



NPA No. 11 /2015

**CAR PART VIII SUB PART 1
Certification of Air Navigation Service Organisations: General**

Release Date: 25 June 2015

The GCAA has recently conducted a review of CAR PART VIII Subpart 1 as a result of annual review.

The review has concluded that a number of additional definitions and abbreviations needed to be added as well the consolidation of duplicated regulations in the various Sub Parts of CAR Part VIII into a single Subpart. These are all included along with additional requirements to support the new CAR Part VIII Subpart X which was recently published.

This notice is published to announce to the public this amendment and to entitle all concerned parties to:

1. Review the attached proposed CAR Part VIII Sub Part 1 regulation; and
2. Submit their comments online through the GCAA website within 60 days from the date of this NPA.

Comments must be submitted through the GCAA Website – E-Publication – Notice of Proposed Amendment, using the Action of “Submit NPA Feedback Request.”

Comments and Responses may be viewed in the Comments Response Document CRD pertaining to this NPA on the GCAA website.

CAR PART VIII

SUBPART 1

CERTIFICATION OF AIR NAVIGATION SERVICE ORGANISATIONS:

GENERAL

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FOREWORD

- 1 The General Civil Aviation Authority (hereinafter “Authority”) has implemented CAR Part VIII, Subpart 1 as general guidance for all subsequent ANS Subparts of CAR Part VIII. This Subpart prevails in case of contradiction between this Subpart and the particular Subpart of PART VIII described in CAR 1.1.
- 2 Definitions and abbreviations of terms used in Subpart 1 shall always be interpreted as per the applicable ICAO Standards and Practices.
- 3 The order of precedence of publications referred to in this document are as follows:
 - (a) UAE Civil Aviation Law
 - (b) UAE Civil Aviation Regulations
 - (c) Other regulatory material published by the Authority
 - (d) ICAO Annexes
 - (e) ICAO Documents.
- 4 ICAO Standards & Recommended Practices and Procedures for Air Navigation Services have the following regulatory status:
 - (a) Standards: Mandatory unless specifically modified in the applicable parts of Supplements to the Annexes or in the Civil Aviation Regulations.
 - (b) Recommended Practices: Mandatory unless the operator has obtained GCAA approval of an alternative provision, resulting in a level of safety equal to or greater than that achieved by application of the recommended practice.
 - (c) PANS: Procedures for Air Navigation Services (PANS) shall be applied, with similar Mandatory status as for the SARPs, except where specifically deleted or modified in the Civil Aviation Regulations.
 - (d) Definitions, tables, figures and appendices contained in ICAO Annexes are to be considered as Standards and therefore mandatory.
 - (e) Attachments to ICAO Annexes are supplementary to SARPs or included as general guidance material. Where specific or general applications are considered necessary for additional safety levels, these are included in the Civil Aviation Regulations and carry Mandatory status.

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SECTION A — GENERAL PROVISIONS

CAR 1.1 APPLICABILITY

- (a) CAR PART VIII, in the Subparts shown below, contains the Rules governing:
- (1) Subpart 1: The general requirements for;
 - i. certification,
 - ii. on-going surveillance,
 - iii. transfer or revocation and suspension of a certificate,
 - iv. quality assurance,
 - v. safety management systems,
 - vi. operational approvals.
 - (2) Subpart 2: The certification and operation of organisations providing;
 - i. an Aeronautical Information Service (AIS) for the UAE on behalf of the Authority, and
 - ii. The requirements for;
 - (A) the UAE Aeronautical Information Publication (AIP),
 - (B) the Aeronautical Information Circulars (AIC) and NOTAM.
 - (3) Subpart 3: The classification and designation of Navigable Airspace and Objects affecting Navigable Airspace.
 - (4) Subpart 4: The certification and operation of organizations providing Air Traffic Services.
 - (5) Subpart 5: The certification and operation of organizations providing Communication, Navigation and Surveillance Services – Aeronautical Information Resource Services.
 - (6) Subpart 6: The certification and operation of organizations providing Instrument Flight Procedure Design Services.
 - (7) Subpart 7: The certification and operation of organizations providing Aviation Meteorological Services.
 - (8) Subpart 8: The certification and operation of organizations providing Search and Rescue Services.
 - (9) Subpart 9: The certification and operation of organisations providing an Aerodrome Flight Information Service (AFIS).
 - (10) Subpart 10: The operation of UAS (Only Definitions apply).

CAR 1.2 DEFINITIONS AND ACRONYMS

- (a) Definitions

The use of the word “shall”, in these Regulations, means the requirement is mandatory. The use of the word “should” does not mean that compliance is optional but rather that, where insurmountable difficulties exist, the Authority may accept an alternative means of compliance, provided that an acceptable safety assurance document from the ATS provider shows that the safety requirements will

not be reduced below that intended by the requirement. The definitions contained in this subpart are in direct relation to CAR Part VIII and may have alternate interpretations in other Parts of the CAR.

Accepted/Acceptable. Means not objected to by the Authority as suitable for the purpose intended.

Accepting unit/controller. ATC unit/controller next to take responsibility for the providing of an Air Traffic Service for an aircraft.

Accident. An occurrence associated with an operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or, in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

- 1) A person is fatally or seriously injured as a result of:
 - i. being in the aircraft, or
 - ii. direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
 - iii. direct exposure to jet blast.

Except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to passengers and crew; or

- 2) The aircraft sustains damage or structural failure which:
 - i. adversely affects the structural strength, performance or flight characteristics of the aircraft, and
 - ii. would normally require major repair or replacement of the affected component,

Except for engine failure or damage, when the damage is limited to a single engine (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes); or for minor damages to the main rotor blades, tail rotor blades, landing gear and those resulting from hail or bird strike (including holes in the radome); or

- 3) The aircraft is missing or completely inaccessible. An aircraft is considered missing when the official search has been terminated and the wreckage has not been located.

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

Accountable Manager. The person within an organisation who has:

- 1) Full control of the human resources required for the operations authorized to be conducted under the operations certificate;
- 2) Full control of the financial resources required for the operations authorized to be conducted under the operations certificate;
- 3) Final authority over operations authorized to be conducted under the operations certificate;
- 4) Direct responsibility for the conduct of the organization's affairs; and
- 5) Final responsibility for all safety issues.

ADS-C agreement. A reporting plan which establishes the conditions of ADS-C data reporting (i.e. data required by the ATS unit and frequency of reports which have to be agreed to prior to using ADS-C in the provision of ATS).

Note: The terms of the agreement will be exchanged between the ground system and the aircraft by means of a contract, or a series of contracts.

Advanced Surface Movement Guidance and Control System. A system providing routing, guidance and surveillance for the control of aircraft and vehicles in order to maintain the declared surface movement rate under all weather conditions within the aerodrome visibility operational level (AVOL) while maintaining the required level of safety.

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 control service. Air traffic control service for aerodrome traffic.

Aerodrome control tower. A unit established to provide air traffic control service to aerodrome traffic.

Aerodrome elevation. The elevation of the highest point of the landing area.

Aerodrome facilities and equipment. Facilities and equipment, inside or outside the boundaries of the aerodrome, that are constructed or installed, operated and maintained for the arrival, departure and surface movement of aircraft.

Aerodrome flight information service. A flight information service provided to aerodrome traffic at an uncontrolled aerodrome provided with such a service.

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

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

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

Aerodrome Meteorological Office. An office, located at an aerodrome, designated to provide meteorological services for international air navigation.

Aerodrome traffic. All traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome.

Note: An aircraft is in the vicinity of the aerodrome when it is in, entering or leaving the aerodrome circuit.

Aerodrome traffic zone. An airspace of defined dimensions, extending upwards from the surface of the earth, established around an aerodrome for the protection of aerodrome traffic.

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 facility means-

- 1) The various types of aeronautical communications systems used in either an aeronautical broadcast service or an aeronautical fixed service, that support IFR flight or an air traffic service; or
- 2) The ground elements of communication systems used for an aeronautical mobile service; or
- 3) The various types of radio navigation aids used for the aeronautical radio navigation service; or
- 4) Any other type of ground based telecommunication system that supports IFR flight or an air traffic service.

Aeronautical fixed service. 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 fixed telecommunication network. A worldwide system of aeronautical fixed circuits provided, as part of the aeronautical fixed service e, for the exchange of messages and/or digital data between aeronautical fixed stations having the same or compatible communications characteristics.

Aeronautical Information Circular. 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. 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 Publication. 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 Regulation and Control. An acronym signifying a system aimed at advance notification based on common effective dates of circumstances that necessitate significant changes in operating practices.

Aeronautical Information Service. 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.

Aeronautical Meteorological Station. A station designated to make observations and meteorological reports for use in international air navigation.

Aeronautical mobile service. A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies.

Aeronautical mobile-satellite service. A mobile-satellite service in which mobile earth stations are located on board aircraft; survival craft stations and emergency position-indicating radio beacon stations may also participate in this service.

