

STATE OF LIBYA
MINISTRY OF TRANSPORT
CIVIL AVIATION AUTHORITY



دولة ليبيا
وزارة المواصلات
مصلحة الطيران المدني

LYCAR Part-AIS

Libyan Civil Aviation Regulation

Part - AIS: Aeronautical Information Services

Second issue, February 2023

Approved by and published under the authority of the President of LYCAA.

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FOREWORD

1. The regulation contained herein is adopted under the provision of Article N5 of Libyan Civil Aviation Law N6 of 2005, issued and signed by the President of Libyan Civil Aviation by virtue of powers vested from the Minister of Transport under the resolution N154 issued on 13.05.2015.
2. This Libyan Civil Aviation Regulation - Part Aeronautical Information Services (LYCAR - Part AIS) prescribes guidelines, rules and procedures for the provision of Aeronautical Information Services in order to ensure safety, regularity and efficiency of air navigation within the airspace jurisdiction of the State of Libya. This covers the rules and regulations for Aeronautical Information Services within the Tripoli Flight Information Region.
3. This LYCAR- Part AIS is developed based on the ICAO Standards and Recommended Practices prescribed. It has been modeled upon similar regulations implemented by other member States and includes the subject matter endorsed within ICAO Annex 15, Aeronautical Information Services.
4. The information contained herein is subject to constant review in the light of changing regulations and requirements. No subscriber or other reader should act on the basis of any such information without taking appropriate professional advice when/as indicated/required. Although, every effort has been made to ensure accuracy, the Libyan Civil Aviation Authority (LYCAA) shall not be held responsible for loss or damage caused by errors, omissions, misprints or misinterpretation of the content hereof.
5. The use of the male gender implies the female gender and vice versa.
6. Copies of this regulation can be obtained from the ANS Inspectorate Office of the LYCAA or can be downloaded on the official website: www.caa.gov.ly
7. Transition Period: The Libyan Air Navigation Service Providers are required to comply with the requirements of this regulation within three months after its official publication.

Dr. Mohamed Shlibek
President of LYCAA
14th of February 2023



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Abbreviations

ACC	Area control center
ACFT	Aircraft
ADIZ	Air defense identification zone
ADS-B	Automatic dependent surveillance - broadcast
ADS-C	Automatic dependent surveillance - contract
AFS	Aeronautical fixed service
AFTN	Aeronautical fixed telecommunication network
AIC	Aeronautical Information Circular
AICM	Aeronautical Information conceptual model
AIM	Aeronautical information management
AIP	Aeronautical Information Publication
AIRAC	Aeronautical Information Regulation and Control
AIREP	Air-report
AIS	Aeronautical information service
AMD	Aerodrome mapping data
AMDB	Aerodrome mapping database
AMHS	Aeronautical message Handling system
AMDT	Amendment (AIP Amendment)
AMSL	Above mean sea level
ANS	Air navigation service
ANSP	Air navigation service provider
ARO	Air traffic services reporting office
ARP	Aerodrome reference point
ASBU	Aviation system block upgrades
ATM	Air traffic management
ATS	Air Traffic Service
ATZ	Aerodrome traffic zone
AWY	Airway
CNS	Communications, navigation and surveillance
COM	Communications
CPDLC	Controller-pilot data Link communications
CRC	Cyclic redundancy check
CTR	Control zone
DAIM	Daily airspace information management
DEM	Digital Elevation Model
DME	Distance measuring equipment
DTD	Distance to touchdown
EST	Estimate or estimated or estimation
FIC	Flight information center
FIR	Flight information region
FL	Flight level
FMS	Flight management system

GANP	Global air navigation plan
GNSS	Global navigation satellite system
IFR	Instrument flight rules
ILS	Instrument landing system
ISO	International standard organization
LYCAA	Libyan civil aviation authority
MEA	Minimum en-route altitude
MET	Meteorological or meteorology
MOCA	Minimum obstacle clearance altitude
MSL	Mean Sea level
NOF	International NOTAM office
NOTAM	Notice to Airmen
PANS	Procedures for Air Navigation Services
PBC	Performance-based communication
PBN	Performance-based navigation
PBS	Performance-based surveillance
PERM	Permanent
PIB	Pre-flight information bulletin
QMS	Quality management system
RCP	Required communication performance
RCR	Runway condition report
RSP	Required surveillance performance
RNAV	Area Navigation
RWY	Runway
SAR	Search and rescue
SARPS	Standards and Recommended Practices
SID	Standard Instrument Departure
SIGMET	Inflight weather advisories significant meteorological hazards
SIGWX	Significant weather
SMS	Safety management system
STAR	Standard instrument arrival
SWIM	System wide information management
TAF	Aerodrome forecast
TCAS	Traffic collision avoidance system
TMA	Terminal control area
TWR	Tower
UIR	Upper flight information region
UTC	Universal Time Coordinated
VFR	Visual flight rules
VMC	Visual meteorological conditions
VOR	VHF omnidirectional radio range
WGS-84	World Geodetic System — 1984

Definitions

Aerodrome. A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aerodrome mapping data (AMD). Data collected for the purpose of compiling aerodrome mapping information.

Note: Aerodrome mapping data is collected for purposes that include the improvement of the user's situational awareness, surface navigation operations, training, charting and planning.

Aerodrome mapping database (AMDB). A collection of aerodrome mapping data organized and arranged as a structured data set.

Aeronautical chart. A representation of a portion of the Earth, its culture and relief, specifically designated to meet the requirements of air navigation.

Aeronautical data. A representation of aeronautical facts, concepts or instructions in a formalized manner suitable for communication, interpretation or processing.

Aeronautical fixed service (AFS). A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.

Aeronautical information. Information resulting from the assembly, analysis and formatting of aeronautical data.

Aeronautical Information Circular (AIC). A notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP, but which relates to flight safety, air navigation, technical, administrative or legislative matters.

Aeronautical information management (AIM). The dynamic, integrated management of aeronautical information through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties.

Aeronautical information product. Aeronautical data and aeronautical information provided either as digital data sets or as a standardized presentation in paper or electronic media. Aeronautical information products include:

- Aeronautical Information Publication (AIP), including Amendments and Supplements;
- Aeronautical Information Circulars (AIC);
- aeronautical charts;
- NOTAM; and
- digital data sets.

Note: Aeronautical information products are intended primarily to satisfy international requirements for the exchange of aeronautical information.

Aeronautical Information Publication (AIP). A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.

Aeronautical information service (AIS). A service established within the defined area of coverage responsible for the provision of aeronautical data and aeronautical information necessary for the safety, regularity and efficiency of air navigation.

AIP Amendment. Permanent changes to the information contained in the AIP.

AIP Supplement. Temporary changes to the information contained in the AIP which are provided by means of special pages.

AIRAC. An acronym (aeronautical information regulation and control) signifying a system aimed at advance notification, based on common effective dates, of circumstances that necessitate significant changes in operating practices.

Air defense identification zone (ADIZ). Special designated airspace of defined dimensions within which aircraft are required to comply with special identification and/or reporting procedures additional to those related to the provision of air traffic services.

Air traffic management (ATM). The dynamic, integrated management of air traffic and airspace (including air traffic services, airspace management and air traffic flow management) — safely, economically and efficiently — through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions.

Application. Manipulation and processing of data in support of user requirements (ISO 19104).

Area navigation (RNAV). A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these.

Note: Area navigation includes performance-based navigation as well as other operations that do not meet the definition of performance-based navigation.

ASHTAM. A special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption and/or volcanic ash cloud that is of significance to aircraft operations.

Assemble. A process of merging data from multiple sources into a database and establishing a baseline for subsequent processing.

Note: The assemble phase includes checking the data and ensuring that detected errors and omissions are rectified.

ATS surveillance service. Term used to indicate a service provided directly by means of an ATS surveillance system.

ATS surveillance system. A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.

Note: A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal to or better than mono-pulse SSR.

Automatic dependent surveillance - broadcast (ADS-B). A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

Automatic dependent surveillance — contract (ADS-C). A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports.

Note: The abbreviated term “ADS contract” is commonly used to refer to ADS event contract, ADS demand contract, ADS periodic contract or an emergency mode.

Automatic terminal information service (ATIS). The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof:

- Data link-automatic terminal information service (D-ATIS). The provision of ATIS via data link.
- Voice-automatic terminal information service (Voice-ATIS). The provision of ATIS by means of continuous and repetitive voice broadcasts.

Bare Earth. Surface of the Earth including bodies of water and permanent ice and snow, and excluding vegetation and manmade objects.

Calendar. Discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day (ISO 19108).

Canopy. Bare Earth supplemented by vegetation height.

