European Aviation Safety Agency

RMG.0464 'Requirements for air traffic services'

ICAO ANNEX 11 CHECKLIST
based on ICAO ANNEX 11
Thirteenth Edition — July 2001
incorporating all amendments up to Amendment No 49 of 14.11.13

This document is published as information material associated with NPA 2016-09. It includes a comparison between the SARPs in ICAO Annex 11 'Air Traffic Services' and their proposed transposition into the EU regulatory framework as in NPA 2016-09. It also indicates when a difference between the original ICAO SARPs and the proposed transposition into EU ATS requirements exists.

The Agency acknowledges the publication of the ICAO document AN 13/13.1-16/39 dated 11.04.2016, by which ICAO notified the adoption of Amendment 50 to Annex 11. This Amendment introduces changes to the SARPs of Annex 11 mainly on three subjects, namely:

— performance-based communication and surveillance (PBCS), effective as of 10 November 2016;

— procedure design and oversight SARPs, effective as of 10 November 2016; and

— fatigue management for air traffic controllers, effective as of 5 November 2020.

The proposed changes in the said Amendment do not affect any of the SARPs proposed for transposition with NPA 2016-09. More specifically:

— SARPs related to PBCS are not included in the regulatory proposal, and will be considered by the Agency for transposition into the EU legislation when developing requirements for the SES implementation activities;

— SARPs related to procedure design and oversight are being analysed for transposition under the activities of RMT.0445 'Technical requirements and operational procedures for airspace design, including procedure design';

— SARPs related to fatigue management for air traffic controllers will be evaluated by the Agency for transposition under RMT.0486, to be initiated before the end of 2016.

Under these circumstances, and given the advanced status of the work for the publication of NPA 2016-09 at the time of the receipt of the aforementioned ICAO notification, this checklist includes the content of Annex 11 up to its Amendment No 49.

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements

	ORIGINAL ICAO PROVISION	**DIFFERENCES BETWEEN ICAO STANDARDS AND PROPOSED TRANSPOSITION**	**PROPOSED TRANSPOSITION**
	CHAPTER 1. DEFINITIONS *Note 1.— 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.*		
	Note 2.— The designation (RR) in these definitions indicates a definition which has been extracted from the Radio Regulations of the International Telecommunication Union (ITU) (see Handbook on Radio Frequency Spectrum Requirements for Civil Aviation including statement of approved ICAO policies (*Doc 9718)).*		
	When the following terms are used in the Standards and Recommended Practices for Air Traffic Services, they have the following meanings: ----------		
	Accepting unit. Air traffic control unit next to take control of an aircraft.		The proposed transposition is as follows: **'Accepting unit' means ATC unit next to take control of an aircraft.**
	Accident. An occurrence 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		Definition not proposed for transposition.

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	purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which: a) a person is fatally or seriously injured as a result of: — being in the aircraft, or — direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or — 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 the passengers and crew; or b) the aircraft sustains damage or structural failure which: — adversely affects the structural strength, performance or flight characteristics of the aircraft, and — 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 main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or c) the aircraft is missing or is completely		

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	inaccessible.		
	Note 1.— For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.		Note not proposed for transposition.
	Note 2.— An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.		Note not proposed for transposition.
	Note 3.— The type of unmanned aircraft system to be investigated is addressed in Annex 13, 5.1.		Note not proposed for transposition.
	Note 4.— Guidance for the determination of aircraft damage can be found in Annex 13, Attachment F.		Note not proposed for transposition.
	Accuracy. A degree of conformance between the estimated or measured value and the true value.		The proposed transposition, identical to Annex 11 and SERA Article 2(1), is as follows: **'accuracy' means a degree of conformance between the estimated or measured value and the true value.**
	Note.— For measured positional data the accuracy is normally expressed in terms of a distance from a stated position within which there is a defined confidence of the true position falling.		The proposed transposition as GM1 to the definition of 'accuracy' is as follows: **For measured positional data, the accuracy is normally expressed in terms of a distance from a stated position within which there is a defined confidence of the true position falling.**
	ADS-C agreement. A reporting plan which establishes the conditions of ADS-C data reporting (i.e. data required by the air traffic services unit and frequency of ADS-C reports which have to be agreed to prior to using ADS-C in the provision of air traffic services).		Definition not proposed for transposition.
	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.		

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	Advisory airspace. An airspace of defined dimensions, or designated route, within which air traffic advisory service is available.		The proposed transposition, identical to Annex 11 and SERA Article 2(3), is as follows: **'advisory airspace' means an airspace of defined dimensions, or designated route, within which air traffic advisory service is available.**
	Advisory route. A designated route along which air traffic advisory service is available.		The proposed transposition, identical to Annex 11 and SERA Article 2(4), is as follows: **'advisory route' means a designated route along which air traffic advisory service is available.**
	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.		The EU definition of aerodrome, established by Regulation (EC) No 216/2008, its implementing rules, as well as Regulation (EU) No 923/2012 Article 2(6), is as follows, and derogates from the definition provided in Annex 11: **'aerodrome' shall mean a defined area (including any buildings, installations and equipment) on land or water or on a fixed, fixed offshore or floating structure 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.		Not transposed as ATS-related definition; exhaustive definition and explanation on ATC service is provided within the set of measures.
	Aerodrome control tower. A unit established to provide air traffic control service to aerodrome traffic.		The proposed transposition, identical to Annex 11 and SERA Article 2(8), is as follows: **'aerodrome control tower' means a unit established to provide air traffic control service to aerodrome traffic.**

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	Aerodrome traffic. All traffic on the maneuvering area of an aerodrome and all aircraft flying in the vicinity of an aerodrome.		The proposed transposition, identical to Annex 11 and SERA Article 2(9), is as follows: **'aerodrome traffic' means all traffic on the manoeuvering area of an aerodrome and all aircraft flying in the vicinity of an aerodrome. An aircraft operating in the vicinity of an aerodrome includes but is not limited to aircraft entering or leaving an aerodrome traffic circuit.**
	Note.— An aircraft is in the vicinity of an aerodrome when it is in, entering or leaving an aerodrome traffic circuit.		Note not proposed for transposition.
	Aeronautical fixed service (AFS). A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Aeronautical Information Publication (AIP). A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.		Definition not proposed for transposition.
	Aeronautical mobile service (RR S1.32). 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.		The proposed transposition, identical to Annex 11 and SERA Article 2(14), is as follows: **'aeronautical mobile service' means 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.**

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	Aeronautical telecommunication station. A station in the aeronautical telecommunication service.		The proposed transposition, identical to Annex 11, is as follows: **'Aeronautical telecommunication station' means a station in the aeronautical telecommunication service.**
	Airborne collision avoidance system (ACAS). An aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders.		The proposed transposition, identical to Annex 11 and SERA Article 2(17), is as follows: '**airborne collision avoidance system (ACAS)' means an aircraft system based on secondary surveillance radar (SSR) transponder signals which operates independently of ground-based equipment to provide advice 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 reactions of the air against the earth's surface.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Air-ground communication. Two-way communication between aircraft and stations or locations on the surface of the earth.		The proposed transposition, identical to Annex 11 and SERA Article 2(22), is as follows: **'air-ground communication' means 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 region concerned or sub-area thereof.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation, by referring to 'AIRMET message'.
	Air-taxiing. Movement of a helicopter/VTOL		The proposed transposition, identical to Annex 11

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	above the surface of an aerodrome, normally in ground effect and at a ground speed normally less than 37 km/h (20 kts).		and SERA Article 2(25), is as follows: **'air-taxiing' means movement of a helicopter/VTOL above the surface of an aerodrome, normally in ground effect and at a ground speed normally less than 37 km/h (20 kts).**
	Air traffic. All aircraft in flight or operating on the manoeuvring area of an aerodrome.		The proposed transposition, identical to Annex 11 and SERA Article 2(26), is as follows: **'air traffic' means all aircraft in flight or operating on the manoeuvring area of an aerodrome.**
	Air traffic advisory service. A service provided within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans.		The proposed transposition, identical to Annex 11 and SERA Article 2(27), is as follows: **'air traffic advisory service' means a service provided within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans.**
	Air traffic control clearance. Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.		The proposed transposition, identical to Annex 11 and SERA Article 2(28), is as follows: **'air traffic control clearance' means 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.		The proposed transposition as GM1 to the definition of 'ATC clearance' is as follows: **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		The proposed transposition as GM1 to the definition of 'ATC clearance' is as follows: **The abbreviated term 'clearance' may be prefixed by the words 'taxi', 'take-off',**

	control clearance relates.		**'departure', 'en route', 'approach' or 'landing' to indicate the particular portion of flight to which the air traffic control clearance relates.**
	Air Traffic control service. A service provided for the purpose of: a) preventing collisions: 1) between aircraft, and 2) on the manoeuvring area between aircraft and obstructions; and b) expediting and maintaining an orderly flow of air traffic.		Definition not proposed for transposition; exhaustive definition and explanation on ATC service is provided within the set of measures.
	Air traffic control unit. A generic term meaning variously, area control centre, approach control unit or aerodrome control tower.		The proposed transposition, identical to Annex 11 and SERA Article 2(31), is as follows: **'air traffic control unit' means a generic term meaning variously, area control centre, approach control unit or aerodrome control tower.**
	Air traffic flow management (ATFM). 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.		Definition neither included in SERA, nor in Regulation (EU) No 255/2010, or in the ATM/ANS Common Requirements Regulation. Definition not proposed for transposition.
	Air traffic service. A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).		Definition not proposed for transposition; exhaustive definition and explanation on ATS is provided within the set of measures.
	Air traffic services airspaces. Airspaces of defined dimensions, alphabetically designated, within which specific types of flights may		The proposed transposition, identical to Annex 11 and SERA Article 2(33), is as follows: **'air traffic services airspaces' means airspaces**

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	operate and for which air traffic services and rules of operation are specified		**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.**
	Air traffic services reporting office. A unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure.		The definition is transposed as ATS.TR.110(b).
	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.		Note not proposed for transposition. The concept is further elaborated in GM1 ATS.TR.110(b).
	Air traffic services unit. A generic term meaning variously, air traffic control unit, flight information centre or air traffic services reporting office.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Airway. A control area or portion thereof established in the form of a corridor.		The proposed transposition, identical to Annex 11 and SERA Article 2(36), is as follows: **'airway' means a control area or portion thereof established in the form of a corridor.**
	ALERFA. The code word used to designate an alert phase.		Definition not included in SERA. The proposed transposition, identical to Annex 11, is as follows: **'ALERFA' means the code word used to designate an alert phase.**
	Alerting service. A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.		Not transposed as ATS-related definition; exhaustive definition and explanation on alerting service is provided within the set of measures.
	Alert phase. A situation wherein apprehension exists as to the safety of an aircraft and its occupants.		The proposed transposition, identical to Annex 11, is as follows: **'alert phase' means a situation wherein apprehension exists as to the safety of an**

			aircraft and its occupants.
	Alternate aerodrome. An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing where the necessary services and facilities are available, where aircraft performance requirements can be met and which is operational at the expected time of use. Alternate aerodromes include the following:		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation Definitions of 'destination alternate', 'en route alternate' and 'take-off alternate' are established separately.
	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.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	En-route alternate. An alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en route.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Destination alternate. An alternate aerodrome at which an aircraft would be able to land should it become either impossible or inadvisable to land at the aerodrome of intended landing.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Note.— The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.		Note not proposed for transposition.
	Altitude. The vertical distance of a level, a point or an object considered as a point, measured from mean sea level.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Approach control service. Air traffic control service for arriving or departing controlled flights.		Definition not proposed for transposition; exhaustive definition and explanation on ATC service is provided within the set of measures.
	Approach control unit. A unit established to provide air traffic control service to controlled		The proposed transposition, identical to Annex 11 and SERA Article 2(41), is as follows:

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	flights arriving at, or departing from, one or more aerodromes.		**'approach control unit' means a unit established to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes.**
	Appropriate ATS authority. The relevant authority designated by the State responsible for providing air traffic services in the airspace concerned.		Definition not proposed for transposition as not applicable to the EU context, which allocates responsibilities to Members States, competent authorities, and service providers.
	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.		Definition not proposed for transposition as it is already included in Regulation (EC) No 216/2008 (the EASA Basic Regulation).
	Apron management service. A service provided to regulate the activities and the movement of aircraft and vehicles on an apron.		Definition not proposed for transposition as it is already included in Regulation (EC) No 216/2008 (the EASA Basic Regulation).
	Area control centre. A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Area control service. Air traffic control service for controlled flights in control areas.		Definition not proposed for transposition; exhaustive definition and explanation on ATC is provided within the set of measures.
	Area navigation (RNAV). A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Note.— Area navigation includes performance-based navigation as well as other operations that do not meet the definition of performance-based navigation.		Note not proposed for transposition.