Aeronautical radio navigation service. A radio navigation service intended for the benefit and for the safe operation of aircraft.

Aeronautical Rescue Coordination Centre. A unit responsible for promoting efficient organisation of aeronautical SAR services and for coordinating the conduct of aeronautical SAR operations within a SRR.

Aeronautical telecommunication service. A telecommunication service provided for any aeronautical purpose.

Aeronautical Telecommunication Station. A station in the aeronautical telecommunication service.

Aeroplane. A power driven, heavier than air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

Airborne collision avoidance system. An aircraft system based on secondary surveillance radar transponder signals which operates independently of ground-based equipment to provide information to the pilot on potential conflicting aircraft that are equipped with SSR transponders.

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reaction of the air against the earth's surface.

Aircraft — category. Classification of aircraft according to specified basic characteristics, e.g. aeroplane, helicopter, glider, free balloon.

Aircraft Coordinator. A person or team who coordinates the involvement of multiple aircraft in SAR operations in support of the SAR mission coordinator and the on-scene coordinator.

Aircraft observation. The evaluation of one or more meteorological elements made from an aircraft in flight.

Aircraft proximity. A situation in which, in the opinion of a pilot or air traffic services personnel, the distance between aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved may have been compromised.

Air-Ground Communication. Two way communication between aircraft and stations or locations on the surface of the earth.

AIRMET Information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the forecast issued for low-level flights in the flight information regions concerned, or sub-area thereof.

Air Navigation Services. Services provided to air traffic during all phases of operations including air traffic service (ATS) communications, navigation and surveillance (CNS), meteorological services for air navigation (MET), search and rescue (SAR) and aeronautical information services (AIS).

Air Navigation Service Provider. Any organisation that is providing air navigation services to air traffic and that is functionally separated from its regulator.

Air-taxiing. Movement of a helicopter above the surface of an aerodrome, normally in ground effect and at a speed normally less than 20kt.

Air traffic. All aircraft in flight or operating on the manoeuvring area of an aerodrome.

Air traffic control clearance. Authorisation for an aircraft to proceed under conditions specified by an air traffic control unit.

Note 1: For convenience, the term “air traffic control clearance” is frequently abbreviated to “clearance” when used in appropriate contexts.

Note 2: The abbreviated term “clearance” may be prefixed by the words “taxi, take-off, departure, en-route, approach, or landing” to indicate the particular portion of flight to which the air traffic control clearance relates.

Air Traffic Control Examiner. A person, meeting the requirements of Subpart 4, authorised to conduct examinations for the issue and renewal of Certificates of Competency at operational positions or sectors where the holder is currently competent.

Air traffic control service. A service provided for the purpose of:

1. Preventing collisions:
 - a. Between aircraft;
 - b. On the manoeuvring area, between aircraft and obstructions;
2. Expediting and maintaining an orderly flow of air traffic;
3. Providing information and advice useful for the safe and efficient conduct of flights; and
4. Notifying appropriate organisations regarding aircraft in need of search and rescue aid, and assisting such organisations as required.

Air traffic control unit. A generic term meaning variously, area control centre, approach control unit or aerodrome control tower.

Air traffic controller schedule. A plan for allocating air traffic controller duty periods and non-duty periods over a period of time, otherwise referred to as a roster.

Air traffic flow management. A service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

Air Traffic Management. 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.

Air Traffic Safety Electronic Personnel. Any authorised personnel who is competent to operate, maintain, release from, and return into operations safety-related ATM/ANS systems shall be considered to be an ATSEP.

Air traffic service. A generic term meaning variously, flight information service, alerting service, air traffic advisory service, and air traffic control services (area control, approach control, or aerodrome control services).

Air traffic services airspaces. Airspaces of defined dimensions alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified.

Note: ATS airspaces are classified as Class A to G as described in 2.6. ANNEX11

Air traffic services reporting office. A unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure.

Note: An air traffic services reporting office may be established as a separate unit or combined with an existing unit, such as another air traffic services unit, or a unit of the aeronautical information service.

Air traffic services unit. A generic term meaning variously, air traffic control unit, flight information centre or air traffic services reporting office.

AIS product. Aeronautical data and aeronautical information/data provided in the form of the elements of the Integrated Aeronautical Information Package (except NOTAM and PIB), including aeronautical charts, or in the form of suitable electronic media.

Airway. A control area or portion thereof established in the form of a corridor.

Alerting service. A service provided to notify appropriate organisations regarding aircraft in need of search and rescue aid, and assist such organisations as required.

Alert phase. A situation wherein apprehension exists as to the safety of an aircraft and its occupants.

Alerting post. Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue coordination centre or rescue sub-centre.

Alerting service. A service provided to notify appropriate organisations regarding aircraft in need of search and rescue aid and to assist such organisations as required.

Alternate aerodrome. An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or land at the aerodrome of intended landing. Alternate aerodromes include the following:

- 1) Take-off alternate. An alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure;
- 2) En-route alternate. An aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route;
- 3) ETOPS en-route alternate. A suitable and appropriate alternate aerodrome at which an aeroplane would be able to land after experiencing an engine shutdown or other abnormal or emergency condition while en route in an ETOPS operation;
- 4) Destination alternate. An alternate aerodrome to which an aircraft may proceed should it become either impossible or inadvisable to land at the aerodrome of intended landing.

Note: The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.

Altitude. The vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL).

Approach control service. An ATC service for arriving or departing controlled flights.

Approach control unit. A unit established to provide ATC services to controlled flights arriving at or departing from one or more aerodromes.

Approved ATS training organisation. An organisation approved by the Authority in accordance with the requirements of Annex 1 to perform ATS training and operating under the supervision of the Authority.

Approved by the Authority. Means documented by the Authority as suitable for the purpose intended.

Apron. A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or Maintenance.

Apron management service. A service provided to regulate the activities and the movement of aircraft and vehicles on an apron.

Appropriate ATS Authority. The relevant authority designated by the State to be responsible for providing air traffic services in the airspace concerned. Within the Civil Aviation Law, it refers to the concerned authorities of the respective Emirates.

Area control centre. A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.

Area control service. Air traffic control service for controlled flights in control areas.

Area navigation. 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 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.

Area navigation route. An ATS route established for the use of aircraft capable of employing area navigation.

Approved training. Training conducted under special curricula and supervision approved by the Authority.

ATS occurrence. Any event, including an accident, unlawful interference, serious incident or incident, associated with the operation of an aircraft, which could be hazardous to the safety of aircraft operations, or which compromises the provision of an Air Traffic Service.

ATS provider. An organisation providing air traffic services within certain airspace or at an airport.

ATS route. A specified route designed for channelling the flow of traffic as necessary for the provision of air traffic services.

Note 1: The term “ATS route” is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.

Note 2: An ATS route is defined by route specifications which include an ATS route designator, the track to or from significant points (waypoints), distance between significant points, reporting requirements and, as determined by the appropriate ATS authority, the lowest safe altitude.

ATS surveillance service. A 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.

Autonomous Operation. An Unmanned Aerial Vehicle operation which is programmed to operate without direct commands from a remote pilot.

Authority. Means the General Civil Aviation Authority of the United Arab Emirates, the competent body responsible for the safety regulation of Civil Aviation.

Note: For the purpose of this Rule part, the Authority shall mean the Air Navigation and Aerodromes department of the Aviation Safety Affairs Sector.

Automatic dependent surveillance. A surveillance technique in which aircraft automatically provide, via a data link, data derived from on-board navigation and position-fixing systems, including aircraft identification, four dimensional position and additional data as appropriate.

Automatic Dependent Surveillance – Broadcast. A means by which aircraft, 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. 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. The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof.

Base turn. A turn executed by the aircraft during the initial approach between the end of the outbound track and the beginning of the intermediate or final approach track. The tracks are not reciprocal.

Note: Base turns may be designated as being made either in level flight or while descending, according to the circumstances of each individual procedure.

Beyond Line of Sight Operations. The operation of an Unmanned Aerial System, during which, the system operator maintains electronic communications with the aircraft to manage its flight and meet separation and collision avoidance requirements. In this mode the operator is not required to maintain visual contact with the aircraft.

Break. A time interval between periods of time-in-position, during which the air traffic controller is relieved of all operational and administrative tasks.

Briefing. Oral commentary on existing and/or expected meteorological conditions.

Broadcast. A transmission intended to be received by all stations.

Calendar. A discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day.

Canopy level. The surface of the earth supplemented by the vegetation height.

Certificated CNS Maintenance unit. A unit whose operator has been granted a CNS Maintenance Certificate.

Change-over point. The point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omni-directional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft.

Note: Change-over points are established to provide the optimum balance in respect of signal strength and quality between facilities at all levels to be used and to ensure a common source of azimuth guidance for all aircraft operating along the same portion of a route segment.