Confidence level. The probability that the true value of a parameter is within a certain interval around the estimate of its value.

Note: The interval is usually referred to as the accuracy of the estimate.

Controller-pilot data link communications (CPDLC). A means of communication between controller and pilot, using data link for ATC communications.

Culture. All man-made features constructed on the surface of the Earth, such as cities, railways and canals.

Cyclic redundancy check (CRC). A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.

Danger area. An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.

Data accuracy. A degree of conformance between the estimated or measured value and the true value.

Data completeness. The degree of confidence that all of the data needed to support the intended use is provided.

Data format. A structure of data elements, records and files arranged to meet standards, specifications or data quality requirements.

Data integrity (assurance level). A degree of assurance that an aeronautical data and its value has not been lost or altered since the origination or authorized amendment.

Data product. Data set or data set series that conforms to a data product specification (ISO 19131).

Data product specification. Detailed description of a data set or data set series together with additional information that will enable it to be created, supplied to and used by another party (ISO 19131).

Note: A data product specification provides a description of the universe of discourse and a specification for mapping the universe of discourse to a data set. It may be used for production, sales, end-use or other purpose.

Data quality. A degree or level of confidence that the data provided meet the requirements of the data user in terms of accuracy, resolution, integrity (or equivalent assurance level), traceability, timeliness, completeness and format.

Data resolution. A number of units or digits to which a measured or calculated value is expressed and used.

Data set. Identifiable collection of data (ISO 19101).

Data set series. Collection of data sets sharing the same product specification (ISO 19115).

Data timeliness. The degree of confidence that the data is applicable to the period of its intended use.

Data traceability. The degree that a system or a data product can provide a record of the changes made to that product and thereby enable an audit trail to be followed from the end-user to the originator.

Datum. Any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities (ISO 19104).

Digital Elevation Model (DEM). The representation of terrain surface by continuous elevation values at all intersections of a defined grid, referenced to common datum.

Note: Digital Terrain Model (DTM) is sometimes referred to as DEM.

Direct transit arrangements. Special arrangements approved by the public authorities concerned by which traffic which is pausing briefly in its passage through the Contracting State may remain under their direct control.

Ellipsoid height (geodetic height). The height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.

Feature. Abstraction of real-world phenomena (ISO 19101).

Feature attribute. Characteristic of a feature (ISO 19101).

Note: A feature attribute has a name, a data type and a value domain associated with it.

Feature operation. Operation that every instance of a feature type may perform (ISO 19110*).

Note: An operation upon the feature type dam is to raise the dam. The result of this operation is to raise the level of water in the reservoir.

Feature relationship. Relationship that links instances of one feature type with instances of the same or a different feature type (ISO 19101).

Feature type. Class of real-world phenomena with common properties (ISO 19110).

Note: In a feature catalogue, the basic level of classification is the feature type.

Geodesic distance. The shortest distance between any two points on a mathematically defined ellipsoidal surface.

Geodetic datum. A minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system/frame.

Geoid. The equipotential surface in the gravity field of the Earth which coincides with the undisturbed mean sea level (MSL) extended continuously through the continents.

Note: The geoid is irregular in shape because of local gravitational disturbances (wind tides, salinity, current, etc.) and the direction of gravity is perpendicular to the geoid at every point.

Geoid undulation. The distance of the geoid above (positive) or below (negative) the mathematical reference ellipsoid.

Note: In respect to the World Geodetic System — 1984 (WGS-84) defined ellipsoid, the difference between the WGS-84 ellipsoidal height and orthometric height represents WGS-84 geoid undulation.

Gregorian calendar. Calendar in general use; first introduced in 1582 to define a year that more closely approximates the tropical year than the Julian calendar (ISO 19108).

Note: In the Gregorian calendar, common years have 365 days and leap years 366 days divided into twelve sequential months.

Height. The vertical distance of a level, point or an object considered as a point, measured from a specific datum.

Heliport. An aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters.

Human factors principles. Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

Integrity classification (aeronautical data). Classification based upon the potential risk resulting from the use of corrupted data. Aeronautical data is classified as:

a) routine data: there is a very low probability when using corrupted routine data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe;

b) essential data: there is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe; and

c) critical data: there is a high probability when using corrupted critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

International airport. Any airport designated by the Contracting State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, animal and plant quarantine and similar procedures are carried out.

International NOTAM office (NOF). An office designated by a State for the exchange of NOTAM internationally.

Logon address. A specified code used for data link logon to an ATS unit.

Maneuvering area. That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

Metadata. Data about data (ISO 19115).

Note: A structured description of the content, quality, condition or other characteristics of data.

Minimum en-route altitude (MEA). The altitude for an en-route segment that provides adequate reception of relevant navigation facilities and ATS communications, complies with the airspace structure and provides the required obstacle clearance.

Minimum obstacle clearance altitude (MOCA). The minimum altitude for a defined segment of flight that provides the required obstacle clearance.

Movement area. That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the maneuvering area and the apron Navigation specification. A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications:

- Required navigation performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH.
- Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.

Note 1: The Performance-based Navigation (PBN) Manual (Doc 9613), Volume II, contains detailed guidance on navigation specifications.

Note 2: The term RNP, previously defined as “a statement of the navigation performance necessary for operation within a defined airspace”, has been removed from this Annex as the concept of RNP has been overtaken by the concept of PBN. The term RNP in this Annex is now solely used in the context of navigation specifications that require performance monitoring and alerting, e.g. RNP 4 refers to the aircraft and operating requirements, including a 4 NM lateral performance with on-board performance monitoring and alerting that are detailed in Doc 9613.

Next intended user. The entity that receives the aeronautical data or information from the aeronautical information service.

NOTAM. A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

Obstacle. All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that:

- a) are located on an area intended for the surface movement of aircraft; or
- b) extend above a defined surface intended to protect aircraft in flight; or
- c) stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.

Obstacle/terrain data collection surface. A defined surface intended for the purpose of collecting obstacle/terrain data.

Origination (aeronautical data or aeronautical information). The creation of the value associated with new data or information or the modification of the value of existing data or information.

Originator (aeronautical data or aeronautical information). An entity that is accountable for data or information origination and/or from which the AIS organization receives aeronautical data and aeronautical information.

Orthometric height. Height of a point related to the geoid, generally presented as an MSL elevation.

Performance-based communication (PBC). Communication based on performance specifications applied to the provision of air traffic services.

Note: A required communication performance (RCP) specification includes communication performance requirements that are allocated to system components in terms of the communication to be provided and associated transaction time, continuity, availability, integrity, safety and functionality needed for the proposed operation in the context of a particular airspace concept.

Performance-based navigation (PBN). Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.

Note: Performance requirements are expressed in navigation specifications (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.

Performance-based surveillance (PBS). Surveillance based on performance specifications applied to the provision of air traffic services.

Note: A required surveillance performance (RSP) specification includes surveillance performance requirements that are allocated to system components in terms of the surveillance to be provided and associated data delivery time, continuity, availability,

integrity, accuracy of the surveillance data, safety and functionality needed for the proposed operation in the context of a particular airspace concept.

Portrayal. Presentation of information to humans (ISO 19117).

Position (geographical). Set of coordinates (latitude and longitude) referenced to the mathematical reference ellipsoid which define the position of a point on the surface of the Earth.

Post spacing. Angular or linear distance between two adjacent elevation points.

Precision. The smallest difference that can be reliably distinguished by a measurement process.

Note: In reference to geodetic surveys, precision is a degree of refinement in performance of an operation or a degree of perfection in the instruments and methods used when taking measurements.

Pre-flight information bulletin (PIB). A presentation of current NOTAM information of operational significance, prepared prior to flight.

Prohibited area. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.

Quality. Degree to which a set of inherent characteristics fulfils requirements (ISO 9000).

Note 1: The term “quality” can be used with adjectives such as poor, good or excellent.

Note 2: “Inherent”, as opposed to “assigned”, means existing in something, especially as a permanent characteristic.

Quality assurance. Part of quality management focused on providing confidence that quality requirements will be fulfilled (ISO 9000).

Quality control. Part of quality management focused on fulfilling quality requirements (ISO 9000).

Quality management. Coordinated activities to direct and control an organization with regard to quality (ISO 9000).

Radio navigation service. A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids.

Required communication performance (RCP) specification. A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication.

Required surveillance performance (RSP) specification. A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance.

Requirement. Need or expectation that is stated, generally implied or obligatory (ISO 9000).

Note 1: “Generally implied” means that it is custom or common practice for the organization, its customers and other interested parties, that the need or expectation under consideration is implied.

Note 2: A qualifier can be used to denote a specific type of requirement, e.g. product requirement, quality management requirement, customer requirement.

Note 3: A specified requirement is one which is stated, for example, in a document.