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	Area navigation route. An ATS route established for the use of aircraft capable of employing area navigation.		Definition not proposed for transposition as considered suitable for Part-ASD.
	ATS route. A specified route designed for channelling the flow of traffic as necessary for the provision of air traffic services.		Definition not proposed for transposition as considered suitable for Part-ASD.
	Note 1.— The term "ATS route" is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.		Note not proposed for transposition.
	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.		Note not proposed for transposition.
	Automatic dependent surveillance – broadcast (ADS-B). A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.		The proposed transposition, identical to Annex 11 and SERA Article 2(47), is as follows: **'automatic dependent surveillance — broadcast (ADS-B)' means a means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.**
	Automatic dependent surveillance – contract (ADS-C). A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports.		The proposed transposition, identical to Annex 11 and SERA Article 2(48), is as follows: **'automatic dependent surveillance — contract (ADS-C)' means 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.**

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	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.		It is proposed for transposition as GM1 to the definition of 'ADS-C', as follows: **The abbreviated term 'ADS contract' is commonly used to refer to 'ADS event contract', 'ADS demand contract', 'ADS periodic contract' or an emergency mode.**
	Automatic terminal information service (ATIS). The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof: a) Data link-automatic terminal information service (D-ATIS). The provision of ATIS via data link. b) Voice-automatic terminal information service (Voice-ATIS). The provision of ATIS by means of continuous and repetitive voice broadcasts.		The proposed transposition, identical to Annex 11 and SERA Article 2(49), is as follows: **'automatic terminal information service (ATIS)' means the automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof:** **(a) 'data link-automatic terminal information service (D-ATIS)' means the provision of ATIS via data link;** **(b) 'voice-automatic terminal information service (Voice- ATIS)' means the provision of ATIS by means of continuous and repetitive voice broadcasts.**
	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.		The proposed transposition, identical to Annex 11, is as follows: **'Base turn' means 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.		Note not proposed for transposition.
	Calendar. Discrete temporal reference system that provides the basis for defining temporal		Definition not proposed for transposition.

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	position to a resolution of one day.		
	Change-over point. The point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omnidirectional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft.		The proposed transposition, identical to Annex 11 and SERA Article 2(51), is as follows: **'change-over point' means the point at which an aircraft navigating on an ATS route segment defined by reference to very high-frequency omnidirectional 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.		Note not proposed for transposition.
	Clearance limit. The point to which an aircraft is granted an air traffic control clearance.		The proposed transposition, identical to Annex 11 and SERA Article 2(52), is as follows: **'clearance limit' means the point to which an aircraft is granted an air traffic control clearance.**
	Conference communications. Communication facilities whereby direct speech conversation may be conducted between three or more locations simultaneously.		Definition not included in SERA. The proposed transposition, identical to Annex 11, is as follows: **'Conference communications' means communication facilities whereby direct speech conversation may be conducted between three or more locations simultaneously.**
	Control area. A controlled airspace extending upwards from a specified limit above the earth.		Definition not proposed for transposition as considered suitable for Part-ASD.
	Controlled aerodrome. An aerodrome at which air traffic control service is provided to		The proposed transposition, identical to Annex 11 is as follows:

	aerodrome traffic.		**'controlled aerodrome' means an aerodrome at which air traffic control service is provided to aerodrome traffic.** An amendment to the corresponding definition in SERA Article 2(57) is proposed.
	Note.— The term "controlled aerodrome" indicates that air traffic control service is provided to aerodrome traffic but does not necessarily imply that a control zone exists.		Note not proposed for transposition.
	Controlled airspace. An airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.		The proposed transposition, identical to Annex 11 and SERA Article 2(58), is as follows: '**controlled airspace' means an airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.**
	Controlled flight. Any flight which is subject to an air traffic control clearance.		The proposed transposition, identical to Annex 11 and SERA Article 2(59), is as follows: **'controlled flight' means any flight which is subject to an air traffic control clearance.**
	Controller-pilot data link communications (CPDLC). A means of communication between controller and pilot, using data link for ATC communications.		The proposed transposition, identical to Annex 11 and SERA Article 2(60), is as follows: **'controller-pilot data link communications (CPDLC)' mean a means of communication between controller and pilot, using data link for ATC communications.**
	Control zone. A controlled airspace extending upwards from the surface of the earth to a specified upper limit.		Definition not proposed for transposition as considered suitable for Part ASD.
	Cruising level. A level maintained during a significant portion of a flight.		The proposed transposition, identical to Annex 11 and SERA Article 2(63), is as follows: **'cruising level' means a level maintained during a significant portion of a flight.**
	Cyclic redundancy check (CRC). A		Definition not proposed for transposition.

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	mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.		
	Danger area. An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.		Definition not proposed for transposition as considered suitable for Part-ASD.
	Data link communications. A form of communication intended for the exchange of messages via a data link.		The proposed transposition, identical to Annex 11 and SERA Article 2(66), is as follows: **'data link communications' means 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 meets the requirements of the data user in terms of accuracy, resolution and integrity.		Definition not proposed for transposition.
	Datum. Any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities.		Definition not proposed for transposition.
	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.		Definition not proposed for transposition.
	DETRESFA. The code word used to designate a distress phase.		The proposed transposition, identical to Annex 11, is as follows: **'DETRESFA' means the code word used to designate a distress phase.**

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	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.		The proposed transposition, identical to Annex 11, is as follows: **'Distress phase' means a situation wherein there is reasonable certainty that an aircraft and its occupants are threatened by grave and imminent danger or require immediate assistance.**
	Downstream clearance. A clearance issued to an aircraft by an air traffic control unit that is not the current controlling authority of that aircraft.		The proposed transposition, identical to Annex 11 and SERA Article 2(68), is as follows: **'downstream clearance' means a clearance issued to an aircraft by an air traffic control unit that is not the current controlling authority of that aircraft.**
	Emergency phase. A generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.		The proposed transposition, identical to Annex 11, is as follows: **'Emergency phase' means a generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase.**
	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, a) at the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or b) at the point of interception of the last track specified in the approach procedure; and ends at a point in the vicinity of an aerodrome from which: 1) a landing can be made; or 2)a missed approach procedure is initiated.		The proposed transposition, identical to Annex 11, is as follows: **'Final approach' means 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,** **a) at the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or** **b) at the point of interception of the last track specified in the approach procedure; and** **ends at a point in the vicinity of an aerodrome**

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			from which: **1) a landing can be made; or** **2) a missed approach procedure is initiated.**
	Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.		Definition not proposed for transposition.
	Flight information centre. A unit established to provide flight information service and alerting service.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Flight information region. An airspace of defined dimensions within which flight information service and alerting service are provided.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Flight information service. A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.		Definition not transposed as ATS-related definition; exhaustive definition and explanation on ATS is provided within the set of measures.
	Flight level. A surface of constant atmospheric pressure which is related to a specific pressure datum, 1 013.2 hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Note 1.— A pressure type altimeter calibrated in accordance with the Standard Atmosphere: *a) when set to a QNH altimeter setting, will indicate altitude;* *b) when set to a QFE altimeter setting, will indicate height above the QFE reference datum;* *c) when set to a pressure of 1013.2 hPa, may be used to indicate flight levels.*		Note not proposed for transposition.
	Note 2.— The terms "height" and "altitude", used in Note 1 above, indicate altimetric rather than geometric heights and altitudes.		Note not proposed for transposition.

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	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.*		The proposed transposition, identical to Annex 11 and SERA Article 2(79), is as follows: **'flight plan' means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.**
	Forecast. A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	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.		Definition not proposed for transposition.
	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. *Note.— In the Gregorian calendar, common years have 365 days and leap years 366 days divided into twelve sequential months.*		Definition not proposed for transposition as it is already proposed to be included in Annex I to the ATM/ANS Common Requirements Regulation with NPA 2016-02.
	Height. The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	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.		Definition not proposed for transposition.
	Human performance. Human capabilities and limitations which have an impact on the safety		Definition not proposed for transposition.

	and efficiency of aeronautical operations.		
	IFR. The symbol used to designate the instrument flight rules.		The proposed transposition, identical to Annex 11 and SERA Article 2(87), is as follows: **'IFR' means the symbol used to designate the instrument flight rules.**
	IFR flight. A flight conducted in accordance with the instrument flight rules.		The proposed transposition, identical to Annex 11 and SERA Article 2(88), is as follows: **'IFR flight' means a flight conducted in accordance with the instrument flight rules.**
	IMC. The symbol used to designate instrument meteorological conditions.		The proposed transposition, identical to Annex 11 and SERA Article 2(89), is as follows: **'IMC' means the symbol used to designate instrument meteorological conditions.**
	INCERFA. The code word used to designate an uncertainty phase.		Definition not included in SERA. The proposed transposition, identical to Annex 11, is as follows: **'INCERFA' means the code word used to designate an uncertainty phase.**
	Incident. An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.		Definition not proposed for transposition.
	Note.— The types of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in Annex 13, Attachment C.		Note not proposed for transposition.
	Instrument meteorological conditions (IMC). Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.		The proposed transposition, identical to Annex 11 and SERA Article 2(91), is as follows: **'instrument meteorological conditions (IMC)' means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.**

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	Note.— The specified minima for visual meteorological conditions are contained in Annex 2.		Note not proposed for transposition.
	Integrity (aeronautical data). A degree of assurance that an aeronautical data and its value has not been lost nor altered since the data origination or authorized amendment.		Definition not proposed for transposition.
	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.		Definition not proposed for transposition.
	International NOTAM office. An office designated by a State for the exchange of NOTAM internationally.		Definition not proposed for transposition.
	Level. A generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Manoeuvring area. That part of an aerodrome to be used for the take-off, landing and taxiing of		The proposed transposition, identical to Annex 11 and SERA Article 2(94), is as follows:

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	aircraft, excluding aprons.		‘**manoeuvring area’ means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.**
	Meteorological office. An office designated to provide meteorological service for international air navigation.		Definition not proposed for transposition as this term is no longer used in the context of MET requirements in the ATM/ANS Common Requirements Regulation.
	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).		The proposed transposition, identical to Annex 11 and SERA Article 2(96), is as follows: **‘movement area’ means 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).**
	Navigation specification. A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications: Required navigation performance (RNP) Specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, eg RNP 4, RNP APCH. Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNP, eg RNAV 5, RNAV 1.		Definition not proposed for transposition.
	Note 1.— The Performance-based Navigation (PBN) Manual *(Doc 9613), Volume II contains detailed guidance on navigation specifications.*		Note not proposed for transposition.