Clearance limit. The point to which an aircraft is granted an air traffic control clearance.

CNS Maintenance Certificate. A Certificate issued by the Authority under Civil Aviation Regulation VIII for the operation of a CNS Maintenance unit.

CNS Maintenance Unit. An organisation that provides Maintenance services to a CNS facilities supporting an ANS provider.

CNS Manual. The Manual that forms part of the application for an CNS Maintenance Certificate pursuant to these Regulations, including any amendments thereto accepted by the Authority.

CNS System. Any safety related ATM/ATS electronic system used for operational purposes.

Command and control link. The data link between the remotely-piloted aircraft and the remote pilot station for the purposes of managing the flight.

Commercial operation. An aircraft operation conducted for business purposes (mapping, security surveillance, wildlife survey, aerial application, etc.) other than commercial air transport, for remuneration or hire.

Competency. A combination of skills, knowledge and attitudes required to perform a task to the prescribed standard.

Competent Authority. The General Civil Aviation Authority or any of its Departments to which supervision and development of civil aviation is assigned.

Conditional Clearance. An ATC clearance issued to an aircraft which does not become effective until a specified condition has been satisfied. The condition will normally relate to another aircraft or vehicle.

Conference communications. Communication facilities whereby direct speech conversation may be conducted between three or more locations simultaneously.

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.

Congested Area. A congested area as being 'any area of a city, town or settlement which is substantially used for residential, industrial, commercial or recreational purposes.

Consecutive duties. When the duration of a non-duty period between the conclusion of one duty period and the commencement of the next duty period is less than 40 hours.

Contour Line. A line on a map or chart connecting points of equal elevation.

Control area. A controlled airspace extending upwards from a specified limit above the earth.

Controlled aerodrome. An aerodrome at which an ATC service is provided to aerodrome traffic.

Note: The term "controlled aerodrome" indicates that an air traffic control service is provided to aerodrome traffic but does not necessarily imply that a control zone exists.

Controlled airspace. An airspace of defined dimensions within which ATC service is provided in accordance with the airspace classification.

Note: Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E as described in 2.6.ANNEX11.

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

Controlled flight. Any flight which is subject to an ATC clearance.

Control zone. A controlled airspace extending upwards from the surface of the earth to a specified upper limit.

Consultation. Discussion with a meteorologist or another qualified person of existing and/or expected meteorological conditions relating to flight operations; a discussion includes answers to questions (relevant to Subpart 7 Meteorology only).

COSPAS-SARSAT system. A satellite and ground station network that is designed to detect electronic distress beacons and to provide accurate, timely and reliable distress alert and location data to help search and rescue authorities assist persons in distress.

Craft. Any aircraft or marine surface vehicle or submersible.

Cruising level. A level maintained during a significant portion of a flight.

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

Current flight plan. The flight plan, including changes, if any, brought about by subsequent clearances.

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

Data link-automatic terminal information service. The provision of ATIS via data link.

Data link communications. A form of communication intended for the exchange of messages via a data link.

Data quality. A degree or level of confidence that the data provided meet the requirements of the data user in terms of accuracy, resolution and integrity.

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

Declared capacity. A measure of the ability of the ATC system or any of its subsystems or operating positions to provide service to aircraft during normal activities. It is expressed as the number of aircraft entering a specified portion of airspace in a given period of time, taking due account of weather, ATC unit configuration, staff and equipment available, and any other factors that may affect the workload of the controller responsible for the airspace.

Distress phase. A situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.

Drone. An unmanned aerial vehicle which can navigate autonomously, without human control or beyond line of sight. Also falls under the definition of UAV.

Downstream clearance. A clearance issued to an aircraft by an air traffic control unit that is not the current controlling authority of that aircraft.

Duty. Any task that an air traffic controller is required by the air traffic services provider to perform. These tasks include those performed during time-in-position, administrative work and training.

Note: These tasks include those performed during time-in-position, administrative work and training.

Duty period. A period which starts when an air traffic controller is required by an air traffic services provider to report for or to commence a duty and ends when that person is free from all duties.

Note: Regulations for prescriptive duty limits shall apply to air traffic controllers having, prior to commencing duty, performed unlicensed duties, e.g. administration work and training.

Early Start. An early start is a duty period that commences between 0530 and 0659 hours.

Elevation. The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.

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

Emergency phase. A generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.

Error. An action or inaction by an operational person that leads to deviations from organizational or the operational person's intentions or expectations.

Error management. The process of detecting and responding to errors with countermeasures that reduce or eliminate the consequences of errors and mitigate the probability of further errors or undesired states.

Essential Traffic. Essential traffic is controlled traffic to which the provision of separation by ATC is applicable, but which, in relation to a particular controlled flight is not, or will not be, separated from other controlled traffic by the appropriate separation minimum.

Extra Duty Period. An unscheduled duty period without prior arrangement in which an air traffic controller is requested by the air traffic services provider to perform a duty.

Fatigue. A physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to adequately perform safety-related operational duties.

Fatigue risk management system. A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.

Final Approach. That part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified—

1. At the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or
2. At the point of interception of the last track specified in the approach procedure; and
3. Ends at a point in the vicinity of an aerodrome from which:
 - a. a landing can be made; or
 - b. a missed approach procedure is initiated.

Final approach point or fix: That fix or point of an instrument approach procedure where the final approach segment commences.

Flexible use of airspace. An airspace management concept based on the principle that airspace should not be designated purely as civil or military, but rather as a continuum in which all user requirements are accommodated to the greatest possible extent.

Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Flight documentation. Written or printed documents, including charts or forms, containing meteorological information for a flight.

Flight information centre. A unit established to provide flight information service and alerting service.

Flight information region. An airspace of defined dimensions within which flight information service and alerting service are provided.

Flight information service. A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

Flight level. A surface of constant atmospheric pressure which is related to a specific pressure datum, 1013.2 hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals.

Flight plan. Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

Note: Specifications for flight plans are contained in Annex 2. When the expression “flight plan form” is used it denotes the model flight plan form at Appendix 2 to the PANS-ATM.

Flight procedure designer. A person responsible for flight procedure design who meets the competency requirements as laid down by the State.

Forecast. A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.

Foreign Object Debris. Any substance, debris or article alien to a vehicle or system which would potentially cause damage to an aircraft which is categorized by the location at which it is found.

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 WGS-84 defined ellipsoid, the difference between the WGS-84 ellipsoidal height and orthometric height represents WGS-84 geoid undulation.

Glidepath. A descent profile determined for vertical guidance during a final approach.

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.

Ground level at its site. Means the highest ground within a 600m radius of the site.

Handover. Transfer of an operational ATS control position responsibility from one person to another utilizing a position relief checklist.

Heading. The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid).

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

Helicopter reference point. The designated location of a heliport or a landing location.

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.

High Performance Capability. Horizontal speed capability of greater than 80 kph (20 metres per second).

Holding procedure. A predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance.

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.

Human performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Hypsometric tints. A succession of shades or colour gradations used to depict ranges of elevation.

Incident. An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Note: The types of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in the Accident/Incident Reporting Manual (ADREP Manual) (Doc 9156).

Instrument approach procedure. A series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply.

Instrument approach procedures are classified as follows:

Non-precision approach (NPA) procedure. An instrument approach procedure which utilizes lateral guidance but does not utilize vertical guidance.

Approach procedure with vertical guidance (APV). An instrument approach procedure which utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations.

Precision approach (PA) procedure. An instrument approach procedure using precision lateral and vertical guidance with minima as determined by the category of operation.

Note: Lateral and vertical guidance refers to the guidance provided either by:

- a) a ground-based navigation aid; or*
- b) computer-generated navigation data.*

Instrument Flight Rules flight. A flight conducted in accordance with the instrument flight rules.

Instrument Meteorological Conditions. Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

Instrument runway. One of the following types of runways intended for the operation of aircraft using instrument approach procedures:

1. Non-precision approach runway. An instrument runway served by visual aids and a non-visual aid providing at least directional guidance adequate for a straight-in approach.
2. Precision approach runway, category I. An instrument runway served by ILS and/or MLS and visual aids intended for operations with a decision height not lower than 60 m (200 ft.) and either a visibility not less than 800 m or a runway visual range not less than 550 m.
3. Precision approach runway, category II. An instrument runway served by ILS and/or MLS and visual aids intended for operations with a decision height lower than 60 m (200 ft.) but not lower than 30 m (100 ft.) and a runway visual range not less than 300 m.
4. Precision approach runway, category III. An instrument runway served by ILS and/or MLS to and along the surface of the runway and:
 - a. intended for operations with a decision height lower than 30 m (100 ft.), or no decision height and a runway visual range not less than 175 m.
 - b. intended for operations with a decision height lower than 15 m (50 ft.), or no decision height and a runway visual range less than 175 m but not less than 50 m.
 - c. intended for operations with no decision height and no runway visual range limitations.