Note 4: Requirements can be generated by different interested parties.

Restricted area. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions.

Route stage. A route or portion of a route flown without an intermediate landing.

SNOWTAM. A special series NOTAM given in a standard format providing a surface condition report notifying the presence or cessation of hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area.

Station declination. An alignment variation between the zero-degree radial of a VOR and true north, determined at the time the VOR station is calibrated.

Terrain. The surface of the Earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow, and excluding obstacles.

Traceability. Ability to trace the history, application or location of that which is under consideration (ISO 9000).

Note: When considering product, traceability can relate to:

- *the origin of materials and parts;*
- *the processing history; and*
- *the distribution and location of the product after delivery.*

Validation. Confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled (ISO 9000).

Verification. Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled (ISO 9000).

Note: The term “verified” is used to designate the corresponding status.

VOLMET. Meteorological information for aircraft in flight.

Data link-VOLMET (D-VOLMET). Provision of current aerodrome routine meteorological reports (METAR) and aerodrome special meteorological reports (SPECI), aerodrome forecasts (TAF), SIGMET, special air-reports not covered by a SIGMET and, where available, AIRMET via data link.

VOLMET broadcast. Provision, as appropriate, of current METAR, SPECI, TAF and SIGMET by means of continuous and repetitive voice broadcasts.

Subpart A – General

AIS.005 Applicability

This Regulation prescribes:

- (a) Libyan Civil aviation regulations governing the certification and operation of organizations providing an aeronautical information service for the State of Libya; and
- (b) The requirements for the Aeronautical Information products, technical requirements and provisions including the scope of Aeronautical Information Management (AIM), the role of AIM, the functions of AIM, the products and services within an AIM environment and the associated update mechanisms.

AIS.010 Entry into force

This Regulation shall enter into force from the day of its publication except for [AIS.020](#) related to the requirement for certification of Aeronautical Information Service (AIS) providers, which shall apply from 22nd of June 2025.

AIS.015 Definitions

Definitions existing in ICAO Documents shall form part of this regulation, supplemented by the definitions contained in this Part. Where there are differences between the definitions in the two sources, this Part Definitions and Abbreviations has precedence.

AIS.020 Requirement for certificate

No person shall provide an aeronautical information service for the Tripoli FIR except under the authority of and in accordance with the provisions of an aeronautical information service certificate issued under this Part.

AIS.025 Application for certificate

Each applicant for the grant of an aeronautical information service certificate shall complete an application form and submit it to the Authority (LYCAA) with:

- (a) The exposition required by [AIS.095](#); and
- (b) A payment of the appropriate application fee prescribed by regulations.

AIS.030 Issue of certificate

An applicant is entitled to an aeronautical information service certificate if:

- (a) The applicant meets the requirements of [Subpart B](#) and applicable subparts of this Part;
- (b) The applicant and the applicant's senior person or persons required by [AIS.070\(a\)](#) paras (1) and (2) are acceptable to the Authority;

- (c) The organization's exposition as required by [AIS.095](#) is acceptable to the Authority; and
- (d) The Authority is satisfied that the granting of the certificate is not contrary to the interests of aviation safety.

AIS.035 Privileges of certificate

The aeronautical information service certificate specifies the aeronautical information services that the certificate holder is authorized to provide.

AIS.040 Duration of certificate

- (a) An aeronautical information service certificate is granted or renewed for a maximum period of three (3) years.
- (b) An aeronautical information service certificate remains in force until it expires, or is suspended or revoked.
- (c) Upon revocation, suspension or surrender, the aeronautical information service certificate shall be returned to the Authority without delay.
- (d) The holder of an aeronautical information service certificate that expires shall surrender the certificate to the Authority.
- (e) The holder of an aeronautical information service certificate that is suspended shall immediately return the certificate to the Authority for appropriate endorsement.
- (f) The validity of the Certificate is based upon the continued operation in accordance with this Regulation.
- (g) The Certificate shall remain valid subject to periodic surveillance audits conducted at the discretion of the Authority confirming ongoing compliance with the Libyan Civil Aviation Regulations.

AIS.045 Renewal of certificate

- (a) An application for the renewal of an aeronautical information service certificate shall be made.
- (b) The application shall be submitted to the Authority before the application renewal date specified on the certificate or, if no such date is specified, not less than thirty (30) days before the certificate expires.

AIS.050 Safety inspections and audits

- (a) The Authority shall conduct an initial certification audit and thereafter audits at intervals not exceeding two years (24 months) at the certificate holder's office/facility.
- (b) The Authority may require the certificate holders to provide such information as the Authority considers relevant to the inspection or audit.
- (c) The Authority shall be granted unrestricted access to the certificate holder's facilities and shall be permitted to carry its own equipment (e.g., computers, cameras and recording devices) under all conditions while carrying out its oversight functions.

AIS.055 Resolution of safety issues

- (a) When objective evidence is found showing non-compliance of the holder of a Certificate with the requirements, the finding shall be set out as follows:
 - (1) A level one finding is any non-compliance with these regulations which could lead to uncontrolled non-compliances with applicable requirements and could affect the safety of aircraft.
 - (2) A level two finding is any non-compliance with these regulations which is not classified as level one.
 - (3) A level three finding is any opportunity of improvement.
- (b) After a receipt of notification of findings:
 - (1) A level one finding must be rectified immediately or within the short timescale specified;
 - (2) In case of level two findings, the corrective action period granted by the authority shall be appropriate to the nature of the finding but in any case, shall not be more than ninety (90) days. In certain circumstances, the Authority may extend the ninety (90) days period subject to a satisfactory corrective action plan.
 - (3) the certificate holders shall:
 - i. Identify the root cause of the non-compliance;
 - ii. Define a corrective action plan; and
 - iii. Demonstrate corrective action implementation to the satisfaction of the Authority within a period agreed with the Authority.
- (c) In the case of level one or level two findings, the Certificate may be subject to a partial or full suspension or revocation. The holder of the certificate shall provide confirmation of receipt of the notice of suspension or revocation of the certificate in a timely manner.

AIS.060 Transferability

An aeronautical information service certificate, granted in accordance with the requirements of this Regulation, is not transferable.

AIS.065 Non-compliance

Non-compliance with this regulation may require the Authority to restrict, suspend or revoke the Aeronautical Information Service certificate.

Subpart B - Certification requirements

AIS.070 Personnel requirements

(a) Each applicant for the grant of an aeronautical information service certificate shall engage, employ or contract:

- (1) a senior person identified as the Chief Executive, who has the authority within the applicant's organization to ensure that each aeronautical information service listed in their exposition:
 - i. can be financed and is provided to meet operational requirements; and
 - ii. is provided in accordance with the requirements prescribed by this Part.
- (2) a senior person or group of senior persons who are responsible for ensuring that the applicant's organization complies with the requirements of this Part. Such nominated person or persons shall be ultimately responsible to the LYCAA.
- (3) sufficient personnel to collect, collate, check, coordinate, edit and publish aeronautical information for the aeronautical information services listed in the applicant's exposition.

(b) The applicant shall:

- (1) establish procedures acceptable to the Authority and follow the approved training programs for AIS personnel as follows, as appropriate:
 - i. Ab initio training;
 - ii. Initial training;
 - iii. Specialized training;
 - iv. Recurrent/Refresher training; and
 - v. On-job-training.
- (2) establish a procedure to initially assess the competence of those personnel authorized by the applicant to check, edit, and publish aeronautical information for the aeronautical information services listed in their exposition;
- (3) establish a procedure to maintain the competence of those authorized personnel;
- (4) develop job descriptions for AIS personnel containing safety responsibilities; and
- (5) establish procedures acceptable to the Authority for keeping training record for all technical staff and to be maintained up to date.

AIS.075 Facility requirements

Each applicant for the grant of an aeronautical information service certificate shall establish offices and facilities that:

- (a) Are appropriate for the aeronautical information services listed in their exposition; and
- (b) Meet the applicable requirements of this regulation.

AIS.080 Documentation

- (a) Each applicant for the grant of an aeronautical information service certificate shall:
 - (1) document the format and standards for the aeronautical data and aeronautical information published under the authority of their certificate;
 - (2) ensure that the format and standards take into account the circumstances under which the information will be used; and
 - (3) hold copies of relevant reference material, standards, practices and procedures, and any other documentation that is necessary for the aeronautical information services listed in their exposition.
- (b) The applicant shall establish a procedure to control all the documentation, required by paragraph (a), to ensure that:
 - (1) the documentation is reviewed and authorized by appropriate personnel before issue;
 - (2) current issues of relevant documentation are available to staff at all locations where they need access to such documentation for the aeronautical information services listed in their exposition;
 - (3) all obsolete documentation is promptly removed from all points of issue or use;
 - (4) changes to documentation are reviewed and approved by appropriate personnel; and
 - (5) the current version of each item of documentation can be identified to preclude the use of out-of-date editions.

