Electronic).	-	ANS
17-	Aeronautical Navigation Chart — ICAO Small Scale.	-	ANS
18-	ATC Surveillance Minimum Altitude Chart — ICAO.	-	ANS

Fakhreldein Osman Ahmed
Director General
Sudan Civil Aviation Authority
November 2022



DOC No: Ac-011-007

**Sudan Civil Aviation Authority
AERONAUTICAL CHARTS SERVICE PROVIDERS FRAME WORK
NOVEMBER 2022**