Note - Where decision height (DH) and runway visual range (RVR) fall into different categories of operation, the instrument approach and landing operation would be conducted in accordance with the requirements of the most demanding category (e.g. an operation with a DH in the range of CAT IIIA but with an RVR in the range of CAT IIIB would be considered a CAT IIIB operation or an operation with a DH in the range of CAT II but with an RVR in the range of CAT I would be considered a CAT II operation).

Integrated Aeronautical Information Package. A package in paper or electronic media which consists of the following elements:

1. AIP, including amendment service;
2. Supplements to the AIP;
3. NOTAM and PIB;
4. AIC; and
5. Checklists and lists of valid NOTAM.

Integrated Airspace. Airspace in which UAV and manned aircraft operate with no segregation, with the same minimum separation standards applied and level of safety as provided between manned aircraft.

Integrity. A measure of the trust that can be placed in the correctness of the information supplied by the total system. Integrity includes the ability of a system to provide timely and valid warnings to the user (alerts).

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

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 Aeronautical and Maritime Search and Rescue Manual. The IAMSAR manual, a joint publication by the International Civil Aviation Organisation and the International Maritime Organisation that provides guidelines for a common aviation and maritime approach to organizing and providing SAR services.

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. An office designated by a State for the exchange of NOTAM internationally.

Joint Rescue Coordination Centre. A rescue coordination centre responsible for both aeronautical and maritime search and rescue incidents.

Key Performance Indicator (KPI). A set of quantifiable measures that an organisation uses to gauge or compare performance in terms of meeting their strategic and operational goals.

Leisure. The act of relaxation and/or amusing oneself by engaging in a sport or pastime.

Level. A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.

Level Bust. Any deviation from the assigned level greater than the 200ft allowed for in the Subpart 4, paragraph 4.34.(d) as meeting the Mode C verification criteria.

Licensing Authority. The Authority designated by a Contracting State as responsible for the licensing of personnel.

Note: In the provisions of this Subpart, the Licensing Authority is deemed to have been given the following responsibilities by the Contracting State:

- a) assessment of an applicant's qualifications to hold a licence or rating;*
- b) issue and endorsement of licences and ratings;*
- c) designation and authorization of approved persons;*
- d) approval of training courses;*
- e) approval of the use of flight simulation training devices and authorization for their use in gaining the experience or in demonstrating the skill required for the issue of a licence or rating; and*
- f) validation of licences issued by other Contracting States.*

Local Competency Examiner. A person, meeting the requirements of Subpart 4, authorised to conduct examinations for the renewal of Certificates of Competence, including re-issues following lapses of a validation of less than 12 months or suspensions from positions where the holder is currently competent.

Lost link. The loss of command and control link contact with the remotely-piloted aircraft such that the remote pilot can no longer manage the aircraft's flight.

Low Performance Capability. Horizontal speed capability of a maximum of 80 kph (20 Metres per second).

Magnetic variation: The angular difference between True North and Magnetic North.

Note: The value given indicates whether the angular difference is East or West of True North.

Maintenance. The term 'Maintenance' includes the operation, regular Maintenance, repair, modification and overhaul of facilities.

Mandatory Broadcast Airspace. Airspace of defined lateral and vertical dimensions within which pilots must make broadcasts of position and intention, upon entry, joining the circuit, prior to entering a runway or at stated intervals, on a designated frequency. May be either a Mandatory Broadcast Area (MBA) or Mandatory Broadcast Zone (MBZ).

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

Maritime Rescue Coordination Centre. A unit responsible for promoting efficient organisation of maritime SAR services and for coordinating the conduct of maritime SAR operations within a SRR.

Marker. An object displayed above ground level in order to indicate an obstacle or delineate a boundary.

Marking. A symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.

Manoeuvring area excursion. An excursion from the aerodrome manoeuvring area which is categorized according to the location and whether or not damage occurred.

MAYDAY MAYDAY MAYDAY FUEL: This terminology was chosen as the clearest and most urgent possible expression of an emergency situation brought about by insufficient fuel remaining to meet the planned final reserve fuel upon landing at the **nearest aerodrome** where a safe landing can be made.

Medical Assessment. The evidence issued by a Contracting State that the licence holder meets specific requirements of medical fitness.

Metadata. Data about data.

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

Meteorological Authority. The authority providing or arranging for the provision of meteorological service for international air navigation on behalf of a Contracting State.

Meteorological bulletin. A text comprising meteorological information preceded by an appropriate heading.

Meteorological information. Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.

Meteorological office. An office designated to provide meteorological service for international air navigation.

Meteorological report. A statement of observed meteorological conditions related to a specific time and location.

Minimum en-route altitude. 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 Fuel. The term used to describe a situation in which an aircraft's fuel supply has reached a state where the flight is committed to land at a specific aerodrome and no additional delay can be accepted.

Minimum sector altitude. The lowest altitude which may be used which will provide a minimum clearance of 300m (1000ft) above all objects located in the area contained within a sector of a circle of 46 km (25NM) radius centred on a significant point, the aerodrome reference point (ARP), or the helicopter reference point (HRP).

Morning Duty. A morning duty is a duty period that commences between 0700 and 0759 hours.

Movement area. That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

Multilateration. A ground-based independent cooperative ATM system, using transponder signals received by a number of ground based receivers and processed to calculate the position of origin of the signal.

National SAR Plan. A document that pertains to the SRRs, RCCs, and SAR-related functions for which one State is responsible and that describes how SAR services will be provided, organized and supported.

Navigable airspace. Airspace at or above the minimum flight altitudes prescribed by or under Civil Aviation Rules, including all legitimate low level operations but not including prohibited, restricted and danger areas.

Navigation specification. A set of aircraft and flight crew requirements needed to support performance-based navigation within a defined airspace. There are two kinds of navigation specification:

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

Night Duty. A night duty is a duty period wholly or partly within the period of 0200 and 0529 hours.

Non-duty period. A continuous and defined period of time, subsequent to and/or prior to duty periods, during which the air traffic controller is free of all duties.

Notice to Airmen. 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.

Observation (meteorological) The evaluation of one or more meteorological elements.

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

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

Obstacle free zone. The airspace above the inner approach surface, inner transitional surfaces, and balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangibly mounted one required for air navigation purposes.

Obstacle limitation surface. Surfaces defining the airspace around an aerodrome to be maintained free of obstacles so as to permit aeroplane operations at the aerodrome to be conducted safely and to prevent the aerodrome from becoming unusable by the growth of obstacles around the aerodrome.

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

On-scene coordinator. A person designated to coordinate SAR operations within a specified area.

On the Job Training Instructor. A person, authorized to conduct on the job training in simulators and operational control positions.

Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

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

Performance based navigation. 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 criteria. Simple, evaluative statements on the required outcome of the competency element and a description of the criteria used to judge whether the required level of performance has been achieved.

Pilot-in-command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

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.

Precision. The smallest difference that can be reliably distinguished by a measurement process. Note: In reference to geoid 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. A presentation of current NOTAM information of operational significance, prepared prior to flight.

Printed Communications. Communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such a circuit.

Private operation. An aircraft operation which is performed for Sport or Leisure purposes not as a commercial venture.

Problematic use of substances. The use of one or more psychoactive substances by aviation personnel in a way that:

1. Constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or
2. Causes or worsens an occupational, social, mental or physical problem or disorder.

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.

Psychoactive substances. Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

Quality. Degree to which a set of inherent characteristics fulfils requirements.

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.

Quality control. Part of quality management focused on fulfilling quality requirements.

Quality management. Coordinated activities to direct and control an organisation with regard to quality.

Quality system. Documented organisational procedures and policies; internal audit of those procedures and policies; management review and recommendation for quality improvement.

Radio Controlled Aircraft. Unmanned Aerial Vehicle, controlled remotely by a remote pilot using radio control device.

Radiotelephony. A form of radio communication primarily intended for the exchange of information in the form of speech.

Radio Navigation Aids. ILS, MLS, GNSS, VOR, DME, and VHF marker beacons.

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.

Rating. An authorisation entered on or associated with a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence.

Recommended Practice. Any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interests of safety, regularity or efficiency of international air navigation, and to which Contracting States will endeavour to conform in accordance with the Convention.

Regional air navigation agreement. Agreement approved by the Council of ICAO normally on the advice of a regional air navigation meeting.

Relief. The inequalities in elevation of the surface of the Earth, represented on aeronautical charts by contours, hypsometric tints, shading or spot elevations.

Remote pilot. The person who manipulates the flight controls of a remotely-piloted aircraft during flight time.

Remotely piloted Aerial System. An Unmanned Aerial Vehicle and its associated elements which are operated with no pilot on board. The term does not include unmanned balloons. Same meaning as Unmanned Aerial System.

Repetitive flight plan. A flight plan related to a series of frequently recurring, regularly operated individual flights with identical basic features, submitted by an operator for retention and repetitive use by ATS units.