AIS.085 Error correction in published information

- (a) Each applicant for the grant of an aeronautical information service certificate shall establish procedures to record, investigate, correct and report any errors that are detected in the aeronautical information published under the authority of their certificate.

(b) The procedures shall ensure that:

- (1) the error is corrected by the most appropriate means relative to the operational significance of the error;
- (2) the correction is clearly identified in the republished information;
- (3) the source of the error is identified and, where possible, eliminated; and
- (4) the Authority is notified of a promulgated information incident.

AIS.090 Records

(a) Each applicant for the grant of an aeronautical information service certificate shall establish procedures to identify, collect, index, store, maintain and dispose of the records that are necessary for the aeronautical information services listed in their exposition.

(b) The procedures shall ensure that:

- (1) there are records enabling all incoming and outgoing aeronautical information to be readily identified by serial number and date and that supplementary information can be similarly verified and, where necessary, authenticated;
- (2) there is a record of each person who is authorized by the applicant to check, edit, and publish aeronautical information;
- (3) there is a record of each occurrence of error correction under the procedures required by [AIS.085](#);
- (4) all records are legible and of a permanent nature; and
- (5) all records are retained for at least five (5) years except NOTAM, AIP Supplements and Aeronautical Information Circulars (AIC), which need only be retained for three (03) months after cancellation.

AIS.095 Organization exposition

(a) An applicant for the grant of an aeronautical information service certificate shall provide the Authority with an exposition containing:

- (1) a statement signed by the Chief Executive on behalf of the applicant's organization confirming that:
 - i. the exposition and any included manuals define the organization and demonstrate its means and methods for ensuring ongoing compliance with this Regulation; and
 - ii. the exposition and any included manuals will be complied with at all times;

- (2) the titles and names of the senior person or persons required by [AIS.070](#) paragraphs (a)(1) and (2);
 - (3) the duties and responsibilities of the senior persons specified in paragraph (a)(2) including matters for which they have responsibility to deal directly with the Authority or the Authority on behalf of the organization;
 - (4) an organization chart showing lines of responsibility of the senior persons specified in paragraph (a)(2);
 - (5) a summary of the applicant's staffing structure for each aeronautical information service listed under paragraph (a)(6);
 - (6) a list of the aeronautical information services to be covered by the certificate;
 - (7) for a pre-flight information service, details of the area, aerodromes and air routes required by [AIS.290](#);
 - (8) the location and address details of the applicant's offices;
 - (9) details of the applicant's format and standards required by [AIS.080](#) Para (a)(1) for their published aeronautical information;
 - (10) details of the applicant's procedures required regarding: and
 - i. the competence of personnel;
 - ii. the control of documentation;
 - iii. the collection of information;
 - iv. the publication of aeronautical information;
 - v. the correction of errors in published information;
 - vi. the identification, collection, indexing, storage, maintenance and disposal of records; and
 - vii. internal quality management.
 - (11) procedures to control, amend and distribute the exposition.
- (b) The applicant's exposition must be acceptable to the Authority.

AIS.100 Operations Manual

- (a) Each holder of an aeronautical information service certificate shall provide and keep up to date its operations manual or system of manuals relating to the provision of the services listed in its exposition for the use and guidance of operations personnel.
- (b) It shall ensure:
- (1) operations manuals contain the instructions and information required by the operations personnel to perform their duties;
 - (2) relevant parts of the operations manuals are accessible to the personnel concerned; and
 - (3) the operations personnel are informed of amendments to the operations manual applying to their duties in a manner that enables their application as of their entry into force.
- (c) Operation manual shall include but not limited to:
- (1) A statement setting out the AIS and the related functions, that the provider processes to perform;
 - (2) The proposed hours of operations of each service;
 - (3) The airspace within which each service is to be provided;
 - (4) The specific location or locations in case of distributed facility;
 - (5) Organization structure including names, qualifications, experience and position of the principles;
 - (6) Duties and responsibilities of supervising positions;
 - (7) AIS functions and operational staff required;
 - (8) Operational instructions;
 - (9) Error Reporting and Rectification.

Subpart C - Operating requirements

AIS.105 Continued compliance

Each holder of an aeronautical information service certificate shall:

- (a) Hold at least one complete and current copy of their exposition at each office listed in their exposition;
- (b) Comply with all procedures and standards detailed in their exposition;
- (c) Make each applicable part of their exposition available to personnel who require those parts to carry out their duties;
- (d) Continue to meet the standards and comply with the requirements of [Subpart B](#) prescribed for certification under this Part; and
- (e) Notify the Authority of any change of address for service, telephone number or facsimile number within twenty-eight (28) days of the change.

AIS.110 Operation of Aeronautical Information Services

- (a) The holder of an aeronautical information service certificate shall comply with requirements of [Subpart D](#);
- (b) The certificate holder shall establish resources and processes to ensure the timely collection, processing, storing, integration, exchange and delivery of quality-assured aeronautical data and aeronautical information in accordance with [Subpart F](#);
- (c) The certificate holder shall provide Aeronautical information in the form of Aeronautical Information Products and associated services in accordance with [Subpart H](#); and
- (d) The certificate holder shall keep up to date Aeronautical data and aeronautical information in accordance with [Subpart I](#).

AIS.115 Responsibilities & functions

The holder of an aeronautical information service certificate shall carry out the functions and assume its share of the responsibilities defined in [Subpart E](#).

AIS.120 Scope of aeronautical data and aeronautical information

The scope of aeronautical data and aeronautical information that is managed by an AIS is described in [Subpart G](#).

AIS.125 Changes to certificate holder's organization

- (a) Each holder of an aeronautical information service certificate shall ensure that their exposition is amended, so as to remain a current description of the holder's organization and services.
- (b) The certificate holder shall ensure that any amendments made to the holder's exposition meet the applicable requirements of this Part and comply with the amendment procedures contained in the holder's exposition.
- (c) The certificate holder shall provide the Authority with a copy of each amendment to the holder's exposition as soon as practicable after its incorporation into the exposition.
- (d) Where a certificate holder proposes to make a change to any of the following, prior notification to and acceptance by the Authority is required:
 - (1) the Chief Executive;
 - (2) the listed senior persons;
 - (3) the aeronautical information services provided by the holder; and
 - (4) the format and standards for the aeronautical information published under the authority of their certificate.
- (e) The Authority may prescribe conditions under which a certificate holder may operate during or following any of the changes specified in paragraph (d).
- (f) A certificate holder shall comply with any conditions prescribed under paragraph (e).
- (g) Where any of the changes referred to in this Part requires an amendment to the certificate, the certificate holder shall forward the certificate to the Authority as soon as practicable.
- (h) The certificate holder shall make such amendments to the holder's exposition, as the Authority may consider necessary in the interests of aviation safety.

AIS.130 Regulatory approval of aeronautical information and data

- (a) Certain aeronautical information and data submitted to the aeronautical information service provider will require regulatory approval by the Authority before publication.
- (b) Aeronautical information and data requiring approval by the Authority includes but is not limited to:
 - (1) Controlled/Regulated Airspace;
 - (2) Ground/Satellite based Navigation Systems;
 - (3) Instrument Flight Procedures;

- (4) VHF/UHF frequencies;
 - (5) Danger/Restricted Areas;
 - (6) Activities of a Dangerous Nature and Other Potential Hazards;
 - (7) Aerodrome Traffic Zones;
 - (8) Aerodrome Runway Declared Distances; and
 - (9) Aerodrome Rescue & Fire Fighting categories.
- (c) Data originators providing aeronautical data and information shall ensure that an approval has been granted by the Authority before submitting for publication new or revised aeronautical data and information specified in paragraph (b).
- (d) For aeronautical data that requires regulatory approval, data originators shall take account of the additional time required by the Authority for the approvals process.

Subpart D - General specifications

AIS.135 Common reference systems for air navigation

(a) Horizontal Reference System:

- (1) World Geodetic System - 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system for international air navigation. Consequently, published aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.
- (2) In precise geodetic applications and some air navigation applications, temporal changes in the tectonic plate motion and tidal effects on the Earth's crust shall be modelled and estimated. To reflect the temporal effect, an epoch shall be included with any set of absolute station coordinates.