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	Note 2.— The term RNP as previously defined as "a statement of the navigation performance, necessary for operation within a defined airspace", has been removed from this Annex as the concept of RNP has been overtaken by the concept of PBN. The term RNP in this Annex is now solely used in context of navigation specifications that require performance monitoring and alerting. E.g. RNP 4 refers to the aircraft and operating requirements, including a 4 NM lateral performance with on board performance monitoring and alerting that are detailed in the PBN Manual (Doc 9613).		Note not proposed for transposition.
	NOTAM. A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	Obstacle. All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation, with some additional text.
	Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.		Definition not proposed for transposition.
	Performance-based navigation (PBN). Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a		Definition not proposed for transposition.

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	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.		Note not proposed for transposition.
	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.		The proposed transposition, identical to Annex 11 and SERA Article 2(100), is as follows: **'pilot-in-command' means 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.**
	Printed communications. Communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such circuit.		Definition not proposed for transposition.
	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.		Definition not proposed for transposition as considered suitable for Part-ASD.
	Radio navigation service. A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more navigation aids.		The proposed transposition, identical to Annex 11 and SERA Article 2(107), is as follows: **'radio navigation service' means a service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids.**
	Radiotelephony. A form of radio communication primarily intended for the exchange of information in the form of speech.		The proposed transposition, identical to Annex 11 and SERA Article 2(108), is as follows: **'radiotelephony' means a form of radiocommunication primarily intended for the exchange of information in the form of**

			speech.
	RCP type. A label (e.g. RCP 240) that represents the values assigned to RCP parameters for communication transaction time, continuity, availability and integrity.		Definition not proposed for transposition.
	Reporting point. A specified geographical location in relation to which the position of an aircraft can be reported.		The proposed transposition, identical to Annex 11 and SERA Article 2(110), is as follows: **'reporting point' means a specified geographical location in relation to which the position of an aircraft can be reported.**
	Required communication performance (RCP). A statement of the performance requirements for operational communication in support of specific ATM functions.		Definition not proposed for transposition.
	Rescue coordination centre. A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	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.		Definition not proposed for transposition as considered suitable for Part-ASD.
	Runway. A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation.
	State safety programme. An integrated set of regulations and activities aimed at improving safety.		Definition not proposed for transposition.
	Safety management system (SMS). A systematic approach to managing safety, including the		Definition not proposed for transposition.

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements
	necessary organisational structures, accountabilities, policies and procedures.		
	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.		Definition not proposed for transposition as it is already included in Annex I to the ATM/ANS Common Requirements Regulation, by referring to 'SIGMET message'.
	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.		The proposed transposition, identical to Annex 11 and SERA Article 2(121), is as follows: **'significant point' means a specified geographical location used in defining an ATS route or the flight path of an aircraft and for other navigation and ATS purposes.**
	Note.— There are three categories of significant points: ground-based navigation aid, intersection and waypoint. In the context of this definition, intersection is a significant point expressed as radials, bearings and/or distances from ground based navigation aids.		The transposition as GM1 to the definition of 'significant point' is proposed, as follows: **There are three categories of significant points: ground-based navigation aid, intersection and waypoint. In the context of this definition, intersection is a significant point expressed as radials, bearings and/or distances from ground-based navigation aids.**
	Special VFR flight. A VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.		The proposed transposition, identical to Annex 11 and SERA Article 2(122), is as follows: **'special VFR flight' means a VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC.**
	State safety programme. An integrated set of regulations and activities aimed at improving safety		Definition not proposed for transposition.
	Station declination. An alignment variation between the zero degree radial of a VOR and true north, determined at the time the VOR		Definition not proposed for transposition.

	station is calibrated.		
	Taxiing. Movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing.		The proposed transposition, identical to Annex 11 and SERA Article 2(125), is as follows: **'taxiing' means movement of an aircraft on the surface of an aerodrome or an operating site under its own power, excluding take-off and landing.**
	Terminal control area. A control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes.		Definition not included in SERA. The proposed transposition, identical to Annex 11, is as follows: **'terminal control area' means a control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes.**
	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).		The proposed transposition, identical to Annex 11 and SERA Article 2(130), is as follows: **'track' means 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.		The proposed transposition, identical to Annex 11 and SERA Article 2(131), is as follows: **'traffic avoidance advice' means 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 services 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.		The proposed transposition, identical to Annex 11 and SERA Article 2(132), is as follows: **'traffic information' means information issued by an air traffic services 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.		The proposed transposition, identical to Annex 11 and SERA Article 2(133), is as follows: **'transfer of control point' means 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. 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.		Definition not included in SERA. The proposed transposition, identical to Annex 11, is as follows: **'Transferring unit' means 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.**
	Uncertainty phase. A situation wherein uncertainty exists as to the safety of an aircraft and its occupants.		Definition not included in SERA. The proposed transposition, identical to Annex 11, is as follows: **'uncertainty phase' means a situation wherein uncertainty exists as to the safety of an aircraft and its occupants.**
	VFR. The symbol used to designate the visual flight rules.		The proposed transposition, identical to Annex 11 and SERA Article 2(139), is as follows: **'VFR' means the symbol used to designate the visual flight rules.**
	VFR flight. A flight conducted in accordance with the visual flight rules.		The proposed transposition, identical to Annex 11 and SERA Article 2(140), is as follows: **'VFR flight' means a flight conducted in accordance with the visual flight rules.**
	Visual meteorological conditions (VMC). Meteorological conditions expressed in terms of		The proposed transposition, identical to Annex 11 and SERA Article 2(142), is as follows:

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	visibility, distance from cloud, and ceiling, equal to or better than specified minima. *Note.— The specified minima are contained in Annex 2.*		**'visual meteorological conditions' means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.** The definition in Article 2 of the SERA Regulation does not include the Note in Annex 11 and the acronym (VMC).
	VMC. The symbol used to designate visual meteorological conditions.		The proposed transposition, identical to Annex 11 and SERA Article 2(143), is as follows: **'VMC' means the symbol used to designate visual meteorological conditions.**
	Waypoint. A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation. Waypoints are identified as either: Fly-by waypoint. A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure, or Flyover waypoint. A waypoint at which a turn is initiated in order to join the next segment of a route or procedure.		Definition not included in SERA. The proposed transposition, identical to Annex 11, is as follows: **'Waypoint' means a specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation. Waypoints are identified as either:** **a) Fly-by waypoint. A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure, or** **b) Flyover waypoint. A waypoint at which a turn is initiated in order to join the next segment of a route or procedure.**
2.	CHAPTER 2. GENERAL		
2.1.1	Establishment of authority Contracting States shall determine, in accordance with the provisions of this Annex and for the territories over which they have jurisdiction, those portions of the airspace and those aerodromes where air traffic services will		Not to be transposed as ATS requirement.

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	be provided. They shall thereafter arrange for such services to be established and provided in accordance with the provisions of this Annex, except that, by mutual agreement, a State may delegate to another State the responsibility for establishing and providing air traffic services in flight information regions, control areas or control zones extending over the territories of the former.		
	Note.— If one State delegates to another State the responsibility for the provision of air traffic services over its territory, it does so without derogation of its national sovereignty. Similarly, the providing State's responsibility is limited to technical and operational considerations and does not extend beyond those pertaining to the safety and expedition of aircraft using the concerned airspace. Furthermore, the providing State in providing air traffic services within the territory of the delegating State will do so in accordance with the requirements of the latter which is expected to establish such facilities and services for the use of the providing State as are jointly agreed to be necessary. It is further expected that the delegating State would not withdraw or modify such facilities and services without prior consultation with the providing State. Both the delegating and providing States may terminate the agreement between them at any time.		Not to be transposed as ATS requirement.
2.1.2	Those portions of the airspace over the high seas or in airspace of undetermined sovereignty where air traffic services will be provided shall be determined on the basis of regional air navigation agreements. A Contracting State having accepted the responsibility to provide air traffic services in such portions of airspace shall thereafter arrange for the services to be		Not to be transposed as ATS requirement.

	established and provided in accordance with the provisions of this Annex.		
	Note 1.— The phrase "regional air navigation agreements" refers to the agreements approved by the Council of ICAO normally on the advice of Regional Air Navigation Meetings.		Not to be transposed as ATS requirement.
	Note 2.— The Council, when approving the Foreword to this Annex, indicated that a Contracting State accepting the responsibility for providing air traffic services over the high seas or in airspace of undetermined sovereignty may apply the Standards and Recommended Practices in a manner consistent with that adopted for airspace under its jurisdiction.		Not to be transposed as ATS requirement.
2.1.3	When it has been determined that air traffic services will be provided, the States concerned shall designate the authority responsible for providing such services		Not to be transposed as ATS requirement.
	Note 1.— The authority responsible for establishing and providing the services may be a State or a suitable Agency. *Note 2.— Situations which arise in respect of the establishment and provision of air traffic services to either part or whole of an international flight are as follows:* Situation 1: *A route, or portion of a route, contained within airspace under the sovereignty of a State establishing and providing its own air traffic services.* Situation 2: *A route, or portion of a route, contained within airspace under the sovereignty of a State which has, by mutual agreement, delegated to another State, responsibility for the establishment and provision of air traffic services.* Situation 3: *A portion of a route contained within airspace over the high seas or in airspace of undetermined sovereignty for which a State has accepted the responsibility for the establishment and provision of air traffic services. For the purpose of this*		Not to be transposed as ATS requirement.