Reporting point. A specified geographical location in relation to which the position of an aircraft can be reported.

Required Communication Performance. A statement of the performance requirements for operational communication in support of specific ATM functions.

Required Communication Performance type. A label (e.g. RCP 240) that represents the values assigned to RCP parameters for communication transaction time, continuity, availability and integrity.

Required Navigation Performance. A statement of the navigation performance necessary for operation within a defined airspace.

Rescue. An operation to retrieve persons in distress, provide for their initial medical and other needs and deliver them to a place of safety.

Rescue Coordination Centre. A unit responsible for promoting efficient organisation of SAR services and for coordinating the conduct of SAR operations within a SRR.

Rescue sub-centre. A unit subordinate to a rescue coordination centre, established to complement the latter according to particular provisions of the responsible authorities.

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

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.

Runway. A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.

Runway-holding position. A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower.

Note: In radiotelephony phraseologies, the expression "holding point" is used to designate the runway-holding position.

Runway Incursion. Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and takeoff of aircraft.

Note: For the purposes of this definition, the protected area is defined as "the area on the runway side of the appropriate runway holding position" and incorrect presence is "entering the protected area regardless of the safety effect on other aircraft or vehicle operations and irrespective of whether the protected surface (runway) is closed or not, as a consequence of a failure of a pilot, driver or person to comply with a valid ATC clearance, or their compliance with an inappropriate ATC clearance."

Runway visual range. The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

Safety Management Post holder. The member of management who shall be the responsible individual and focal point for the development and maintenance of an effective safety management system.

Safety Management System. A systematic approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures.

Safety performance. A State's or service provider's safety achievement as defined by its safety performance targets and safety performance indicators.

Safety performance indicator. A data-based safety parameter used for monitoring and assessing safety performance.

Safety performance target. The planned or intended objective for safety performance indicator(s) over a given period.

Safety-sensitive personnel. Persons who might endanger aviation safety if they perform their duties and functions improperly, including, but not limited to, crew members, aircraft maintenance personnel and air traffic controllers.

Segregated airspace. Airspace of specified dimensions allocated for exclusive use to a specific user(s).

Sense and avoid. The capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action to comply with the applicable rules of flight.

Serious Incident. An incident involving circumstances indicating that there was a high probability of an accident or where there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger, or apprehension exists as to the safety of the aircraft and its occupants, associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down.

Search. An operation normally coordinated by a rescue coordination centre or rescue sub-centre using available personnel and facilities to locate persons in distress.

SAR Coordinator. A person within the SAR organisation with overall responsibility for establishing and providing SAR services and ensuring that planning for those services is properly coordinated.

Search and Rescue Region. An area of defined dimensions associated with a rescue coordination centre within which search and rescue services are provided.

Search and Rescue Service. The performance of distress monitoring, communication, coordination and other related functions including initial medical assistance and medical evacuation through the use of public and private resources including cooperating aircraft, vessels and other craft and installations.

Search and Rescue Service Provider. Any organisation that is providing search and rescue services and that is functionally separated from its regulator.

Search and Rescue Unit. A mobile unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations.

SIGMET information. Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations.

Significant point. A specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.

Surface Movement Guidance and Control System. A system of visual and non-visual aids, facilities, procedures and regulations designed to meet the particular requirements for guidance to, and control of, surface traffic consistent with the operational needs at a particular aerodrome.

Special Use Airspace. A collective expression for Danger, Restricted or Prohibited Areas.

Special VFR flight. A VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.

Standard. Any specification for physical characteristics, configuration, material, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38.

Standby Duty. A period of time during which, by prior arrangement, an air traffic controller is required by the air traffic service provider to be available to report at his place of work to perform a duty.

State safety programme. An integrated set of regulations and activities aimed at improving safety.

Strayed Aircraft. An aircraft which has deviated significantly from its intended track or which reports that it is lost.

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.

Takeover. Accepting of an operational ATS control position responsibility from one person to another utilising a position relief checklist.

Taxiing. Movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing.

Terminal control area. A control area normally established the confluence of ATS routes in the vicinity of one or more major aerodromes.

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.

Note: In practical terms, depending on the method of data collection used, terrain represents the continuous surface that exists at the bare Earth, the top of the canopy or something in-between, also known as "first reflective surface".

Threat. Events or errors that occur beyond the influence of an operational person, increase operational complexity and must be managed to maintain the margin of safety.

Threat management. The process of detecting and responding to threats with countermeasures that reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired states.

Time-in-position. The period of time when an air traffic controller is exercising the privileges of the air traffic controller's licence at an operational position.

Track. The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).

Traffic avoidance advice. Advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision.

Traffic information. Information issued by an air traffic service unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision.

Transfer of control point. A defined point located along the flight path of an aircraft, at which the responsibility for providing air traffic control service to the aircraft is transferred from one control unit or control position to the next.

Transferring unit. An air traffic control unit in the process of transferring the responsibility for providing air traffic control service to an aircraft to the next air traffic control unit along the route of flight.

Transition altitude: The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.

Uncertainty phase. A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.

Uncontrolled Airspace. Class G airspace in which aircraft are not subject to an Air Traffic Control service.

Unmanned aircraft. An aircraft which is intended to operate with no pilot on board.

Unmanned Aerial System. An aircraft and its associated elements which are operated with no pilot on board. The term does not include unmanned balloons.

Unmanned Aerial Vehicle. An aircraft which is intended to operate with no pilot on board.

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

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

Note1: The term "verified" is used to designate the corresponding status.

Note2: Confirmation can comprise activities such as:

1. Performing alternative calculations;

2. Comparing a new design specification with a similar proven design specification;
3. Undertaking tests and demonstrations; and
4. Reviewing documents prior to issue.

Vertical path angle. Angle of the published final approach descent in Baro-VNAV procedures.

VFR flight. A flight conducted in accordance with the visual flight rules.

Visibility. Visibility for aeronautical purposes is the greater of:

- a) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background; or
- b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.

Note: The two distances have different values in air of a given extinction coefficient, and the latter b) varies with the background illumination. The former a) is represented by the meteorological optical range (MOR).

Visual line-of-sight operation. An UAV operation in which the remote crew maintains direct visual contact with the aircraft to manage its flight and meet separation and collision avoidance responsibilities.

Visual meteorological conditions. Meteorological conditions expressed in terms of visibility, distance from cloud and ceiling, equal to or better than specified minima.

Note: The specified minima are contained in Annex 2.

Voice-automatic terminal information service. The provision of ATIS by means of continuous and repetitive voice broadcasts.

Waypoint. A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation, identified as either:

1. Fly by waypoint. A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure; or
2. Flyover waypoint. A waypoint at which a turn is initiated in order to join the next segment of a route or procedure.

World Meteorological Organisation. The agency of the United Nations relating to climate, meteorology, hydrology and related geophysical sciences.

(b) Acronyms

The Acronyms/Abbreviations used in CAR Part VIII have the following meanings:

ABAS	Aircraft-based augmentation system
AC	Advisory Circular
ACAS	Airborne collision avoidance system
ACC	Area control centre
ACO	Aircraft Coordinator
ADS	Automatic dependent surveillance
ADS-B	Automatic dependent surveillance — broadcast
ADS-C	Automated dependent surveillance — contract
AFIS	Aerodrome flight information service
AFS	Aeronautical fixed service
AFTN	Aeronautical fixed telecommunication network
AIC	Aeronautical Information Circular
AIM	Aeronautical information management
AIP	Aeronautical information publication
AIRAC	Aeronautical information regulation and control
AIRPROX	Aircraft proximity
AIS	Aeronautical Information Service
ALERFA	Alert phase
AMD	Aerodrome mapping data
AMDB	Aerodrome mapping database
AMSL	Above mean sea level
ANSP	Air navigation service provider
APC	Assessment of Previous Competence
APCH	Approach
APV	Approach procedures with vertical guidance
ARCC	Aeronautical Rescue Coordination Centre
ARP	Aerodrome reference point
ATC	Air traffic control
ATCA	Air Traffic Control Assistant
ATCO	Air Traffic Control Officer
ATFM	Air traffic flow management
ATM	Air Traffic Management
AMSL	Above mean sea level
ATFM	Air traffic flow management
ATIS	Automatic terminal information service
ATM	Air traffic management
ATN	Aeronautical telecommunication network
ATS	Air traffic service
ATSEP	Air traffic safety electronics personnel
ATSU	Air traffic services unit
ATZ	Aerodrome traffic zone
AWY	Airway
A/SMGCS	Advanced Surface Movement Guidance and Control System
CAA	Civil aviation authority
CAR	Civil Aviation Regulations
CAT	Category
CCO	Continuous climb operations
CDFA	Constant descent final approach
CDI	Course deviation indicator