(b) Vertical Reference System:

- (1) Mean sea level (MSL) datum shall be used as the vertical reference system for international air navigation.
- (2) The Earth Gravitational Model - 1996 (EGM-96) shall be used as the global gravity model for international air navigation.
- (3) At those geographical positions where the accuracy of EGM-96 does not meet the accuracy requirements for elevation and geoid undulation on the basis of EGM-96 data, regional, national or local geoid models containing high resolution (short wavelength) gravity field data shall be developed and used. When a geoid model other than the EGM-96 model is used, a description of the model used, including the parameters required for height transformation between the model and EGM-96, shall be provided in the Aeronautical Information Publication (AIP).

(c) Temporal Reference System:

- (1) The Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference system for international air navigation.
- (2) When a different temporal reference system is used for some applications, the feature catalogue or the metadata associated with an application schema or a data set, as appropriate, shall include either, a description of that system or, a citation for a document that describes that temporal reference system.

AIS.140 Miscellaneous specifications

- (a) Aeronautical information products intended for international distribution shall include English text for those parts expressed in plain language.
- (b) Place names shall be spelt in conformity with local usage, transliterated, when necessary, into the ISO-Basic Latin alphabet.
- (c) Units of measurement used in the origination, processing and distribution of aeronautical data and aeronautical information shall be consistent with Units of Measurement Regulation and Annex 5.
- (d) ICAO abbreviations shall be used in the aeronautical information products whenever they are appropriate and their use will facilitate distribution of aeronautical data and aeronautical information.

Subpart E - Responsibilities & functions

AIS.145 Responsibilities of the State of Libya

- (a) The State of Libya shall:
- (1) provide an aeronautical information service (AIS); or
 - (2) agree with one or more other Contracting State(s) for the provision of a joint service; or
 - (3) delegate the authority for the provision of the service to a non-governmental agency, provided that these regulations, in conjunction with the Standards and Recommended Practices of Part-AIS are adequately met by the nominated agency.
- (b) The State of Libya shall ensure that the provision of aeronautical data and aeronautical information covers its own territory and those areas over the high seas for which it is responsible for the provision of air traffic services.
- (c) Information provided in accordance with paragraph (b), Aeronautical data and aeronautical information provided for and on behalf of the State of Libya shall clearly indicate that they are provided under the authority of the State of Libya, irrespective of the format in which they are provided.
- (d) The State of Libya shall ensure that the aeronautical data and aeronautical information provided are complete, timely and of required quality in accordance with [AIS.175](#).
- (e) The State of Libya shall ensure that formal arrangements are established between originators of aeronautical data and aeronautical information and the AIS provider, in relation to the timely and complete provision of aeronautical data and aeronautical information.

AIS.150 AIS responsibilities and functions

- (a) The AIS shall ensure that aeronautical data and aeronautical information necessary for the safety, regularity and efficiency of air navigation are made available in a form suitable for the operational requirements of the air traffic management (ATM) community, including:
- (1) those involved in flight operations, including flight crews, flight planning and flight simulators; and
 - (2) the air traffic services unit responsible for flight information service and the services responsible for pre-flight information.
- (b) The AIS shall receive, collate or assemble, edit, format, publish/store and distribute aeronautical data and aeronautical information concerning the entire territory of the State of Libya as well as those areas over the high seas in which the ATM provider is

responsible for the provision of air traffic services. Aeronautical data and aeronautical information shall be provided as aeronautical information products.

- (c) Where twenty-four (24) hour service is not provided, service shall be available during the whole period an aircraft is in flight in the area of responsibility of the aeronautical information service provider, plus a period of at least two hours before and after such a period. Service shall also be available at such other time as may be requested by an appropriate ground organization.
- (d) The AIS shall, in addition, obtain aeronautical data and aeronautical information to enable it to provide pre-flight information service and to meet the need for in-flight information:
 - (1) from the AIS of other States; and
 - (2) from other sources that may be available.
- (e) Aeronautical data and aeronautical information obtained under paragraph (d) (1) shall, when distributed, be clearly identified as having the authority of the originating State.
- (f) Aeronautical data and aeronautical information obtained under paragraph (d)(2) shall, if possible, be verified before distribution and if not verified shall, when distributed, be clearly identified as such.
- (g) The AIS shall promptly make available to the AIS of other States any aeronautical data and aeronautical information necessary for the safety, regularity or efficiency of air navigation required by them, to enable them to comply with [AIS.150](#) paragraph (a).

AIS.155 Exchange of aeronautical data and aeronautical information

- (a) The State of Libya shall designate the office to which all elements of aeronautical information products provided by other States shall be addressed. Such an office shall be qualified to deal with requests for aeronautical data and aeronautical information provided by other States.
- (b) Formal arrangements shall be established between those parties providing aeronautical data and aeronautical information on behalf of the State of Libya and their users, in relation to the provision of the service.
- (c) Where more than one international NOTAM office is designated within the State of Libya, the extent of responsibility and the territory covered by each office shall be defined.
- (d) The AIS shall arrange, as necessary, to satisfy operational requirements for the issuance and receipt of NOTAM distributed by telecommunication.
- (e) Wherever practicable, direct contact between AIS shall be established in order to facilitate the international exchange of aeronautical data and aeronautical information.

- (f) Except as provided in AIS.260 paragraph (h), one copy of each of the elements of the Integrated Aeronautical Information Package following aeronautical information products (where available) that have been requested by the AIS of a Contracting State shall be made available by the originating State and provided in the mutually-agreed form(s), without charge, even where authority for publication/storage and distribution has been delegated to a non-governmental agency:
- (1) Aeronautical Information Publication (AIP), including Amendments and Supplements;
 - (2) Aeronautical Information Circulars (AIC);
 - (3) NOTAM; and
 - (4) Aeronautical Charts.
- (g) The exchange of more than one copy of the elements of aeronautical information products and other air navigation documents, including those containing air navigation legislation and regulations, shall be subject to bilateral agreements between the participating Contracting States and entities.
- (h) When aeronautical information and aeronautical data are provided in the form of digital data sets to be used by the AIS, it shall be provided on the basis of agreement between the State of Libya and other Contracting States concerned.
- (i) The procurement of aeronautical data and aeronautical information, including the elements of aeronautical information products and other air navigation documents, including those containing air navigation legislation and regulations, by States other than Contracting States and by other entities shall be subject to a separate agreement with the State of Libya.
- (j) Globally interoperable aeronautical data and information exchange models shall be used for the provision of data sets.

AIS.160 Copyright

- (a) Any aeronautical information product which has been granted copyright protection by the State of Libya and provided to another State in accordance with [AIS.155](#) shall only be made available to a third party on the condition that the third party is made aware that the product is copyright protected and provided that it is appropriately annotated that the product is subject to copyright by the State of Libya.
- (b) When aeronautical information and aeronautical data are provided to a State in accordance with [AIS.155](#) paragraph (h), the receiving State shall not provide digital data sets of the providing State to any third party without the consent of the providing State.

AIS.165 Cost recovery

The overhead cost of collecting and compiling aeronautical data and aeronautical information shall be included in the cost basis for airport and air navigation services charges or other charges as appropriate.

Subpart F - Aeronautical Information Management (AIM)

AIS.170 Information management requirements

The information management resources and processes established by an Aeronautical Information Service (AIS) shall be adequate to ensure the timely collection, processing, storing, integration, exchange and delivery of quality-assured aeronautical data and aeronautical information within the air traffic management (ATM) system.

AIS.175 Data quality specifications

(a) Data Accuracy:

The order of accuracy for aeronautical data shall be in accordance with its intended use.

(b) Data Resolution:

The order of resolution of aeronautical data shall be commensurate with the actual data accuracy.

(c) Data Integrity:

- (1) The integrity of aeronautical data shall be maintained throughout the data process from origination to distribution to the next intended user.
- (2) Based on the applicable integrity, classification procedures shall be put in place in order to:
 - i. for routine data: avoid corruption throughout the processing of the data;
 - ii. for essential data: assure corruption does not occur at any stage of the entire process and include additional processes as needed to address potential risks in the overall system architecture to further assure data integrity at this level; and
 - iii. for critical data: assure corruption does not occur at any stage of the entire process and include additional integrity assurance processes to fully mitigate the effects of faults identified by thorough analysis of the overall system architecture as potential data integrity risks.

(d) Data Traceability:

Traceability of aeronautical data shall be ensured and retained as long as the data is in use.

(e) Data Timeliness:

Timeliness shall be ensured by including limits on the effective period of the data elements.

(f) Data Completeness:

Completeness of the aeronautical data shall be ensured in order to support its intended use.

(g) Data Format:

The format of delivered aeronautical data shall be adequate to ensure that the data is interpreted in a manner that is consistent with its intended use.

AIS.180 Aeronautical data & aeronautical information validation and verification

- (a) Material to be issued as part of an aeronautical information product shall be thoroughly checked before it is submitted to the AIS, in order to ensure that all necessary information has been included and that it is correct in detail.
- (b) An AIS provider shall establish verification and validation procedures, which ensure that upon receipt of aeronautical data and aeronautical information, quality requirements are met.