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements
	Annex, the State which designates theauthority responsible for establishing and providing the air traffic services is: in Situation 1: *the State having sovereignty over the relevant portion of the airspace;* in Situation 2: *the State to whom responsibility for the establishment and provision of air traffic services has been delegated;* in Situation 3: *the State which has accepted the responsibility for the establishment and provision of air traffic services.*		
2.1.4	Where air traffic services are established, information shall be published as necessary to permit the utilization of such services.		The transposition as ATS IR ATS.OR.125(a), is proposed as follows: **The air traffic services providers shall provide to the relevant AIS providers information to be published as necessary to permit the utilisation of such air traffic services.**
2.2	Objectives of the air traffic services The objectives of the air traffic services shall be to: a) prevent collisions between aircraft; b) prevent collisions between aircraft on the manoeuvring area and obstructions on that area; c) expedite and maintain an orderly flow of air traffic; d) provide advice and information useful for the safe and efficient conduct of flights; e) notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.		Provision already transposed as SERA.7001 ‘General — Objectives of the air traffic services’; due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.100, as follows: **The objectives of the air traffic services shall be to:** **(a) prevent collisions between aircraft;** **(b) prevent collisions between aircraft on the manoeuvring area and obstructions on that area;** **(c) expedite and maintain an orderly flow of air traffic;** **(d) provide advice and information useful for the safe and efficient conduct of flights;** **(e) notify appropriate organisations**

			regarding aircraft in need of search and rescue aid, and assist such organisations as required.
2.3.1	Divisions of the air traffic services The air traffic services shall comprise three services identified as follows. The air traffic control service, to accomplish objectives a), b) and c) of 2.2, this service being divided in three parts as follows: a) Area control service: the provision of air traffic control service for controlled flights, except for those parts of such flights described in 2.3.1 b) and c), in order to accomplish objectives a) and c) of 2.2; b) Approach control service: the provision of air traffic control service for those parts of controlled flights associated with arrival or departure, in order to accomplish objectives a) and c) of 2.2; c) Aerodrome control service: the provision of air traffic control service for aerodrome traffic, except for those parts of flights described in 2.3.1 b), in order to accomplish objectives a), b) and c) of 2.2.		The transposition as ATS IR ATS.TR.105, is proposed as follows: **The air traffic services shall comprise three services identified as follows:** **a) The air traffic control service, to accomplish objectives as in paragraphs (a), (b) and (c) of ATS.TR.100, this service being divided in three parts as follows:** **1) Area control service: the provision of air traffic control service for controlled flights, except for those parts of such flights described in points (a)(2) and (a)(3), in order to achieve objectives established in points (a) and (c) of ATS.TR.100;** **2) Approach control service: the provision of air traffic control service for those parts of controlled flights associated with arrival or departure, in order to achieve objectives established in points (a) and (c) of ATS.TR.100;** **3) Aerodrome control service: the provision of air traffic control service for aerodrome traffic, except for those parts of flights described in point (a)(2), in order to achieve objectives established in paragraphs (a), (b) and (c) of**

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			ATS.TR.100.
2.3.2	The flight information service, to accomplish objective d) of 2.2.		The transposition as ATS IR ATS.TR.105, is proposed as follows: **b) The flight information service and/or air traffic advisory service, to achieve objectives established as in point (d) of ATS.TR.100;**
2.3.3	The alerting service, to accomplish objective e) of 2.2.		The transposition as ATS IR ATS.TR.105, is proposed as follows: **c) The alerting service, to achieve objectives established in point (e) of ATS.TR.100.**
2.4.1	Determination of the need for air traffic services The need for the provision of air traffic services shall be determined by consideration of the following: a) the types of air traffic involved; b) the density of air traffic; c) the meteorological conditions; d) such other factors as may be relevant.		The transposition as ATS IR Article 3(1b) of the ATM/ANS Common Requirements Regulation, is proposed as follows: **The need for the provision of ATS shall be determined by the Member States by consideration of the following:** **a) the types of air traffic involved;** **b) the density of air traffic;** **c) the meteorological conditions;** **d) such other factors as may be relevant.**
	Note.— Due to the number of elements involved, it has not been possible to develop specific data to determine the need for air traffic services in a given area or at a given location. For example: *a) a mixture of different types of air traffic with aircraft of varying speeds (conventional jet, etc.) might necessitate the provision of air traffic services, whereas a relatively greater density of traffic where only one type of operation is involved would not;* *b) meteorological conditions might have considerable effect in areas where there is a constant flow of air traffic (e.g. scheduled traffic), whereas similar or worse*		The Note is proposed for transposition as GM1 to Article 3(1b) of the ATM/ANS Common Requirements Regulation, as follows: **The determination of the need for air traffic services in a given area and/or aerodrome may be subject to consideration and evaluation of a great number and typology of elements.** **For example:** **(a) a mixture of different types of air traffic with aircraft of varying speeds (conventional, jet, etc.) might necessitate**

	meteorological conditions might be relatively unimportant in an area where air traffic would be discontinued in such conditions (e.g. local VFR flights); *c) open stretches of water, mountainous, uninhabited or desert areas might necessitate the provision of air traffic services even though the frequency of operations is extremely low.*		**the provision of air traffic services, whereas a relatively greater density of traffic where only one type of operation is involved would not;** **(b) meteorological conditions might have considerable effect in areas where there is a constant flow of air traffic (e.g. scheduled traffic), whereas similar or worse meteorological conditions might be relatively unimportant in an area where air traffic would be discontinued in such conditions (e.g. local VFR flights);** **(c) open stretches of water, mountainous, uninhabited or desert areas might necessitate the provision of air traffic services even though the frequency of operations is extremely low;** **(d) the complexity of the airspace concerned; and** **(e) the language(s) to be used in air–ground communications, in the case of AFIS.**
2.4.2	The carriage of airborne collision avoidance systems (ACAS) by aircraft in a given area shall not be a factor in determining the need for air traffic services in that area.		The transposition as IR Article 3(1b) of the ATM/ANS Common Requirements Regulation, is proposed as follows: **The carriage of airborne collision avoidance systems (ACAS) by aircraft in a given area shall not be a factor in determining the need for air traffic services in that area.**
2.5.1	Designation of the portions of the airspace and controlled aerodromes where air traffic services will be provided When it has been determined that air traffic		The provision is to be transposed as ASD requirement, and not as ATS requirement.

	services will be provided in particular portions of the airspace or at particular aerodromes, then those portions of the airspace or those aerodromes shall be designated in relation to the air traffic services that are to be provided.		
2.5.2	The designation of the particular portions of the airspace or the particular aerodromes shall be as follows:		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.5.2.1	Flight information regions. Those portions of the airspace where it is determined that flight information service and alerting service will be provided shall be designated as flight information regions.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.5.2.2.1	Control areas and control zones Those portions of the airspace where it is determined that air traffic control service will be provided to IFR flights shall be designated as control areas or control zones.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note.— The distinction between control areas and control zones is made in 2.10.		The Note is to be transposed as ASD requirement, and not as ATS requirement.
2.5.2.2.1.1	Those portions of controlled airspace wherein it is determined that air traffic control service will also be provided to VFR flights shall be designated as Classes B, C, or D airspace.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.5.2.2.2	Where designated within a flight information region, control areas and control zones shall form part of that flight information region.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.5.2.3	Controlled aerodromes. Those aerodromes where it is determined that air traffic control		The provision is to be transposed as ASD requirement, and not as ATS requirement.

	service will be provided to aerodrome traffic shall be designated as controlled aerodromes.		A definition of 'controlled aerodrome' is proposed in the NPA, identical to the definition in the SERA Regulation.
2.6.1	Classification of airspaces ATS airspaces shall be classified and designated in accordance with the following: Class A. IFR flights only are permitted, all flights are provided with air traffic control service and are separated from each other. Class B. IFR and VFR flights are permitted, all flights are provided with air traffic control service and are separated from each other. Class C. IFR and VFR flights are permitted, all flights are provided with air traffic control service and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights. Class D. IFR and VFR flights are permitted and all flights are provided with air traffic control service, IFR flights are separated from other IFR flights and receive traffic information in respect of VFR flights, VFR flights receive traffic information in respect of all other flights.		Provision transposed as SERA.6001 'Classification of airspaces' and associated AMC and GM. Section 2.6 not to be transposed as ATS requirement.
	Class E. IFR and VFR flights are permitted, IFR flights are provided with air traffic control service and are separated from other IFR flights. All flights receive traffic information as far as is practical. Class E shall not be used for control zones. Class F. IFR and VFR flights are permitted, all		

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	participating IFR flights receive an air traffic advisory service and all flights receive flight information service if requested.		
	Note.— Where air traffic advisory service is implemented, this is considered normally as a temporary measure only until such time as it can be replaced by air traffic control. (See also PANS-ATM, Chapter 9.)		
	Class G. IFR and VFR flights are permitted and receive flight information service if requested.		
2.6.2	States shall select those airspace classes appropriate to their needs.		
2.6.3	The requirements for flights within each class of airspace shall be as shown in the table in Appendix 4.		
	Note.— Where the ATS airspaces adjoin vertically, i.e. one above the other, flights at a common level would comply with requirements of, and be given services applicable to, the less restrictive class of airspace. In applying these criteria, Class B airspace is therefore considered less restrictive than Class A airspace; Class C airspace less restrictive than Class B airspace, etc.		
2.7.1	Performance-based navigation (PBN) operations In applying performance-based navigation, navigation specifications shall be prescribed by States. When applicable, the navigation specification(s) for designated areas, tracks or ATS routes shall be prescribed on the basis of regional air navigation agreements. In designating a navigation specification, limitations may apply as a result of navigation		Not to be transposed as ATS requirement, as it is considered as covered by provisions included in Opinion 10/2016 ‘Performance-based navigation implementation in the European air traffic management network’.

	infrastructure constraints or specific navigation functionality requirements.		
2.7.2	*Performance-based navigation operations should be implemented as soon as practicable.*		Not to be transposed as ATS requirement, as it is considered as covered by provisions included in Opinion 10/2016 'Performance-based navigation implementation in the European air traffic management network'.
2.7.3	The prescribed navigation specification shall be appropriate to the level of communications, navigation and air traffic services provided in the airspace concerned.		Not to be transposed as ATS requirement, as it is considered as covered by provisions included in Opinion 10/2016 'Performance-based navigation implementation in the European air traffic management network'.
2.7.3	*Note.— Applicable guidance on performance-based navigation and implementation is published in the* Performance-Based Navigation Manual *(Doc 9613).*		Not to be transposed as ATS requirement, as it is considered as covered by provisions included in Opinion 10/2016 'Performance-based navigation implementation in the European air traffic management network'.
2.8.1	Required communication performance (RCP) RCP types shall be prescribed by States. When applicable, the RCP type(s) shall be prescribed on the basis of regional air navigation agreements.		Not to be transposed as ATS requirement.
2.8.2	The prescribed RCP type shall be appropriate to the air traffic services provided in the airspace concerned.		Not to be transposed as ATS requirement.
2.8.2	*Note.— Applicable RCP types and associated procedures will be published in the* Manual on Required Communication Performance (RCP) *(Doc 9869)*		Not to be transposed as ATS requirement.
2.9.1	Establishment and designation of the units providing air traffic services The air traffic services shall be provided by units	.	The transposition as ATS IR ATS.TR.110, with textual modification to adapt to the EU regulatory context, is proposed as follows:

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	established and designated as follows: Flight information centres shall be established to provide flight information service and alerting service within flight information regions, unless the responsibility of providing such services within a flight information region is assigned to an air traffic control unit having adequate facilities for the discharge of such responsibility.		**(a) The ATS shall be provided by units established as follows:** **(1) Flight information centres shall be established to provide flight information service and alerting service within flight information regions, unless the responsibility of providing such services within a flight information region is assigned to an air traffic control unit having adequate facilities for the discharge of such responsibility** A new provision is proposed to recognise the AFIS unit as an ATS unit as follows: **(3) Aerodrome flight information service units shall be established to provide flight information service and alerting service at AFIS aerodromes and within the portion of airspace associated with such aerodromes.**
	Note.— This does not preclude delegating to other units the function of providing certain elements of the flight information service.		Not to be transposed as ATS requirements
2.9.2	Air traffic control units shall be established to provide air traffic control service, flight information service and alerting service within control areas, control zones and at controlled aerodromes.		The transposition as ATS IR ATS.TR.110, continued within the provision above, is proposed as follows: **(2) Air traffic control units shall be established to provide air traffic control service, flight information service and alerting service within control areas, control zones and at controlled aerodromes.**

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements
	Note.— The services to be provided by various air traffic control units are indicated in 3.2.		Not to be transposed as ATS requirement.
2.10.1	Specifications for flight information regions, control areas and control zones *The delineation of airspace, wherein air traffic services are to be provided, should be related to the nature of the route structure and the need for efficient service rather than to national boundaries.*		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.2.1	Flight information regions Flight information regions shall be delineated to cover the whole of the air route structure to be served by such regions.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note 1.— Agreements to permit the delineation of airspace lying across national boundaries are advisable when such action will facilitate the provision of air traffic services (see 2.1.1). Agreements which permit delineation of airspace boundaries by straight lines will, for example, be most convenient where data processing techniques are used by air traffic services units.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note 2.— Where delineation of airspace is made by reference to national boundaries there is a need for suitably sited transfer points to be mutually agreed upon.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.2.2	A flight information region shall include all airspace within its lateral limits, except as limited by an upper flight information region.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.2.3	Where a flight information region is limited by an upper flight information region, the lower limit specified for the upper flight information region shall constitute the upper vertical limit of the flight information region and shall coincide with a VFR cruising level of the tables in Appendix3 to Annex2.		The provision is to be transposed as ASD requirement, and not as ATS requirement.