CDO	Continuous descent operations
CISM	Critical Incident Stress Management
CNS	Communications, navigation and surveillance
CoC	Certificate of Competence
CPDLC	Controller-pilot data link communications
CRC	Cyclic redundancy check
CRM	Collision risk model
CSS	Call Sign Similarity
CTA	Control area
CTR	Control zone
C/L	Centre line
DA/H	Decision altitude/height
D-ATIS	Data link-automatic terminal information service
DCL	Departure Clearance
DETRESFA	Distress phase
DTED	Digital terrain elevation data
DME	Distance measurement equipment
DP	Decision point
DR	Dead reckoning
EASA	European Aviation Safety Agency
ECAC	European Civil Aviation Conference
ECT	Emergency Continuation Training
ELP	English Language Proficiency
EUROCAE	European Organisation for Civil Aviation Equipment
EUROCONTROL	European Organisation for the Safety of Air Navigation
EXM	ATC Examiner
FA	Course from a fix to an altitude
FAA	Federal Aviation Administration
FAF	Final approach fix
FAP	Final approach point
FATO	Final Approach and Take-Off area
FRMS	Fatigue risk management system
FIR	Flight information region
FIS	Flight information service
FISA	Automated flight information service
FL	Flight level
FMC	Flight management computer
FMS	Flight management system
FRT	Fixed radius turn
FTS	Fast-time simulation
FUA	Flexible use of airspace
GA	General aviation
GBAS	Ground-based augmentation system
GLS	GBAS landing system
GNSS	Global navigation satellite system
GP	Glide path
GPA	Glide path angle
GPS	Global positioning system
GPWS	Ground Proximity Warning System
GUND	Geoid undulation
HCH	Heliport crossing height

HL	Height loss
HRP	Heliport reference point
IAC	Instrument Approach Chart
IAF	Initial approach fix
IAIP	Integrated Aeronautical Information Package
IAMSAR	International Aeronautical and Maritime Search and Rescue
IAP	Instrument approach procedure
IAS	Indicated airspeed
ICAO	International Civil Aviation Organisation
IF	Intermediate approach fix
IFER	In Flight Emergency Response
IFP	Instrument flight procedure
IFR	Instrument flight rules
ILS	Instrument landing system
IMC	Instrument meteorological conditions
INCERFA	Uncertainty phase
INS	Inertial navigation system
IRS	Inertial reference system
IRU	Inertial reference unit
ISA	International standard atmosphere
JAA	Joint Aviation Authorities
JRCC	Joint Rescue Coordination Centre
KIAS	Knots indicated airspeed
KPI	Key performance indicator
LCE	Local Competency Examiner
LDAH	Landing distance available - helicopters
LOA	Letter of authorization/acceptance/agreement
LOC	Localizer
LP	Localiser performance
LPV	Localiser performance with vertical guidance
LVC	Low visibility conditions
LVO	Low visibility operation/s
LVP	Low visibility procedure/s
MA/H	Minimum altitude/height
MAHF	Missed approach holding fix
MAPt	Missed approach point
MATF	Missed approach turning fix
MCTOW	Maximum Certificated Take-Off Weight
MDA/H	Minimum descent altitude/height
MEA	Minimum en-route altitude
MER	Minimum Experience Requirement
MET	Meteorology
METAR	Aerodrome routine meteorological report
MLS	Microwave landing system
MM	Middle marker
MNPS	Minimum navigation performance specification
MOC	Minimum obstacle clearance
MOCA	Minimum obstacle clearance altitude
MRCC	Maritime Rescue Coordination Centre
MSA	Minimum sector altitude
MSAW	Minimum safe altitude warning

MSD	Minimum stabilization distance
MSL	Mean sea level
NAVAID	Navigation aid
NDB	Non-directional beacon
NM	Nautical mile
NOC	No objection Certificate
NOF	International NOTAM office
NOTAM	Notice to airmen
NPA	Non-precision approach
NSE	Navigational system error
NTZ	No transgression zone
OCA/H	Obstacle clearance altitude/height
OFZ	Obstacle free zone
OJT	On-the-job training
OJTI	On the Job Training Instructor
OLS	Obstacle limitation surface
OM	Outer marker
OSC	On-scene coordinator
PA	Precision approach
PANS	Procedures for air navigation services
PAPI	Precision approach path indicator
PBN	Performance-based navigation
PDG	Procedure design gradient
PIB	Pre-flight information bulletin
PinS	Point in space
QAS	Quality Assurance Systems
QFE	Atmospheric pressure at aerodrome (or runway threshold) elevation
QMS	Quality Management Systems
QNH	Altimeter subscale setting to obtain elevation when on ground
RAIM	Receiver autonomous integrity monitoring
RASS	Remote altitude setting source
RCC	Rescue coordination centre
RCP	Required Communication Performance
RDH	Reference datum height
RF	Constant radius arc to a fix
RFFS	Rescue and Fire Fighting Services
RNAV	Area navigation
RNP	Required navigation performance
ROSI	Reporting of Safety Incidents
RPAS	Remotely piloted Aerial System
RPL	Repetitive flight plan
RSC	Rescue sub-centre
RSR	En-route surveillance radar
RTF	Radiotelephone
RTS	Real-time simulation
RVR	Runway visual range
RVSM	Reduced vertical separation minimum
RWY	Runway
SA	Safety area
SC	SAR Coordinator

SAR	Search and rescue
SARPs	Standards and Recommended Practices (ICAO)
SBAS	Satellite-based augmentation system
SD	Standard deviation
SDF	Stepdown fix
SID	Standard instrument departure
SIGMET	Information concerning en-route weather phenomena which may affect the safety of aircraft operations
SIS	Signal in space
SMGCS	Surface movement guidance and control system
SMR	Surface movement radar
SMS	Safety Management System
SOC	Start of climb
SPECI	Aerodrome special meteorological report
SPI	Safety performance indicator
SPT	Safety performance target
SRR	Search and Rescue Region
SRU	Search and Rescue Unit
SSR	Secondary surveillance radar
STAR	Standard instrument arrival
SUA	Special Use Airspace
SUP	AIP Supplement
TAA	Terminal arrival altitude
TACAN	UHF tactical air navigation aid
TAR	Terminal area surveillance radar
TAS	True airspeed
TA/H	Turn at an altitude/height
TCAS	Traffic Alert and Collision Avoidance System
TCM	Training and Competency Manual
THR	Threshold
TIBA	Traffic information broadcast by aircraft
TLS	Target level of safety
TMA	Terminal control area
TNA/H	Turn altitude/height
TP	Turning point
TRA	Telecommunications Regulatory Authority
TSE	Total system error
TWR	Aerodrome control tower or aerodrome control
UAS	Unmanned Aerial System
UAV	Unmanned Aerial Vehicle
UHF	Ultra high frequency
UIR	Upper flight information region
UTC	Coordinated Universal Time
VAL	Vertical alarm limit
VASIS	Visual approach slope indicator system
VFR	Visual flight rules
VHF	Very high frequency
VMC	Visual meteorological conditions
VNAV	Vertical navigation
Voice-ATIS	Voice-automatic terminal information service
VPA	Vertical path angle

VOR	Very high frequency omni-directional radio range
VS	Visual segment
VSS	Visual segment surface
WGS- 84	World Geodetic System - 1984
WMO	World Meteorological Organisation
5LNC	Five-letter name code

Note: Throughout the text of this document the term “service” is used as an abstract noun to designate functions, or service rendered; the term “unit” is used to designate a collective body performing a service.

CAR 1.3 COMMON REFERENCE SYSTEMS

- (a) Horizontal reference system: World Geodetic System - 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system. Reported aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.

Note: Comprehensive guidance material concerning WGS-84 is contained in the World Geodetic System — 1984 (WGS-84) Manual (Doc 9674).

- (b) Vertical reference system: Mean sea level (MSL) datum, which gives the relationship of gravity-related height (elevation) to a surface known as the geoid, shall be used as the vertical reference system.

Note: The geoid globally most closely approximates MSL. It is defined as the equipotential surface in the gravity field of the Earth which coincides with the undisturbed MSL extended continuously through the continents.

- (c) Temporal reference system: The Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference system.

CAR 1.4 UNITS OF MEASUREMENT

- (a) ICAO Annex 5 contains specifications for the use of a standardised system of units of measurement in international civil aviation air and ground operations. This standardized system of units of measurement is based on the International System of Units (SI) and certain non-SI units considered necessary to meet the specialized requirements of international civil aviation.

- (b) Subject to CAR 1.4.c, the units of measure used for aeronautical purposes in the United Arab Emirates are those specified in the International System of Units as adopted in ICAO Annex 5.

- (c) Non International System Units adopted by ICAO Annex 5 are used in accordance with the following table within the UAE:

Quantity	Non SI symbol.
Altitude	Feet (ft).
Distance	Nautical Miles (NM).
Elevations	Feet (ft).
Heights	Feet (ft).
Speed, including wind speed	Knots (kt).
Vertical speed	Feet per minute (ft/min).