AIS.185 Data error detection

- (a) Digital data error detection techniques shall be used during the transmission and/or storage of aeronautical data and digital data sets.
- (b) Digital data error detection techniques shall be used in order to maintain the integrity levels as specified in [AIS.175](#) paragraph (c).

AIS.190 Use of automation

- (a) Automation shall be applied in order to ensure quality, efficiency and cost-effectiveness of aeronautical information services.
- (b) Due consideration to the integrity of data and information shall be given when automated processes are implemented and mitigating steps taken where risks are identified.
- (c) In order to meet the data quality requirements, automation shall:
 - (1) enable digital aeronautical data exchange between the parties involved in the data processing chain; and
 - (2) use aeronautical information exchange models and data exchange models designed to be globally interoperable.

AIS.195 Quality Management System

- (a) Quality management systems shall be implemented and maintained encompassing all functions of an AIS, as outlined in [AIS.150](#). The execution of such quality management systems shall be made demonstrable for each function stage.
- (b) Quality management shall be applicable to the whole aeronautical information data chain from data origination to distribution to the next intended user, taking into consideration the intended use of data.
- (c) The quality management system established in accordance with paragraph (a) shall follow the ISO-9000 series of quality assurance standards and be certified by an accredited certification body.
- (d) 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. Processes shall be in place to ensure that personnel possess the competencies required to perform specific assigned functions. Appropriate records shall be maintained so that the qualifications of personnel can be confirmed. 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.
- (e) Each 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.
- (f) 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.
- (g) All necessary measures shall be taken to monitor compliance with the quality management system in place.
- (h) 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.

AIS.200 Human factors considerations

- (a) 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.
- (b) Due consideration shall be given to the integrity of information where human interaction is required and mitigating steps taken where risks are identified.

Subpart G - Scope of Aeronautical Data & Aeronautical Information

AIS.205 Scope of aeronautical data and aeronautical information

- (a) The aeronautical data and aeronautical information to be received and managed by the AIS shall include at least the following sub-domains:
- (1) national regulations, rules and procedures;
 - (2) aerodromes and heliports;
 - (3) airspace;
 - (4) ATS routes;
 - (5) instrument flight procedures;
 - (6) radio navigation aids/systems;
 - (7) obstacles;
 - (8) terrain; and
 - (9) geographic information.
- (b) Determination and reporting of aeronautical data shall be in accordance with the accuracy and integrity classification required to meet the needs of the end-user of aeronautical data.

AIS.210 Metadata

- (a) Metadata shall be collected for aeronautical data processes and exchange points.
- (b) Metadata collection shall be applied throughout the aeronautical information data chain, from origination to distribution to the next intended user.

Subpart H - Aeronautical information products and services

AIS.215 General

- (a) Aeronautical information shall be provided in the form of aeronautical information products and associated services.
- (b) When aeronautical data and aeronautical information are provided in multiple formats, processes shall be implemented to ensure data and information consistency between formats.

AIS.220 Aeronautical information in a standardized presentation

- (a) Aeronautical information provided in a standardized presentation shall include the AIP, AIP Amendments, AIP Supplements, AICs, NOTAMs and Aeronautical Charts.
- (b) The AIP, AIP Amendment, AIP Supplement and AIC shall be provided on paper and/or as an electronic document.
- (c) The AIP, AIP Amendment, AIP Supplement and AIC provided as an electronic document (eAIP) shall allow for both displaying on electronic devices and printing on paper.

AIS.225 Aeronautical Information Publication (AIP)

- (a) The AIP shall include:
 - (1) a statement of the competent Authority responsible for the air navigation facilities, services or procedures covered by the AIP;
 - (2) the general conditions under which the services or facilities are available for international use;
 - (3) a list of significant differences between the national regulations and practices of the State of Libya and the related ICAO Standards, Recommended Practices and Procedures, given in a form that would enable a user to differentiate readily between the requirements of the State of Libya and the related ICAO provisions;
 - (4) the choice made by the State of Libya in each significant case where an alternative course of action is provided for in ICAO Standards, Recommended Practices and Procedures.

AIS.230 AIP Supplement

A checklist of valid AIP Supplements shall be regularly provided.

AIS.235 Aeronautical Information Circulars (AIC)

- (a) An AIC shall be used to provide:
- (1) a long-term forecast of any major change in legislation, regulations, procedures or facilities; or
 - (2) information of a purely explanatory or advisory nature liable to affect flight safety; or
 - (3) information or notification of an explanatory or advisory nature concerning technical, legislative or purely administrative matters.
- (b) An AIC shall not be used for information that qualifies for inclusion in AIP or NOTAM.
- (c) The validity of AIC currently in force shall be reviewed at least once a year.
- (d) A checklist of currently valid AIC shall be regularly provided.

AIS.240 Aeronautical Charts

- (a) The aeronautical charts listed alphabetically below shall, when available for designated international aerodromes/heliports, form part of the AIP, or be provided separately to recipients of the AIP:
- (1) Aerodrome/Heliport Chart - ICAO;
 - (2) Aerodrome Ground Movement Chart - ICAO;
 - (3) Aerodrome Obstacle Chart - ICAO Type A;
 - (4) Aerodrome Obstacle Chart - ICAO Type B (when available)
 - (5) Aerodrome Terrain and Obstacle Chart - ICAO (Electronic);
 - (6) Aircraft Parking/Docking Chart - ICAO;
 - (7) Area Chart - ICAO;
 - (8) ATC Surveillance Minimum Altitude Chart - ICAO;
 - (9) Instrument Approach Chart - ICAO;
 - (10) Precision Approach Terrain Chart - ICAO;
 - (11) Standard Arrival Chart - Instrument (STAR) - ICAO;
 - (12) Standard Departure Chart - Instrument (SID) - ICAO; and
 - (13) Visual Approach Chart - ICAO.

- (b) The “En-route Chart - ICAO” shall, when available, form part of the AIP or be provided separately to recipients of the AIP.
- (c) The aeronautical charts listed alphabetically below shall, when available, be provided as aeronautical information products:
 - (1) World Aeronautical Chart - ICAO 1:1,000,000;
 - (2) Aeronautical Chart - ICAO 1:500,000;
 - (3) Aeronautical Navigation Chart - ICAO Small Scale; and
 - (4) Plotting Chart - ICAO chart.
- (d) Electronic aeronautical charts shall be provided based on digital databases and the use of geographic information systems.
- (e) The chart resolution of aeronautical data shall be that as specified for a particular chart.

AIS.245 NOTAM

A checklist of valid NOTAMs shall be regularly provided.

AIS.250 Digital data sets

- (a) Digital data shall be in the form of the following data sets:
 - (1) AIP data set;
 - (2) terrain data sets;
 - (3) obstacle data sets;
 - (4) aerodrome mapping data sets; and
 - (5) instrument flight procedure data sets.
- (b) Each data set shall be provided to the next intended user together with at least the minimum set of metadata that ensures traceability.
- (c) A checklist of valid data sets shall be regularly provided.

AIS.255 AIP data set

- (a) An AIP data set shall be provided covering the extent of information as provided in the AIP.
- (b) When it is not possible to provide a complete AIP data set, the data subset(s) that are available shall be provided; and

- (c) The AIP data set shall contain the digital representation of aeronautical information of lasting character (permanent information and long duration temporary changes) essential to air navigation.

AIS.260 Terrain and obstacle data sets

- (a) The coverage areas for sets of terrain and obstacle data shall be specified as:
- (1) Area 1: the entire territory of the State of Libya;
 - (2) Area 2: within the vicinity of an aerodrome, subdivided as follows;
 - (3) Area 2a: a rectangular area around a runway that comprises the runway strip plus any clearway that exists;
 - (4) Area 2b: an area extending from the ends of Area 2a in the direction of departure, with a length of 10 km and a splay of 15 per cent to each side;
 - (5) Area 2c: an area extending outside Area 2a and Area 2b at a distance of not more than 10 km from the boundary of Area 2a;
 - (6) Area 2d: an area outside the Areas 2a, 2b and 2c up to a distance of 45 km (25 nm) from the aerodrome reference point, or to an existing terminal control area (TMA) boundary, whichever is nearest;
 - (7) Area 3: the area bordering an aerodrome movement area that extends horizontally from the edge of a runway to 90 m (300 ft) from the runway center line and 50 m (165 ft) from the edge of all other parts of the aerodrome movement area.; and
 - (8) Area 4: The area extending 900 m (3,000 ft) prior to the runway threshold and 60 m (200 ft) each side of the extended runway center line in the direction of the approach on a precision approach runway, Category II or III.
- (b) Where the terrain at a distance greater than 900 m (3,000 ft) from the runway threshold is mountainous or otherwise significant, the length of Area 4 shall be extended to a distance not exceeding 2,000 m (6,500 ft) from the runway threshold.