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	Note.— In cases where an upper flight information region is established the procedures applicable therein need not be identical with those applicable in the underlying flight information region.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.3.1	Control areas Control areas including, inter alia, airways and terminal control areas shall be delineated so as to encompass sufficient airspace to contain the flight paths of those IFR flights or portions thereof to which it is desired to provide the applicable parts of the air traffic control service, taking into account the capabilities of the navigation aids normally used in that area.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note.— In a control area other than one formed by a system of airways, a system of routes may be established to facilitate the provision of air traffic control.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.3.2	A lower limit of a control area shall be established at a height above the ground or water of not less than 200 m (700 ft).		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note.— This does not imply that the lower limit has to be established uniformly in a given control area (see Figure A-5 of the Air Traffic Services Planning Manual *(Doc 9426), Part I, Section 2, Chapter 3).*		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.3.2.1	*The lower limit of a control area should, when practicable and desirable in order to allow freedom of action for VFR flights below the control area, be established at a greater height than the minimum specified in 2.10.3.2.*		The provision is to be transposed as ASD requirement, and not as ATS requirement. The Table of Cruising levels mentioned in 2.10.3.2.1 is transposed into Appendix 3 to the SERA Regulation.
2.10.3.2.2	When the lower limit of a control area is above 900 m (3 000 ft) MSL it should coincide with a VFR cruising level of the tables in Appendix3 to Annex2.		The provision is to be transposed as ASD requirement, and not as ATS requirement. The Table of Cruising levels mentioned in 2.10.3.2.1 is transposed into Appendix 3 to the SERA Regulation..

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements
	Note.— This implies that the selected VFR cruising level be such that expected local atmospheric pressure variations do not result in a lowering of this limit to a height of less than 200 m (700 ft) above ground or water.		The provision is to be transposed as ASD requirement, and not as ATS requirement. The Table of Cruising levels mentioned in 2.10.3.2.1 is transposed into Appendix 3 to the SERA Regulation..
2.10.3.3	An upper limit of a control area shall be established when either: a) air traffic control service will not be provided above such upper limit; or b) the control area is situated below an upper control area, in which case the upper limit shall coincide with the lower limit of the upper control area. When established, such upper limit shall coincide with a VFR cruising level of the tables in Appendix 3 to Annex 2.		The provision is to be transposed as ASD requirement, and not as ATS requirement. The Table of Cruising levels mentioned in 2.10.3.2.1 is transposed into Appendix 3 to the SERA Regulation..
2.10.4	Flight information regions or control areas in the upper airspace *Where it is desirable to limit the number of flight information regions or control areas through which high flying aircraft would otherwise have to operate, a flight information region or control area, as appropriate, should be delineated to include the upper airspace within the lateral limits of a number of lower flight information regions or control areas.*		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.5.1	Control zones The lateral limits of control zones shall encompass at least those portions of the airspace, which are not within control areas, containing the paths of IFR flights arriving at and departing from aerodromes to be used under		The provision is to be transposed as ASD requirement, and not as ATS requirement.

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements
	instrument meteorological conditions.		
	Note.— Aircraft holding in the vicinity of aerodromes are considered as arriving aircraft.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.5.2	The lateral limits of a control zone shall extend to at least 9.3 km (5 NM) from the centre of the aerodrome or aerodromes concerned in the directions from which approaches may be made.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note.— A control zone may include two or more aerodromes situated close together		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.5.3	If a control zone is located within the lateral limits of a control area, it shall extend upwards from the surface of the earth to at least the lower limit of the control area.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note.— An upper limit higher than the lower limit of the overlying control area may be established when desired.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.5.4	*If a control zone is located outside of the lateral limits of a control area, an upper limit should be established.*		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.10.5.5	*If it is desired to establish the upper limit of a control zone at a level higher than the lower limit of the control area established above it, or if the control zone is located outside of the lateral limits of a control area, its upper limit should be established at a level which can easily be identified by pilots. When this limit is above 900 m (3 000 ft) MSL it should coincide with a VFR cruising level of the tables in Appendix 3 to Annex 2.*		The provision is to be transposed as ASD requirement, and not as ATS requirement. The Table of Cruising levels mentioned in 2.10.3.2.1 is transposed into Appendix 3 to the SERA Regulation..
	Note.— This implies that, if used, the selected VFR cruising level be such that expected local atmospheric pressure variations do not result in a lowering of this limit to a height of less than 200 m (700 ft) above ground or water		The provision is to be transposed as ASD requirement, and not as ATS requirement. The Table of Cruising levels mentioned in 2.10.3.2.1 is transposed into Appendix 3 to the

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements
			SERA Regulation..
2.11.1	Identification of air traffic services units and airspaces *An area control centre or flight information centre should be identified by the name of a nearby town or city or geographic feature.*		The transposition as ATS IR ATS.TR.115 is proposed as follows: **ATS units shall be unambiguously named by the competent authority, as follows:** **An area control centre or flight information centre shall normally be identified by the name of a nearby town or city or geographic feature or area.**
2.11.2	*An aerodrome control tower or approach control unit should be identified by the name of the aerodrome at which it is located.*		The transposition as ATS IR ATS.TR.115 is proposed as follows: **An aerodrome control tower or approach control unit shall normally be identified by the name of the aerodrome at which it is providing services or by the name of a nearby town or city or geographic feature or area.** A new provision is proposed in ATS.TR.115 to specify how AFIS units have to be named, as follows: **An AFIS unit shall normally be identified by the name of the aerodrome at which it is providing services or by the name of a nearby town or city or geographic feature or area.**
2.11.3	*A control zone, control area or flight information region should be identified by the name of the unit having jurisdiction over such airspace.*		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.12.1	Establishment and identification of ATS routes When ATS routes are established, a protected airspace along each ATS route and a safe spacing between adjacent ATS routes shall be provided.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.12.2	*When warranted by density, complexity or*		The provision is to be transposed as ASD

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	nature of the traffic, special routes should be established for use by low-level traffic, including helicopters operating to and from helidecks on the high seas. When determining the lateral spacing between such routes, account should be taken of the navigational means available and the navigation equipment carried on board helicopters.		requirement, and not as ATS requirement.
2.12.3	ATS routes shall be identified by designators.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.12.4	Designators for ATS routes other than standard departure and arrival routes shall be selected in accordance with the principles set forth in Appendix 1.		The provision is to be transposed together with Appendix 1 as ASD requirement, and not as ATS requirement.
2.12.5	Standard departure and arrival routes and associated procedures shall be identified in accordance with the principles set forth in Appendix 3.		The provision is to be transposed together with Appendix 3 as ASD requirement, and not as ATS requirement.
	Note 1.— Guidance material relating to the establishment of ATS routes is contained in the Air Traffic Services Planning Manual *(Doc 9426).*		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note 2.— Guidance material relating to the establishment of ATS routes defined by VOR is contained in Attachment A.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note 3.— The spacing between parallel tracks or between parallel ATS route centre lines based on performance-based navigation will be dependent upon the relevant navigation specification required.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.13.1	Establishment of change-over points *Change-over points should be established on ATS route segments defined by reference to very high frequency omnidirectional radio ranges where this will assist accurate navigation along*		The provision is to be transposed as ASD requirement, and not as ATS requirement.

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	the route segments. The establishment of change-over points should be limited to route segments of 110 km (60 NM) or more, except where the complexity of ATS routes, the density of navigation aids or other technical and operational reasons warrant the establishment of change-over points on shorter route segments.		
2.13.2	*Unless otherwise established in relation to the performance of the navigation aids or frequency protection criteria, the change-over point on a route segment should be the mid-point between the facilities in the case of a straight route segment or the intersection of radials in the case of a route segment which changes direction between the facilities.*		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note.— Guidance on the establishment of change-over points is contained in Attachment A.		The provision is to be transposed together with Attachment A as ASD requirement, and not as ATS requirement.
2.14.1	Establishment and identification of significant points Significant points shall be established for the purpose of defining an ATS route or instrument approach procedure and/or in relation to the requirements of air traffic services for information regarding the progress of aircraft in flight.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.14.2	Significant points shall be identified by designators.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.14.3	Significant points shall be established and identified in accordance with the principles set forth in Appendix 2.		The provision is to be transposed together with Appendix 2 as ASD requirement, and not as ATS requirement.
2.15.1	Establishment and identification of standard		The transposition as AMC ATS.OR.110 is

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	routes for taxiing aircraft *Where necessary, standard routes for taxiing aircraft should be established on an aerodrome between runways, aprons and maintenance areas. Such routes should be direct, simple and where practicable, designed to avoid traffic conflicts.*		proposed as follows: **(a) The air traffic services provider, in coordination with the aerodrome operator, should assess the necessity for establishing standard routes for taxiing aircraft on an aerodrome between runways, aprons and maintenance areas.** **(b) When established, such routes should be direct, simple and, where practicable, designed to avoid traffic conflicts.**
2.15.2	*Standard routes for taxiing aircraft should be identified by designators distinctively different from those of the runways and ATS routes.*		The transposition as AMC ATS.OR.110 is proposed as follows: **(c) Standard routes for taxiing aircraft should be identified by designators distinctively different from those of the runways and ATS routes.**
2.16.1	Coordination between the operator and air traffic services Air traffic services units, in carrying out their objectives, shall have due regard for the requirements of the operators consequent on their obligations as specified in Annex 6, and, if so required by the operators, shall make available to them or their designated representatives such information as may be available to enable them or their designated representatives to carry out their responsibilities.		Provision already transposed as SERA.7005 'Coordination between the aircraft operator and air traffic services' Not to be transposed as ATS requirement.
2.16.2	When so requested by an operator, messages (including position reports) received by air traffic services units and relating to the operation of the aircraft for which operational control service is provided by that operator shall,		Provision already transposed as SERA.7005 'Coordination between the aircraft operator and air traffic services', with adaptations to the EU regulatory context.