CAR 1.5 REQUIREMENT FOR CERTIFICATION

No person shall provide a service to civil aviation, as listed in CARs 1.1.a.2 to 1.1.a.9 inclusive of this Subpart, within the UAE FIR except under the authority of, and in accordance with the provisions of, a service certificate issued under this Part.

Note: Because of the general nature of this Subpart, the use of the term “service certificate” refers to a certificate issued under any Subpart of PART VIII as applicable.

CAR 1.6 APPLICATION FOR CERTIFICATE

- (a) Application for the grant of a service certificate shall be made in a form and manner established by the Authority.
- (b) Application should be made via E-services online application under the certificate application section relevant to the certificate sought with all elements of the submission completed, including the exposition manual required by the relevant Subpart and payment of the appropriate application fee as specified by the Authority.

CAR 1.7 ISSUE OF CERTIFICATE

- (a) Applicant shall be granted with a service certificate if:
 - (1) The applicant meets the requirements of Section B of this Rule and applicable PART VIII Subpart;
 - (2) The organisation's exposition as required by CAR 1.20 and by the applicable Subpart of PART VIII is acceptable to the Authority; and
 - (3) The Authority is satisfied that the granting of the certificate is not contrary to the interests of aviation safety.
- (b) Unless otherwise authorised by the applicable Subpart, only one certificate shall be issued for the same service at the same location.

CAR 1.8 PRIVILEGES OF CERTIFICATE

The scope of the privileges, and any condition thereof, shall be specified in the service certificate.

CAR 1.9 DURATION OF CERTIFICATE

- (a) The service certificate shall remain valid for unlimited period subject to:
 - (1) the organisation remaining in compliance with the Law and applicable relevant regulatory requirements, taking into account the provisions related to the handling of findings as specified during the activities conducted by the Authority under CAR 1.10;
 - (2) the Authority being granted unrestricted access, for inspectorate staff and their electronic equipment, to the organisation's facilities, documents and records, to determine continued compliance with Law and applicable regulatory requirements; and
 - (3) the service certificate not being surrendered or revoked.
- (b) Upon revocation, suspension, or surrender, the service certificate shall be returned to the Authority without delay.

Note: Electronic equipment referred to in CAR 1.9 (a) (2), includes, computers, cameras and audio recording devices, provided by the Authority to support regulatory oversight activities.

CAR 1.10 AUDITS AND RESOLUTION OF SAFETY ISSUES

- (a) A service certificate Holder shall be subject to planned or unplanned surveillance audits conducted at the discretion of the Authority.
- (b) After receipt of notification of findings during the activities conducted in CAR 1.10.a, the organisation shall:
 - (1) identify the root cause of the non-compliance;
 - (2) define a corrective action plan; and
 - (3) demonstrate corrective action implementation to the satisfaction of the Authority within a period agreed with the Authority.

CAR 1.11 TRANSFER OR WITHDRAWAL OF CERTIFICATE

- (a) Transfer of a service certificate may only be made to an organisation that:
 - (1) is able to undertake the obligations of the privileges of the service certificate; and
 - (2) has demonstrated its ability to qualify under this Subpart and the applicable Subpart of PART VIII.

The existing service certificate holder shall not hinder the preparation and execution of the transitional arrangements required by CAR 1.11.a.

- (b) The holder of an existing service certificate intending to permanently withdraw or significantly reduce the hours of operation of the service shall notify the Authority at least 90 days in advance. The notification should include the new proposal and include a summary of the factors considered in arriving at the decision to withdraw or significantly reduce the hours of operation of the service.
- (b) The applicant intending to assume responsibility for providing a service from an existing certificate holder should include with its application a full detail of transitional arrangements endorsed by the Accountable Manager of both organisations. The application should be made via the E services online application at least 90 days prior to the cessation of service by the existing service certificate holder.

CAR 1.12 CHANGES TO SERVICE CERTIFICATE HOLDER'S ORGANISATION

- (a) The service certificate holder shall ensure that its exposition is reviewed and amended accordingly so as to maintain continued compliance with the applicable regulation and remain a current description of the holder's organisation and services. The Authority may as well request the service certificate holder to amend its exposition, when the change is deemed in the interests of aviation safety.
- (b) The service certificate holder shall ensure that any amendments made to the holder's exposition meet the applicable requirements of the Subpart and comply with the amendment procedures contained in the holder's exposition.
- (c) The service 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) When the service certificate holder proposes to make a change to any of the following elements (as applicable), prior notification to, acceptance by and the obtaining of a No Objection Letter from the Authority shall be required before implementation:
 - (1) The persons listed in CAR 1.14.a;
 - (2) The service(s) provided by the service certificate holder;

- (3) The airspace in which a service is being supplied;
 - (4) The format and standards for the aeronautical information published under the authority of their certificate; or
 - (5) any change of address for service, telephone number or facsimile number.
- (e) The Authority may prescribe conditions under which a service certificate holder must comply with prior to and following acceptance of any change specified in CAR 1.12.d.
- (f) Changes made to the persons and services listed in (d) (1) and (d) (2) above should be made via the E-Services online application along with the required supporting documentation.

CAR 1.13 OPERATIONAL APPROVAL

- (a) Service certificate holders shall obtain an Approval from the Authority prior to undertaking the following amendments affecting operations:
- (1) Installation of new equipment;
 - (2) Introduction of new procedures;
 - (3) Changes to airspace;
 - (4) Changes to the hours of operation of the service provided; and
 - (5) Changes to any aspect of the service provided which may impact on safety.

Note: Details on how to apply and what information to provide is contained in CAAP 25.

SECTION B — CERTIFICATION REQUIREMENTS

CAR 1.14 PERSONNEL REQUIREMENTS

- (a) The applicant for a service certificate shall ensure the following Post Holder roles are continually occupied by appropriately qualified and experienced persons:
- (1) An Accountable Manager who shall:
 - i. have the authority for ensuring that each service listed in their exposition can be financed and provided in accordance with the applicable operational requirements; and is carried out in accordance with the applicable requirements; and
 - ii. be responsible for establishing and maintaining an effective management system prescribed by CAR 1.20.
 - (2) A Head of Service who shall:
 - i. have appropriate knowledge and experience relevant to the service certificate and associated privileges sought;
 - ii. be responsible for the service implementation, maintenance, documentation, performance, effectiveness and oversight of the organisation;
 - iii. be a principle communicator with the Authority in relation to audits and service provision issues relating to the service operational system; and
 - iv. be ultimately responsible to the accountable manager.
 - (3) A Head of Training who shall:
 - i. have appropriate knowledge and experience relevant to the service certificate and associated privileges sought;
 - ii. be responsible for the training system implementation, maintenance, documentation, performance, effectiveness and oversight of the organisation;
 - iii. be a principle communicator with the Authority in relation to audits and service provision issues related to the training system; and
 - iv. be ultimately responsible to the accountable manager.
 - (4) A Head of Safety who shall:
 - i. have appropriate Safety Management System knowledge and experience;
 - ii. be responsible for the Safety Management System implementation, maintenance, documentation, performance, effectiveness and oversight of the organisation;
 - iii. be a principle communicator with the Authority in relation to audits and Safety Management System issues; and
 - iv. be ultimately responsible to the accountable manager.
 - (5) A Head of Quality who shall:
 - i. have appropriate Quality Management System knowledge and experience;
 - ii. be responsible for the Compliance Monitoring and Quality Assurance System implementation, maintenance, documentation, performance, effectiveness and oversight of the organisation;

- iii. be a principle communicator with the Authority in relation to audits and Quality Management System and compliance issues; and
 - iv. be ultimately responsible to the accountable manager.
- (b) No person shall be permitted to occupy one of the above mentioned positions without the acceptance of the Authority. The roles, responsibilities and accountabilities of the person or group of persons occupying the above mentioned positions shall be reflected in their respective job description.
- (c) Additionally, an applicant shall:
- (1) employ sufficient personnel to operate maintain and support the service(s) listed in its exposition;
 - (2) establish a procedure to initially assess the competence of those personnel authorised by the applicant to operate, maintain and support service(s) listed in their exposition;
 - (3) establish procedures to maintain the competence of those authorised personnel;
 - (4) provide those authorised personnel with written evidence of the scope of their authorization; and
 - (5) establish procedures to make clear who deputizes for any particular person in the case of lengthy absence of the said person.
- (d) Prior to the nominee taking the responsibility as the post holder, the organisation should submit, the person's credentials to the Authority through the ANSP Certification E-service, to attain the required acceptance by the Authority including C.V., job description and proof of relevant training. The organisation should allow minimum 20 working days for the Authority to review the application. Accepted Post Holders will be recorded in Part III of the applicable service certificate.

Note 1: These Post Holder positions form an essential component of the organisations safety, quality and operational effectiveness and sustainability. The term "continuously occupied" means that the service certificate holder is no longer in compliance with the applicable requirement when one of these positions becomes vacant (e.g. resignation). In such cases, a permanent or interim replacement person will be immediately appointed by the service certificate holder for acceptance by the Authority.