AIS.265 Terrain data sets

- (a) Terrain data sets shall contain the digital representation of the terrain surface in the form of continuous elevation values at all intersections (points) of a defined grid, referenced to common datum.
- (b) Terrain data shall be provided for Area 1.
- (c) For aerodromes regularly used by international civil aviation, terrain data shall be provided for:
- (1) Area 2a;

- (2) the take-off flight path area; and
 - (3) an area bounded by the lateral extent of the aerodrome obstacle limitation surfaces.
- (d) for aerodromes regularly used by international civil aviation, additional terrain data shall be provided within Area 2 as follows:
- (1) in the area extending to 10 km (5 nm) from the ARP; and
 - (2) within the area between 10 km (5 nm) and the TMA boundary or 45-km (25 nm) radius (whichever is smaller) where terrain penetrates a horizontal terrain data collection surface specified as 120 m (400 ft) above the lowest runway elevation
- (e) Arrangements shall be made for the coordination of providing data for adjacent aerodromes where their respective coverage areas overlap to assure that the data for the same terrain are correct.
- (f) For those aerodromes located near territorial boundaries, arrangements shall be made among States concerned to share terrain data.
- (g) For aerodromes regularly used by international civil aviation, terrain data shall be provided for Area 3.
- (h) For aerodromes regularly used by international civil aviation, terrain data shall be provided for Area 4 for all runways where precision approach Category II or III operations have been established and where detailed terrain information is required by operators to enable them to assess the effect of terrain on decision height determination by use of radio altimeters.
- (i) Where additional terrain data is collected to meet other aeronautical requirements, the terrain data sets shall be expanded to include this additional data.

AIS.270 Obstacle data sets

- (a) Obstacle data sets shall contain the digital representation of the vertical and horizontal extent of obstacles.
- (b) Obstacle data shall not be included in terrain data sets.
- (c) The obstacle data shall be provided for obstacles in Area 1 whose height is 100 m or higher above ground.
- (d) For aerodromes regularly used by international civil aviation, obstacle data shall be provided for all obstacles within Area 2 that are assessed as being a hazard to air navigation.
- (e) For aerodromes regularly used by international civil aviation, obstacle data shall be provided for:

- (1) Area 2a for those obstacles that penetrate an obstacle data collection surface outlined by a rectangular area around a runway that comprises the runway strip plus any clearway that exists. The Area 2a obstacle collection surface shall have height of 3 m above the nearest runway elevation measured along the runway center line, and for those portions related to a clearway, if one exists, at the elevation of the nearest runway end;
 - (2) objects in the take-off flight path area which project above a plane surface having a 1.2 per cent slope and having a common origin with the take-off flight path area; and
 - (3) penetrations of the aerodrome obstacle limitation surfaces.
- (f) For aerodromes regularly used by international civil aviation, obstacle data shall be provided for Areas 2b, 2c and 2d for obstacles that penetrate the relevant obstacle data collection surface specified as follows:
- (1) Area 2b: an area extending from the ends of Area 2a in the direction of departure, with a length of 10 km (5 nm) and a splay of 15% to each side. The Area 2b obstacle collection surface has a 1.2% slope extending from the ends of Area 2a at the elevation of the runway end in the direction of departure, with a length of 10 km and a splay of 15% to each side;
 - (2) Area 2c: an area extending outside Area 2a and Area 2b at a distance of not more than 10 km (5 nm) from the boundary of Area 2a. The Area 2c obstacle collection surface has a 1.2% slope extending outside Area 2a and Area 2b at a distance of not more than 10 km (5 nm) from the boundary of Area 2a. The initial elevation of Area 2c shall be the elevation of the point of Area 2a at which it commences; and
 - (3) Area 2d: an area outside the Areas 2a, 2b and 2c up to a distance of 45 km (25 nm) from the aerodrome reference point, or to an existing TMA boundary, whichever is nearest. The Area 2d obstacle collection surface has a height of 100 m (330 ft) above ground; except that data need not be collected for obstacles less than a height of 3 m (10 ft) above ground in Area 2b and less than a height of 15 m (50 ft) above ground in Area 2c.
- (g) Arrangements shall be made for the coordination of providing obstacle data for adjacent aerodromes where their respective coverage areas overlap to assure that the data for the same obstacle are correct.
- (h) For those aerodromes located near territorial boundaries, arrangements shall be made among States concerned to share obstacle data.
- (i) For aerodromes regularly used by international civil aviation, obstacle data shall be provided for Area 3 for obstacles that penetrate the relevant obstacle data collection surface extending a half-meter (0.5 m/ 1.6 ft) above the horizontal plane passing through the nearest point on the aerodrome movement area.

- (j) For aerodromes regularly used by international civil aviation, obstacle data shall be provided for Area 4 for all runways where precision approach Category II or III operations have been established.
- (k) Where additional obstacle data are collected to meet other aeronautical requirements, the obstacle data sets shall be expanded to include these additional data.

AIS.275 Aerodrome mapping data sets

- (a) Aerodrome mapping data sets shall contain the digital representation of aerodrome features.
- (b) Aerodrome mapping data sets shall be made available for aerodromes regularly used by international civil aviation.

AIS.280 Instrument Flight Procedure data sets

- (a) Instrument flight procedure data sets shall contain the digital representation of instrument flight procedures.
- (b) Instrument flight procedures data sets shall be made available for aerodromes regularly used by international civil aviation.

AIS.285 Distribution services

(a) General

- (1) Aeronautical information products shall be distributed to authorized users who request them.
- (2) AIP, AIP Amendments AIP Supplements and AIC shall be made available by the most expeditious means.
- (3) Global communication networks such as the Internet shall, whenever practicable, be employed for the provision of aeronautical information products.

(b) NOTAM distribution

- (1) NOTAM shall be distributed on the basis of a request.
- (2) NOTAM shall be prepared in conformity with the relevant provisions of the ICAO communication procedures.
- (3) The Aeronautical Fixed Service (AFS) shall, whenever practicable, be employed for NOTAM distribution.
- (4) When a NOTAM is sent by means other than the AFS, a six-digit date-time group indicating the date and time of NOTAM origination and the identification of the

originator shall be used, preceding the text. The originating State shall select the NOTAM that are to be given international distribution.

- (5) International exchange of NOTAM shall take place only as mutually agreed between the international NOTAM offices concerned and between the NOTAM offices and multinational NOTAM Processing Units.
- (6) The originating State shall upon request grant distribution of NOTAM series other than those distributed internationally.
- (7) Selective distribution lists shall be used when practicable.

AIS.290 Pre-flight information service

- (a) For any aerodrome/heliport used for international air operations, aeronautical information relative to the route stages originating at the aerodrome/heliport shall be made available to flight operations personnel, including flight crews and services responsible for pre-flight information.
- (b) Aeronautical information provided for pre-flight planning purposes shall include information of operational significance from the elements of the aeronautical information products.

AIS.295 Post-flight information service

- (a) For any aerodrome/heliport used for international air operations, arrangements shall be made to receive information concerning the state and operation of air navigation facilities or services noted by flight crews.
- (b) The arrangements specified in (a) shall ensure that such information is made available to the aeronautical information service for distribution as the circumstances necessitate.
- (c) For any aerodrome/heliport used for international air operations, arrangements shall be made to receive information concerning the presence of wildlife hazard observed by flight crews.
- (d) The information about presence of wildlife hazard shall be made available to the aeronautical information service for distribution as the circumstances necessitate.

Subpart I - Aeronautical information updates

AIS.300 General specifications

Aeronautical data and aeronautical information shall be kept up to date.

AIS.305 Aeronautical Information Regulation & Control (AIRAC)

(a) Information concerning the following circumstances shall be distributed under the regulated system (AIRAC):

- (1) Limits (horizontal and vertical), regulations and procedures applicable to:
 - i. flight information regions;
 - ii. control areas;
 - iii. control zones;
 - iv. advisory areas;
 - v. ATS routes;
 - vi. permanent danger, prohibited and restricted areas (including type and periods of activity when known) and ADIZ; and
 - vii. permanent areas or routes or portions thereof where the possibility of interception exists.
- (2) Positions, frequencies, call signs, identifiers, known irregularities and maintenance periods of radio navigation aids, and communication and surveillance facilities.
- (3) Holding and approach procedures, arrival and departure procedures, noise abatement procedures and any other pertinent ATS procedures.
- (4) Transition levels, transition altitudes and minimum sector altitudes.
- (5) Meteorological facilities (including broadcasts) and procedures.
- (6) Runways and stop-ways.
- (7) Taxiways and aprons.
- (8) Aerodrome ground operating procedures (including low visibility procedures).
- (9) Approach and runway lighting.
- (10) Aerodrome operating minima if published by LYCAA.