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	so far as practicable, be made available immediately to the operator or a designated representative in accordance with locally agreed procedures.		Not to be transposed as ATS requirement.
	Note.— For aircraft subjected to unlawful interference, see 2.23.3.		Provision already transposed as SERA.7005 'Coordination between the aircraft operator and air traffic services', with adaptations to the EU regulatory context. Not to be transposed as ATS requirement.
2.17.1	Coordination between military authorities and air traffic services Air traffic services authorities shall establish and maintain close cooperation with military authorities responsible for activities that may affect flights of civil aircraft.		Not to be transposed as ATS requirement, as considered covered by Regulation (EC) No 2150/2005. The proposed transposition of provision 2.17.3.1 below is also relevant.
2.17.2	Coordination of activities potentially hazardous to civil aircraft shall be effected in accordance with 2.18.		Not to be transposed, as covered by the proposed transposition of provision 2.18.1 as Article 3(1d) of the ATM/ANS Common Requirements Regulation.
2.17.3	Arrangements shall be made to permit information relevant to the safe and expeditious conduct of flights of civil aircraft to be promptly exchanged between air traffic services units and appropriate military units.		Not to be transposed, as already covered in Article 6 of Regulation (EC) No 2150/2005.
2.17.3.1	Air traffic services units shall, either routinely or on request, in accordance with locally agreed procedures, provide appropriate military units with pertinent flight plan and other data concerning flights of civil aircraft. In order to eliminate or reduce the need for interceptions, air traffic services authorities shall designate any areas or routes where the requirements of Annex		The transposition of the first sentence of the provision as ATS IR ATS.OR.115 is proposed as follows: **Without prejudice to Article 6 of Commission Regulation (EC) No 2150/2005, ATS providers shall ensure that their ATS units, either routinely or on request, in accordance with locally agreed procedures, provide appropriate**

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements
	2 concerning flight plans, two-way communications and position reporting apply to all flights to ensure that all pertinent data is available in appropriate air traffic services units specifically for the purpose of facilitating identification of civil aircraft.		**military units with pertinent flight plan and other data concerning flights of civil aircraft in order to facilitate their identification.** The transposition of the second sentence of the provision as ATS IR ATS.TR.120 is proposed as follows: **In order to eliminate or reduce the need for interceptions, the ATS provider shall ensure that all pertinent data concerning flight plans, two-way communications and position reporting stipulated in Commission Implementing Regulation (EU) No 923/2012, which apply to any area or route as determined by the competent authority, is available to the appropriate ATS units specifically for the purpose of facilitating identification of civil aircraft.**
	Note.— For aircraft subjected to unlawful interference, see 2.23.3 and 2.24.1.3.		Not to be transposed as ATS requirement.
2.17.3.2	Special procedures shall be established in order to ensure that: a) air traffic services units are notified if a military unit observes that an aircraft which is, or might be, a civil aircraft is approaching, or has entered, any area in which interception might become necessary; b) all possible efforts are made to confirm the identity of the aircraft and to provide it with the navigational guidance necessary to avoid the need for interception.		The transposition of the provision as Article 3(1c) of the ATM/ANS Common Requirements Regulation is proposed as follows: **Member States shall ensure that special procedures are established in order to ensure that:** **a) air traffic services units are notified if a military unit observes that an aircraft which is, or might be, a civil aircraft is approaching, or has entered, any area in which interception might become necessary;** **b) all possible efforts are made to confirm the identity of the aircraft and to**

SARP identifier	Annex 11 Amendment 49 Air Traffic Services Standard, *Recommended Practice*, *Notes*, *transposed in SERA*	Differences between SARPs and proposed transposition	Proposed transposition into EU ATS Requirements
			provide it with the navigational guidance necessary to avoid the need for interception.
2.18.1	Coordination of activities potentially hazardous to civil aircraft The arrangements for activities potentially hazardous to civil aircraft, whether over the territory of a State or over the high seas, shall be coordinated with the appropriate air traffic services authorities. The coordination shall be effected early enough to permit timely promulgation of information regarding the activities in accordance with the provisions of Annex 15.		The high seas are included in the SES scope. The transposition of the provision as Article 3(1d) of the ATM/ANS Common Requirements Regulation is proposed as follows: **(a) Member States shall ensure that the arrangements for activities potentially hazardous to civil aircraft over their territory are coordinated. When over the high seas, potentially hazardous activities shall be coordinated with the competent authority of the State having accepted, pursuant to an ICAO Regional Agreement, the responsibility to provide air traffic services within the airspace concerned. The coordination shall be effected early enough to permit timely promulgation of information regarding these activities.**
2.18.1.1	*If the appropriate ATS authority is not that of the State where the organization planning the activities is located, initial coordination should be effected through the ATS authority responsible for the airspace over the State where the organization is located.*		Not to be transposed as ATS requirement
2.18.2	The objective of the coordination shall be to achieve the best arrangements which will avoid hazards to civil aircraft and minimize interference with the normal operations of such aircraft.		Not to be transposed as ATS requirement.

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2.18.2.1	*In determining these arrangements the following should be applied:* *a) the locations or areas, times and durations for the activities should be selected to avoid closure or realignment of established ATS routes, blocking of the most economic flight levels, or delays of scheduled aircraft operations, unless no other options exist;* *b) the size of the airspace designated for the conduct of the activities should be kept as small as possible;* *c)direct communication between the appropriate ATS authority or air traffic services unit and the organization or unit conducting the activities should be provided for use in the event that civil aircraft emergencies or other unforeseen circumstances require discontinuation of the activities.*		The transposition of points (a) and (b) as GM1 to Article 3(1d)(a) are proposed as follows: **In determining these arrangements, the following should be applied:** **a) the locations or areas, times and durations for the activities should be selected to avoid closure or realignment of established ATS routes, blocking of the most economic flight levels, or delays of scheduled aircraft operations, unless no other options exist;** **b) the size of the airspace designated for the conduct of the activities should be kept as small as possible.** Point (c) is not transposed as covered by Article 6 of Regulation (EC) No 2150/2005.
2.18.3	The appropriate ATS authorities shall be responsible for initiating the promulgation of information regarding the activities.		The transposition as Article 3(1d) is proposed as follows: **(b) Member States shall establish arrangements for the promulgation of information regarding such activities.**
2.18.4	*If activities potentially hazardous to civil aircraft take place on a regular or continuing basis, special committees should be established as required to ensure that the requirements of all parties concerned are adequately coordinated.*		Not transposed as ATS requirement. However, GM2 to Article 3(1d)(a) indicates ICAO Doc 9554 as a source of guidance for such coordination.
2.18.5	Adequate steps shall be taken to prevent emission of laser beams from adversely affecting flight operations.		Article 9 of Regulation (EU) No 139/2014 and AMC1 ADR.OPS.B.075 'Safeguarding of aerodromes' implicitly addresses laser emissions affecting aerodromes, but only requires to

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			establish consultation. The transposition as Article 3(1d) of the ATM/ANS Common Requirements Regulation is proposed with the following text: **(c) Member States shall take adequate measures to prevent emission of laser beams from adversely affecting flight operations.** Questions on the suitability of the proposal and on how States have implemented this provision, are asked in the NPA.
	Note 2.— See also Annex 14 — Aerodromes, *Volume I* — Aerodrome Design and Operations, *Chapter 5.*		Provision not to be transposed as ATS requirement
2.18.6	*In order to provide added airspace capacity and to improve efficiency and flexibility of aircraft operations, States should establish procedures providing for a flexible use of airspace reserved for military or other special activities. The procedures should permit all airspace users to have safe access to such reserved airspace.*		Provision not to be transposed as ATS requirement, as already included in Regulation (EC) No 2150/2005.
2.19.1	Aeronautical data Determination and reporting of air traffic services-related aeronautical data shall be in accordance with the accuracy and integrity requirements set forth in Tables 1 to 5 contained in Appendix 5 while taking into account the established quality system procedures. Accuracy requirements for aeronautical data are based upon a 95 per cent confidence level, and in that respect three types of positional data shall be identified: surveyed points (e.g. navigation aids positions), calculated points (mathematical calculations from the known surveyed points of		Not to be explicitly transposed as ATS requirement, as covered by the introduction of a general requirement, applicable to all providers, in the ATM/ANS Common Requirements Regulation (Part-AIS)**.**

	points in space, fixes) and declared points (e.g. flight information region boundary points).		
	Note.— Specifications governing the quality system are given in Annex 15, Chapter 3.		The provision is to be transposed as AIS requirement, and not as ATS requirement.
2.19.2	2.19.2 Contracting States shall ensure that integrity of aeronautical data is maintained throughout the data process from survey/origin to the next intended user. Based on the applicable integrity classification, the validation and verification procedures shall: a) for routine data: avoid corruption throughout the processing of the data; b) for essential data: assure corruption does not occur at any stage of the entire process and may include additional processes as needed to address potential risks in the overall system architecture to further assure data integrity at this level; and c) for critical data: assure corruption does not occur at any stage of the entire process and include additional integrity assurance procedures to fully mitigate the effects of faults identified by thorough analysis of the overall system architecture as potential data integrity risks.		The provision is to be transposed as AIS requirement, and not as ATS requirement.
	Note.— Guidance material in respect to the processing of aeronautical data and aeronautical information is contained in RTCA Document DO-200A and European Organization for Civil Aviation Equipment (EUROCAE) Document ED-76 — Standards for Processing Aeronautical Data.		The provision is to be transposed as AIS requirement, and not as ATS requirement.
2.19.3	Electronic aeronautical data sets shall be protected by the inclusion in the data sets of a		The provision is to be transposed as AIS requirement, and not as ATS requirement.

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	32-bit cyclic redundancy check (CRC) implemented by the application dealing with the data sets. This shall apply to the protection of all integrity levels of data sets as specified in 2.19.2.		
	Note 1.— The requirement in 2.19.3 does not apply to the communications systems used for the transfer of data sets. *Note 2.— Guidance material on the use of a 32-bit CRC algorithm to implement a protection of electronic aeronautical data sets is contained in the Aeronautical Information Services Manual (Doc 8126).*		The provision is to be transposed as AIS requirement, and not as ATS requirement.
	Note.— Guidance material on the aeronautical data quality requirements (accuracy, resolution, integrity, protection and traceability) is contained in the World Geodetic System — 1984 (WGS-84) Manual *(Doc 9674). Supporting material in respect of the provisions of Appendix 5 related to accuracy and integrity of aeronautical data is contained in RTCA Document DO-201A and European Organization for Civil Aviation Equipment (EUROCAE) Document ED-77 —* Industry Requirements for Aeronautical Information.		The provision is to be transposed as AIS requirement, and not as ATS requirement.
2.19.4	Geographical coordinates indicating latitude and longitude shall be determined and reported to the aeronautical information services authority in terms of the World Geodetic System - 1984 (WGS-84) geodetic reference datum, identifying those geographical coordinates which have been transformed into WGS-84 coordinates by mathematical means and whose accuracy of original field work does not meet the requirements in Appendix 5, Table 1.		The provision is to be transposed as AIS requirement, and not as ATS requirement, together with Table 1 of Appendix 5.
2.19.5	The order of accuracy of the field work and		The provision is to be transposed as AIS