Note 2: The Authority will review the nominee's knowledge and experience, and conduct an interview with the nominee to deem if the nominee is appropriate to hold the post of Head of Service. The acceptance process is designed to ensure that the applicant is qualified with knowledge of the applicable regulations, an understanding of the role sought and the standards required by the Authority.

CAR 1.15 FACILITY REQUIREMENTS

The applicant for a service certificate shall have suitable facilities allowing for the performance and management of all planned tasks and activities in accordance with the applicable requirements and appropriate to the service(s) listed in its exposition.

CAR 1.16 DOCUMENTATION

- (a) The applicant for a service certificate shall:
- (1) document the standards to meet for the privileges provided under the authority of its certificate;
 - (2) ensure that the format and standards take into account the circumstances under which the information will be used;
 - (3) hold copies of relevant reference materials, standards, practices and procedures, and any other documentation that is necessary for the service/s listed in their exposition. These

documents shall include, but not be limited to, those specifically listed in the documentation section of the applicable Subpart.

- (b) An applicant shall establish and implement a procedure to control all the documentation required by CAR 1.16.a.3, to ensure that:
 - (1) The documentation is continuously reviewed and authorised 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 service(s) 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 versions.

CAR 1.17 RECORDS

- (a) The applicant for a service certificate shall establish procedures to identify, collect, control, store, maintain and dispose of the records that are necessary for the service(s) listed in its exposition.
- (b) Records shall be retained for at least for the periods as required by the applicable Subpart.

CAR 1.18 QUALITY ASSURANCE

- (a) An applicant for a service certificate shall establish a quality assurance system to ensure compliance with, and the adequacy of, the means established to maintain compliance with the applicable requirements.
- (b) The quality assurance system required shall be similar to ISO 9000 standards and shall be certified accordingly to that particular standard.
- (c) The Head of Quality who is responsibility for the quality assurance system shall have direct access to the Accountable Manager on matters affecting the adequacy, accuracy, timeliness format and dissemination of the published aeronautical information.
- (d) Procedures shall be established and implemented to specify:
 - (1) The level and frequency of internal audits;
 - (2) The person or persons responsible for carrying out the internal audits and their qualification and as well their training;
 - (3) How the independency of the audits is ensured and how findings of the internal audits are to be recorded and reported to the Accountable Manager;
 - (4) How quality indicators such as error reports, incidents and complaints are incorporated into the quality assurance procedures;
 - (5) The means of rectifying any deficiencies found during an internal audit; and
 - (6) The documentation requirements for all aspects of the audit.
- (e) Where required by a particular Subpart, the quality assurance system shall also establish and continuously monitor the effective implementation of the following procedures:
 - (1) validation and verification procedures to ensure that quality requirements and traceability of aeronautical data are met;
 - (2) data integrity procedures to ensure that the integrity of aeronautical data is maintained throughout the complete data process from originator to the end user.

- (f) Each applicant for the grant of a service certificate shall establish procedures to record, investigate, correct, and report any errors that are detected in the service provided under the authority of their certificate.
- (g) Internal audit procedures should ensure that:
 - (1) Identified errors are corrected by the most appropriate means relative to the operational significance of the error;
 - (2) Any correction is clearly identified in the republished information;
 - (3) Error sources are clearly identified and, where possible, eliminated; and
 - (4) Where the error is a reportable error as required in the particular Subpart, the Authority should be notified of the error and the correction process followed.

CAR 1.19 SAFETY MANAGEMENT

- (a) The applicant for service certificate shall establish, maintain and implement a safety management system in accordance with CAR Part X.
- (b) The applicant shall ensure that any change to the service, how the activities are performed or facilities used in providing the service, shall be subject to a safety assessment conducted prior to implementation and acceptable to the Authority. User consultation shall form part of the safety assessment.

CAR 1.20 ORGANISATION EXPOSITION

- (a) The applicant for a service certificate shall establish, implement and maintain with an exposition acceptable to the Authority containing:
 - 1. A compliance statement signed by the Accountable Manager on behalf of the applicant's organisation confirming that:
 - i. the exposition and any included or referred documents define and establish the organisation and its means and methods for ensuring continued compliance with the applicable requirements;
 - ii. the exposition and any included or referred documents will be complied with at all times;
 - iii. the organisation has sufficient financial strength and liability protection to provide the service(s) listed in the exposition and to cover any claims that may be made relating to the services provided;
 - 2. The duties and responsibilities of the Post Holders specified in CAR 1.14 including matters for which they have responsibility to deal directly with the Authority on behalf of the organisation;
 - 3. An organisational chart showing lines of responsibility of the Post Holders specified in CAR 1.14;
 - 4. A list of the service/s to be covered by the certificate and the locations at which the service/s will be provided;
 - 5. A summary of the organisation's staffing structure indicating the minimum staffing levels required for each service listed in their exposition; and
 - 6. Details of the organisation's procedures required by the applicable requirements within each Subpart regarding:
 - i. the competence of personnel;
 - ii. the control of documentation;

- iii. the collection of information;
- iv. the publication of aeronautical information;
- v. the identification, collection, indexing, storage, maintenance, and disposal of records;
- vi. quality assurance;
- vii. safety management; and
- viii. control, amendment and distribution of the exposition.

Note: "Minimum staffing levels" means the minimum number of staff required for the safe provision of the service.

SECTION C — OPERATING REQUIREMENTS

CAR 1.21 SAFETY INSPECTIONS AND AUDITS

- (a) A service certificate holder shall accommodate scheduled and random inspections and audits of service facilities, documents and records when required by the Authority.
- (b) A service certificate holder shall provide such information as the Authority considers relevant to the inspection or audit.

CAR 1.22 ADDITIONAL REQUIREMENTS

- (a) A service certificate holder shall ensure compliance with CAR PART III Chapter 9, in particular in respect of:
 - (1) Being subject to operational restrictions, suspension, or revocation in case of non-resolution of non-compliance;
 - (2) Occurrence reporting system requirement;
 - (3) Access to E-publication.
- (b) A service certificate holder shall establish a system to educate their personnel of how to report an actual or potential safety deficiency through the Authority's voluntary reporting system- "Voluntary Reporting System", as amended.

Note: Prior to adopting firm enforcement standards, the Authority may use the following tools, prior to suspend or revoke a service certificate:

- (1) Special Attention
 - i. There may be occasions where the service certificate Holder require a higher degree of regulatory safety oversight by the Authority, for instance where large or complex organisational developments are being undertaken, where significant operational changes are taking place or in order to achieve a satisfactory standard of regulatory compliance.
 - ii. In addition, concerns may have been identified about the safety of operations by service providers, the maintenance of its facilities, equipment or the service certificate holder's organizational structure in meeting the Authority certification requirements.
 - iii. In these circumstances, the service certificate Holder may be enrolled by the Authority through a "Special Attention" process, which means that closer regulatory oversight will be applied.
 - iv. In such cases the Authority may provide additional resource, which could involve additional visits by Inspectors, with the aim of supporting the service certificate holder so as to achieve the required safety standards. The Authority will write to the service certificate holder to explain the reasons for Special Attention being necessary and will request a meeting to discuss and agree the steps needed to return the operation to normal oversight.
- (2) On-Notice
 - i. There may be occasions when this additional oversight fails to produce the improvements or change necessary to maintain safety standards. Additionally, occasions may arise when the Authority detects unchecked trends in some operations that indicate safety standards are deteriorating and if left unchecked this could lead to

a situation whereby the service certificate holder might be unable to ensure that the service provided meets the applicable requirements.

- ii. In such circumstances, the Authority will notify the service certificate holder of what must be undertaken to recover the situation and of the consequences if the agreed recovery plan is not met. In the event that the Authority has observed an adverse trend, which, if unresolved, would lead the Authority to contact the service certificate holder and arrange a meeting to set out the Authority's concerns. This action may result in the service certificate holder being placed "On-Notice".
- iii. It is important to recognize that every case is different and consequently will be judged on the individual circumstances.
- iv. The Authority will set out its concerns and request a recovery plan from the service certificate holder to address the causes of the adverse trend. The recovery plan should provide deliverables that can be measured, including specific timescales. The recovery plan should set out clearly the "who, what, where and how". The need for, and adherence to, agreed timescales is particularly important.
- v. The service certificate holder will be informed that a failure to deliver, either in terms of quality and/or time, will result in firm regulatory action. This action may include the restrictions to operations or suspension of the Certificate or Operating Approval.
- vi. Where the service certificate holder completes the agreed actions in the recovery plan to the satisfaction of the Authority, the service certificate holder will be informed in writing that they are no longer "On-Notice". In most cases the service certificate holder will revert to "Special Attention" for a period to ensure that the improvements or changes are maintained and then return to normal levels of oversight.