- (b) The information notified under the AIRAC system shall not be changed further for at least another twenty-eight (28) days after the effective date, unless the circumstance notified is of a temporary nature and would not persist for the full period.
- (c) Information provided under the AIRAC system shall be made available by the AIS so as to reach recipients at least twenty-eight (28) days in advance of the effective date.
- (d) When information has not been submitted by the AIRAC date, a NIL notification shall be distributed not later than one cycle before the AIRAC effective date concerned.
- (e) Implementation dates other than AIRAC effective dates shall not be used for pre-planned operationally significant changes requiring cartographic work and/or for updating of navigation databases.
- (f) The regulated system (AIRAC) shall also be used for the provision of information relating to the establishment and withdrawal of and premeditated significant changes in, the circumstances listed below:
 - (1) Position, height and lighting of navigational obstacles.
 - (2) Hours of service of aerodromes, facilities and services.
 - (3) Customs, immigration and health services.
 - (4) Temporary danger, prohibited and restricted areas and navigational hazards, military exercises and mass movements of aircraft.
 - (5) Temporary areas or routes or portions thereof where the possibility of interception exists.
- (g) Whenever major changes are planned and where advance notice is desirable and practicable, information shall be made available by the AIS so as to reach recipients at least fifty-six (56) days in advance of the effective date. This shall be applied to the establishment of and premeditated major changes in the circumstances listed below and other major changes if deemed necessary.
 - (1) New aerodromes for international IFR operations.
 - (2) New runways for IFR operations at international aerodromes.
 - (3) Design and structure of the air traffic services route network.
 - (4) Design and structure of a set of terminal procedures (including change of procedure bearings due to magnetic variation change).
 - (5) Circumstances listed in (a) if the entire State or any significant portion thereof is affected or if cross-border coordination is required.

AIS.310 Aeronautical information product updates (AIP Updates)

- (a) AIP shall be amended or reissued at such regular intervals as may be necessary to keep it up to date.
- (b) Permanent changes to the AIP shall be published as AIP Amendments.
- (c) Temporary changes of long duration (three months or longer) and information of short duration which contains extensive text and/or graphics shall be published as AIP Supplements.

AIS.315 Aeronautical information product updates (NOTAM)

- (a) When an AIP Amendment or an AIP Supplement is published in accordance with AIRAC procedures, a “Trigger” NOTAM shall be originated.
- (b) A NOTAM shall be originated and issued promptly whenever the information to be distributed is of a temporary nature and of short duration or when operationally significant permanent changes or temporary changes of long duration are made at short notice, except for extensive text and/or graphics.
- (c) A NOTAM shall be originated and issued concerning the following information:
 - (1) establishment, closure or significant changes in operation of aerodrome(s) or heliport(s) or runways;
 - (2) establishment, withdrawal and significant changes in operation of aeronautical services (AGA, AIS, ATS, CNS, MET, SAR, etc.);
 - (3) establishment, withdrawal and significant changes in operational capability of radio navigation and air-ground communication services. This includes: interruption or return to operation, change of frequencies, change in notified hours of service, change of identification, change of orientation (directional aids), change of location, power increase or decrease amounting to fifty per cent (50%) or more, change in broadcast schedules or contents, or irregularity or unreliability of operation of any radio navigation and air-ground communication services or limitations of relay stations including operational impact, affected service, frequency and area;
 - (4) unavailability of back-up and secondary systems, having a direct operational impact;
 - (5) establishment, withdrawal or significant changes made to visual aids;
 - (6) interruption of or return to operation of major components of aerodrome lighting systems;
 - (7) establishment, withdrawal or significant changes made to procedures for air navigation services;

- (8) occurrence or correction of major defects or impediments in the maneuvering area;
- (9) changes to and limitations on availability of fuel, oil and oxygen;
- (10) major changes to search and rescue facilities and services available;
- (11) establishment, withdrawal or return to operation of hazard beacons marking obstacles to air navigation;
- (12) changes in regulations requiring immediate action, e.g., prohibited areas for SAR action;
- (13) presence of hazards not otherwise promulgated, which affect air navigation (including obstacles, military exercises and operations, intentional and unintentional radio frequency interferences, rocket launches, displays, fireworks, sky lanterns, rocket debris, races and major parachuting events);
- (14) conflict zones which affect air navigation (to include information that is as specific as possible regarding the nature and extent of threats of that conflict and its consequences for civil aviation);
- (15) planned laser emissions, laser displays and search lights if pilots' night vision is likely to be impaired;
- (16) erecting or removal of or changes to obstacles to air navigation in the take-off/climb, missed approach, approach areas and runway strip;
- (17) establishment or discontinuance (including activation or deactivation) as applicable, or changes in the status of prohibited, restricted or danger areas;
- (18) establishment or discontinuance of areas or routes or portions thereof where the possibility of interception exists and where the maintenance of guard on the VHF emergency frequency 121.5 MHz is required;
- (19) allocation, cancellation or change of location indicators;
- (20) changes in aerodrome/heliport rescue and firefighting category provided (see Part-139);
- (21) presence or removal of or significant changes in hazardous conditions due to snow, slush, ice, radioactive material, toxic chemicals, volcanic ash deposition or water on the movement area;
- (22) outbreaks of epidemics necessitating changes in notified requirements for inoculations and quarantine measures;
- (23) observations or forecasts of space weather phenomena, the date and time of their occurrence, the flight levels where provided and portions of the airspace which may be affected by the phenomena;

- (24) an operationally significant change in volcanic activity, the location, date and time of volcanic eruptions and/or horizontal and vertical extent of volcanic ash cloud, including direction of movement, flight levels and routes or portions of routes which could be affected;
 - (25) release into the atmosphere of radioactive materials or toxic chemicals following a nuclear or chemical incident, the location, date and time of the incident, the flight levels and routes or portions thereof which could be affected and the direction of movement;
 - (26) establishment of operations of humanitarian relief missions, such as those undertaken under the auspices of the United Nations, together with procedures and/or limitations which affect air navigation; and
 - (27) implementation of short-term contingency measures in cases of disruption, or partial disruption, of air traffic services and related supporting services.
- (d) The following information shall not be notified by NOTAM:
- (1) routine maintenance work on aprons and taxiways which does not affect the safe movement of aircraft;
 - (2) runway marking work, when aircraft operations can safely be conducted on other available runways or the equipment used can be removed when necessary;
 - (3) temporary obstructions in the vicinity of aerodromes/heliports that do not affect the safe operation of aircraft;
 - (4) partial failure of aerodrome/heliport lighting facilities where such failure does not directly affect aircraft operations;
 - (5) partial temporary failure of air-ground communications when suitable alternative frequencies are known to be available and are operative;
 - (6) the lack of apron marshalling services and road traffic control;
 - (7) the unserviceability of location, destination or other instruction signs on the aerodrome movement area;
 - (8) parachuting when in uncontrolled airspace under VFR (see paragraph (c) (13)), when controlled, at promulgated sites or within danger or prohibited areas;
 - (9) training activities by ground units;
 - (10) unavailability of back-up and secondary systems if these do not have an operational impact;
 - (11) limitations to airport facilities or general services with no operational impact;

- (12) national regulations not affecting general aviation;
- (13) announcement or warnings about possible/potential limitations, without any operational impact;
- (14) general reminders on already published information;
- (15) availability of equipment for ground units without containing information on the operational impact for airspace and facility users;
- (16) information about laser emissions without any operational impact and fireworks below minimum flying heights;
- (17) closure of movement area parts in connection with planned work locally coordinated of duration of less than one hour;
- (18) closure, changes, unavailability in operation of aerodrome(s)/heliport(s) outside the aerodrome(s)/heliport(s) operational hours; and
- (19) other non-operational information of a similar temporary nature.

AIS.320 Aeronautical information product updates (data set updates)

- (a) Data sets shall be amended or reissued at such regular intervals as may be necessary to keep them up to date.
- (b) Permanent changes and temporary changes of long duration (three (3) months or longer) made available as digital data shall be issued in the form of a complete data set or a sub-set that includes only the differences from the previously issued complete data set.
- (c) When made available as a completely re-issued data set, the differences from the previously issued complete data set shall be indicated.
- (d) When temporary changes of short duration are made available as digital data (Digital NOTAM), they shall use the same aeronautical information model as the complete data set.
- (e) Updates to AIP and the digital data sets shall be synchronized.