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	determinations and calculations derived therefrom shall be such that the resulting operational navigation data for the phases of flight will be within the maximum deviations, with respect to an appropriate reference frame, as indicated in the tables contained in Appendix 5.		requirement, and not as ATS requirement, together with Tables 1 and 2 of Appendix 5.
	Note 1.— An appropriate reference frame is that which enables WGS-84 to be realized on a given position and with respect to which all coordinate data are related. *Note 2.— Specifications governing the publication of aeronautical data are given in Annex 4, Chapter 2 and Annex 15, Chapter 3.* *Note 3.— For those fixes and points that are serving a dual purpose, e.g. holding point and missed approach point, the higher accuracy applies.*		The provision is to be transposed as AIS requirement, and not as ATS requirement.
2.20.1	Coordination between meteorological and air traffic services authorities To ensure that aircraft receive the most up-to-date meteorological information for aircraft operations, arrangements shall be made, where necessary, between meteorological and air traffic services authorities for air traffic services personnel: a) in addition to using indicating instruments, to report, if observed by air traffic services personnel or communicated by aircraft, such other meteorological elements as may be agreed upon; b)to report as soon as possible to the associated meteorological office meteorological phenomena of operational significance, if observed by air traffic services personnel or communicated by aircraft, which have not been		The transposition as ATS.OR.120 is proposed as follows: **To ensure that aircraft receive the most up-to-date meteorological information for aircraft operations, the ATS provider shall arrange with the meteorological services provider for air traffic services personnel:** **a) in addition to using indicating instruments, to report, if observed by air traffic services personnel or communicated by aircraft, such other meteorological elements as may be agreed upon;** **b) to report as soon as possible to the associated meteorological office meteorological phenomena of operational significance, if observed by air traffic services personnel or**

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	included in the aerodrome meteorological report;		**communicated by aircraft, which have not been included in the aerodrome meteorological report;**
	c)to report as soon as possible to the associated meteorological office pertinent information concerning pre-eruption volcanic activity, volcanic eruptions and information concerning volcanic ash cloud. In addition, area control centres and flight information centres shall report the information to the associated meteorological watch office and volcanic ash advisory centres (VAACs).		The transposition as ATS.OR.120 is proposed as follows: **c) to report as soon as possible to the associated meteorological office pertinent information concerning pre-eruption volcanic activity, volcanic eruptions and information concerning volcanic ash cloud. In addition, area control centres and flight information centres shall report the information to the associated meteorological watch office and volcanic ash advisory centres (VAACs).**
	Note 1.— VAACs are designated by regional air navigation agreements in accordance with Annex 3, Chapter 3, 3.5.1. *Note 2.— See 4.2.3 regarding transmission of special air-reports.*		Not to be transposed as ATS requirement.
2.20.2	Close coordination shall be maintained between area control centres, flight information centres and associated meteorological watch offices to ensure that information on volcanic ash included in NOTAM and SIGMET messages is consistent.		The transposition as ATS.OR.120 is proposed as follows: **The ATS provider shall ensure that close coordination is maintained between area control centres, flight information centres and associated meteorological watch offices to ensure that information on volcanic ash included in NOTAM and SIGMET messages is consistent.**
2.21.1	Coordination between aeronautical information services and air traffic services authorities To ensure that aeronautical information services		The transposition as ATS.OR.125 is proposed as follows: **(b) To ensure that aeronautical information**

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	units obtain information to enable them to provide up-to-date pre-flight information and to meet the need for in-flight information, arrangements shall be made between aeronautical information services and air traffic services authorities responsible for air traffic services to report to the responsible aeronautical information services unit, with a minimum of delay: a) information on aerodrome conditions; b) the operational status of associated facilities, services and navigation aids within their area of responsibility; c) the occurrence of volcanic activity observed by air traffic services personnel or reported by aircraft; and d) any other information considered to be of operational significance.		**services units obtain information to enable them to provide up-to-date pre-flight information and to meet the need for in-flight information, the ATS provider shall arrange to report to the responsible aeronautical information services provider, with a minimum of delay:** **(1) information on aerodrome conditions;** **(2) the operational status of associated facilities, services and navigation aids within their area of responsibility;** **(3) the occurrence of volcanic activity observed by air traffic services personnel or reported by aircraft; and** **(4) any other information considered to be of operational significance.**
2.21.2	Before introducing changes to the air navigation system, due account shall be taken by the services responsible for such changes of the time needed by the aeronautical information service for the preparation, production and issuance of relevant material for promulgation. To ensure timely provision of the information to the aeronautical information service, close coordination between those services concerned is therefore required.		The transposition as ATS.OR.125 is proposed as follows: **(c) Before introducing changes to the air navigation system elements under its responsibility, the ATS provider shall:** **(1) ensure close coordination with aeronautical information service concerned;** **(2) take due account of the time needed by the aeronautical information service for the preparation, production and issuance of relevant material for**

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			promulgation; **(3) provide the information to the aeronautical information provider concerned.**
2.21.3	Of particular importance are changes to aeronautical information that affect charts and/or computer-based navigation systems which qualify to be notified by the Aeronautical Information Regulation and Control (AIRAC) system, as specified in Annex 15, Chapter 6 and Appendix 4. The predetermined, internationally agreed AIRAC effective dates in addition to 14 days postage time shall be observed by the responsible air traffic services when submitting the raw information/data to aeronautical information services.		The first sentence does not include any requirement and therefore is not suitable for transposition. The transposition as ATS.OR.125(d) is proposed as follows: **The ATS provider shall observe the predetermined, internationally agreed AIRAC, effective dates in addition to 14 days postage time when submitting to aeronautical information services the raw information/data subject to AIRAC cycle.**
2.21.4	The air traffic services responsible for the provision of raw aeronautical information/data to the aeronautical information services shall do so while taking into account accuracy and integrity requirements for aeronautical data as specified in Appendix 5 to this Annex.		Not to be explicitly transposed as ATS requirement, as covered by the introduction of a general requirement, applicable to all providers, in the ATM/ANS Common Requirements Regulation (Part-AIS)**.**
	Note 1.— Specifications for the issue of a NOTAM, SNOWTAM and ASHTAM are contained in Annex 15, Chapter 5. *Note 2.— Reports of volcanic activity comprise the information detailed in Annex 3, Chapter 4.* *Note 3.— AIRAC information is distributed by the aeronautical information service at least 42 days in advance of the AIRAC effective dates with the objective of reaching recipients at least 28 days in advance of the effective date.* *Note 4.— The schedule of the predetermined, internationally agreed AIRAC common effective dates at*		Not to be transposed as ATS requirement.

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	intervals of 28 days, including 6 November 1997, and guidance for the AIRAC use are contained in the Aeronautical Information Services Manual *(Doc 8126, Chapter 2, 2.6).*		
2.22	Minimum flight altitudes Minimum flight altitudes shall be determined and promulgated by each Contracting State for each ATS route and control area over its territory. The minimum flight altitudes determined shall provide a minimum clearance above the controlling obstacle located within the areas concerned.		Not to be transposed as ATS requirement, as it is considered to be more suitable for transposition as authority requirement within the ASD and AIS requirements. PBN-related provisions might also be relevant.
	Note.— The requirements for publication by States of minimum flight altitudes and of the criteria used to determine them are contained in Annex 15, Appendix 1. Detailed obstacle clearance criteria are contained in PANS-OPS (Doc 8168), Volume II.		Not to be transposed as ATS requirement, as it is considered to be more suitable for transposition as authority requirement within the ASD and AIS requirements. PBN-related provisions might also be relevant.
2.23.1	Service to aircraft in the event of an emergency An aircraft known or believed to be in a state of emergency, including being subjected to unlawful interference, shall be given maximum consideration, assistance and priority over other aircraft as may be necessitated by the circumstances.		Provision already transposed as SERA.11005 'Service to aircraft in the event of an emergency', with adaptations to the EU regulatory context.
	Note.— To indicate that it is in a state of emergency, an aircraft equipped with an appropriate data link capability and/or an SSR transponder might operate the equipment as follows: *a) on Mode A, Code 7700; or* *b) on Mode A, Code 7500, to indicate specifically that it is being subjected to unlawful interference; and/or*		The principles of points a) and b) are already transposed as SERA.13005(a) 'SSR transponder Mode A code setting' Not to be transposed as ATS requirement.

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	c) activate the appropriate emergency and/or urgency capability of ADS-B or ADS-C; and/or *d) transmit the appropriate emergency message via CPDLC.*		
2.23.1.1	*In communications between ATS units and aircraft in the event of an emergency, Human Factors principles should be observed.*		Not to be transposed as ATS requirement.
	Note.— Guidance material on Human Factors principles can be found in the Human Factors Training Manual (Doc 9683).		Not to be transposed as ATS requirement.
2.23.2 .	When an occurrence of unlawful interference with an aircraft takes place or is suspected, ATS units shall attend promptly to requests by the aircraft. Information pertinent to the safe conduct of the flight shall continue to be transmitted and necessary action shall be taken to expedite the conduct of all phases of the flight, especially the safe landing of the aircraft.		Provision already transposed as SERA.11005(c) 'Unlawful interference' Not to be transposed as ATS requirement.
2.23.3	When an occurrence of unlawful interference with an aircraft takes place or is suspected, ATS units shall, in accordance with locally agreed procedures, immediately inform the appropriate authority designated by the State and exchange necessary information with the operator or its designated representative.		Provision already transposed as SERA.11005(d) 'Unlawful interference' Not to be transposed as ATS requirement.
	Note 1.— A strayed or unidentified aircraft may be suspected as being the subject of unlawful interference. See 2.24.1.3.		Provision already transposed as SERA.11010(c) 'In-flight contingencies' Not to be transposed as ATS requirement.
	Note 2.— Procedures relating to the handling of strayed or unidentified aircraft are contained in 2.24.1.		Not to be transposed as ATS requirement.
	Note 3.— PANS-ATM *(Doc 4444), Chapter 15, 15.1.3 contains more specific procedures related to unlawful interference*		Provisions of Section 15.1.3 of PANS ATM are already transposed as AMC1 SERA.11010 'In-flight contingencies'

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			Not to be transposed as ATS requirement.
2.24.1	In-flight contingencies Strayed or unidentified aircraft		
	Note 1.— The terms "strayed aircraft" and "unidentified aircraft" in this paragraph have the following meanings: Strayed aircraft. *An aircraft which has deviated significantly from its intended track or which reports that it is lost.* Unidentified aircraft. *An aircraft which has been observed or reported to be operating in a given area but whose identity has not been established.*		Definitions already transposed in Article 2 of the SERA Regulation. Not to be transposed as ATS requirement.
	Note 2.— An aircraft may be considered, at the same time, as a "strayed aircraft" by one unit and as an "unidentified aircraft" by another unit.		It is already transposed as GM1 SERA.11010. Not to be transposed as ATS requirement.
	Note 3.— A strayed or unidentified aircraft may be suspected as being the subject of unlawful interference		Not to be transposed as ATS requirement.
2.24.1.1	As soon as an air traffic services unit becomes aware of a strayed aircraft it shall take all necessary steps as outlined in 2.24.1.1.1 and 2.24.1.1.2 to assist the aircraft and to safeguard its flight.		Provision already transposed as SERA.11010 'In-flight contingencies' Not to be transposed as ATS requirement.
	Note.— Navigational assistance by an air traffic services unit is particularly important if the unit becomes aware of an aircraft straying, or about to stray, into an area where there is a risk of interception or other hazard to its safety.		It is already transposed as GM1 SERA.11010. Not to be transposed as ATS requirement.
2.24.1.1.1	If the aircraft's position is not known, the air traffic services unit shall: a) attempt to establish two-way communication with the aircraft, unless such communication already exists; b) use all available means to determine its position; c) inform other ATS units into whose area the		Provision already transposed as SERA.11010 'In-flight contingencies' Not to be transposed as ATS requirement.

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	aircraft may have strayed or may stray, taking into account all the factors which may have affected the navigation of the aircraft in the circumstances; d) inform, in accordance with locally agreed procedures, appropriate military units and provide them with pertinent flight plan and other data concerning strayed aircraft; e) request from the units referred to in c) and d) and from other aircraft in flight every assistance in establishing communication with the aircraft and determining its position.		
	Note.— The requirements in d) and e) apply also to ATS units informed in accordance with c).		Provision already transposed as SERA.11010 'In-flight contingencies' Not to be transposed as ATS requirement.
2.24.1.1.2.	When the aircraft's position is established, the air traffic services unit shall: a) advise the aircraft of its position and corrective action to be taken; and b) provide, as necessary, other ATS units and appropriate military units with relevant information concerning the strayed aircraft and any advice given to that aircraft.		Provision already transposed as SERA.11010 'In-flight contingencies' Not to be transposed as ATS requirement.
2.24.1.2	As soon as an air traffic services unit becomes aware of an unidentified aircraft in its area, it shall endeavour to establish the identity of the aircraft whenever this is necessary for the provision of air traffic services or required by the appropriate military authorities in accordance with locally agreed procedures. To this end, the air traffic services unit shall take such of the following steps as are appropriate in the circumstances:		Provision already transposed as SERA.11010 'In-flight contingencies' Not to be transposed as ATS requirement.

	a) attempt to establish two-way communication with the aircraft; b) inquire of other air traffic services units within the flight information region about the flight and request their assistance in establishing two-way communication with the aircraft; c) inquire of air traffic services units serving the adjacent flight information regions about the flight and request their assistance in establishing two-way communication with the aircraft; d) attempt to obtain information from other aircraft in the area.		
2.24.1.2.1	The air traffic services unit shall, as necessary, inform the appropriate military unit as soon as the identity of the aircraft has been established.		Provision already transposed as SERA.11010 'In-flight contingencies' Not to be transposed as ATS requirement.
2.24.1.3	Should the ATS unit consider that a strayed or unidentified aircraft may be the subject of unlawful interference, the appropriate authority designated by the State shall immediately be informed, in accordance with locally agreed procedures.		Provision already transposed as SERA.11010 'In-flight contingencies' Not to be transposed as ATS requirement.
2.24.2.1	Interception of civil aircraft As soon as an air traffic services unit learns that an aircraft is being intercepted in its area of responsibility, it shall take such of the following steps as are appropriate in the circumstances: a) attempt to establish two-way communication with the intercepted aircraft via any means available, including the emergency radio frequency 121.5 MHz, unless such communication already exists; b) inform the pilot of the intercepted aircraft of the interception;		Provision already transposed as SERA.11015 'Interception'. Not to be transposed as ATS requirement.

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	c) establish contact with the intercept control unit maintaining two-way communication with the intercepting aircraft and provide it with available information concerning the aircraft; d) relay messages between the intercepting aircraft or the intercept control unit and the intercepted aircraft, as necessary; e) in close coordination with the intercept control unit take all necessary steps to ensure the safety of the intercepted aircraft; f) inform ATS units serving adjacent flight information regions if it appears that the aircraft has strayed from such adjacent flight information regions.		
2.24.2.2	As soon as an air traffic services unit learns that an aircraft is being intercepted outside its area of responsibility, it shall take such of the following steps as are appropriate in the circumstances: a) inform the ATS unit serving the airspace in which the interception is taking place, providing this unit with available information that will assist in identifying the aircraft and requesting it to take action in accordance with 2.23.2.1; b) relay messages between the intercepted aircraft and the appropriate ATS unit, the intercept control unit or the intercepting aircraft.		Provision already transposed as SERA.11015 'Interception'. Not to be transposed as ATS requirement.
2.25.1	Time in air traffic services Air traffic services units shall use Coordinated Universal Time (UTC) and shall express the time in hours and minutes and, when required, seconds of the 24-hour day beginning at midnight.		Provision already transposed as SERA.3401 'General' a) and d) 'Time in air traffic services', Not to be transposed as ATS requirement.
2.25.2	Air traffic services units shall be equipped with		The transposition as ATS IR ATS.OR.130 is

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	clocks indicating the time in hours, minutes and seconds, clearly visible from each operating position in the unit concerned.		proposed as follows: **The air traffic services provider shall ensure that air traffic services units are equipped with clocks indicating the time in hours, minutes and seconds, clearly visible from each operating position in the unit concerned.**
2.25.3	Air traffic services unit clocks and other time-recording devices shall be checked as necessary to ensure correct time to within plus or minus 30 seconds of UTC. Wherever data link communications are utilized by an air traffic services unit, clocks and other time-recording devices shall be checked as necessary to ensure correct time to within 1 second of UTC.		The transposition of the provision as ATS IR ATS.OR.130 is proposed as follows: **The ATS provider shall ensure that ATS unit clocks and other time-recording devices are checked as necessary to ensure correct time to within plus or minus 30 seconds of UTC. Wherever data link communications are utilised by an air traffic services unit, clocks and other time-recording devices shall be checked as necessary to ensure correct time to within 1 second of UTC.** The second sentence in the provision is already transposed as SERA.3401 'General' point (c).
2.25.4	The correct time shall be obtained from a standard time station or, if not possible, from another unit which has obtained the correct time from such station.		The transposition as ATS IR ATS.OR.130 is proposed as follows: **The correct time shall be obtained from a standard time station or, if not possible, from another unit which has obtained the correct time from such station.**
2.25.5	Aerodrome control towers shall, prior to an aircraft taxiing for take-off, provide the pilot with the correct time, unless arrangements have been made for the pilot to obtain it from other sources. Air traffic services units shall, in addition, provide aircraft with the correct time on request. Time checks shall be given to the		The provision already transposed as SERA.3401 'General' point (d) 'Time in air traffic services', with adaptations to the EU regulatory context, i.e. time checks given to the nearest minute. Not to be transposed as ATS requirement.

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	nearest half minute.		
2.26	Establishment of requirements for carriage and operation of pressure-altitude reporting transponders States shall establish requirements for carriage and operation of pressure-altitude reporting transponders within defined portions of airspace.		The provision already transposed as SERA.13010 'Pressure-altitude-derived information' Not to be transposed as ATS requirement.
	Note.— This provision is intended to improve the effectiveness of air traffic services as well as airborne collision avoidance systems.		Not to be transposed as ATS requirement.
2.27	ATS safety management *Note.— Annex 19 includes the safety management provisions applicable to ATS providers. Further guidance is contained in the Safety Management Manual (SMM) (Doc 9859) and associated procedures are contained in the PANS-ATM (Doc 4444).*		Not to be transposed as ATS requirement, as already covered by the ATM/ANS Common Requirements Regulation (Annex IV Subpart A Section 2).
2.27	ATS safety management Any significant safety-related change to the ATC system, including the implementation of a reduced separation minimum or a new procedure, shall only be effected after a safety assessment has demonstrated that an acceptable level of safety will be met and users have been consulted. When appropriate, the responsible authority shall ensure that adequate provision is made for post-implementation monitoring to verify that the defined level of safety continues to be met.		Not to be transposed as ATS requirement, as already covered by the ATM/ANS Common Requirements Regulation (Annex IV Subpart A Section 2).
	Note.— When, due to the nature of the change, the acceptable level of safety cannot be expressed in quantitative terms, the safety assessment may rely on operational judgment.		Not to be transposed as ATS requirement, as already covered by the ATM/ANS Common Requirements Regulation (Annex IV Subpart A Section 2).

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2.28.1 .	Common reference section Horizontal reference section World Geodetic System – 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system for air navigation. Reported aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.		The content of Chapter 2.28 is proposed for transposition as ATM/ANS.OR.A.085 'Common reference systems for air navigation' with NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'.
	Note.— Comprehensive guidance material concerning WGS-84 is contained in the World Geodetic System — 1984 (WGS-84) Manual *(Doc 9674)*.		The content of Chapter 2.28 is proposed for transposition as ATM/ANS.OR.A.085 'Common reference systems for air navigation' with NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'.
2.28.2	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 for air navigation.		The content of Chapter 2.28 is proposed for transposition as ATM/ANS.OR.A.085 'Common reference systems for air navigation' with NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'.
	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.		The content of Chapter 2.28 is proposed for transposition as ATM/ANS.OR.A.085 'Common reference systems for air navigation' with NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'.
2.28.3.1	Temporal reference system The Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference systems for air navigation.		The content of Chapter 2.28 is proposed for transposition as ATM/ANS.OR.A.085 'Common reference systems for air navigation' with NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'.

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2.28.3.2	When a different temporal reference system is used, this shall be indicated in GEN 2.1.2 of Aeronautical Information Publication (AIP).		The content of Chapter 2.28 is proposed for transposition as ATM/ANS.OR.A.085 'Common reference systems for air navigation' with NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'.
2.29.1	Language proficiency An air traffic services provider shall ensure that air traffic controllers speak and understand the language(s) used for radiotelephony communications as specified in Annex 1.		Not to be transposed as ATS requirement, as it is covered by both Reg.2015/340 and provision 'ATS.OR.215' Licensing and medical certification requirements for air traffic controllers' of the ATM/ANS Common Requirements Regulation.
2.29.2	Except when communications between air traffic control units are conducted in a mutually agreed language, the English language shall be used for such communications.		The transposition as ATS IR ATS.TR.125 is proposed, with the textual modification, as follows: **Except when communications between air traffic <u>services</u> units are conducted in a mutually agreed language, the English language shall be used for such communications.** The proposed modification is to cover cases when coordination between ATC and FIS/AFIS units occurs. To be noted that the requirement does not impose to possess either knowledge in radiotelephony, or English language proficiency.
2.30	Contingency arrangements Air traffic services authorities shall develop and promulgate contingency plans for implementation in the event of disruption, or potential disruption, of air traffic services and related supporting services in the airspace for which they are responsible for the provision of		The first sentence of the provision is transposed by ATM/ANS.OR.A.070 of the ATM/ANS Common Requirements Regulation. The transposition of the second sentence of the provision as ATS IR ATS.OR.135 is proposed as follows:

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	such services. Such contingency plans shall be developed with the assistance of ICAO as necessary, in close coordination with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.		**The ATS provider shall develop contingency plans as specified in ATM/ANS.OR.A.070 in close coordination with the air traffic services providers responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.**
	Note 1.— Guidance material relating to the development, promulgation and implementation of contingency plans is contained in Attachment C. *Note 2.— Contingency plans may constitute a temporary deviation from the approved regional air navigation plans; such deviations are approved, as necessary, by the President of the ICAO Council on behalf of the Council.*		Not to be transposed as ATS requirement.
2.31.1	Identification and delineation of prohibited, restricted and danger areas Each prohibited area, restricted area, or danger area established by a State shall, upon initial establishment, be given an identification and full details shall be promulgated.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note.— See Annex 15, Appendix 1, ENR 5.1.		Not to be transposed as ATS requirement.
2.31.2	The identification so assigned shall be used to identify the area in all subsequent notifications pertaining to that area.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.31.3	The identification shall be composed of a group of letters and figures as follows: a) nationality letters for location indicators assigned to the State or territory which has established the airspace; b) a letter P for prohibited area, R for restricted area and D for danger area as appropriate; and c) a number, unduplicated within the State or territory concerned.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
	Note.— Nationality letters are those contained		The provision is to be transposed as ASD

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	in Location Indicators (Doc 7910).		requirement, and not as ATS requirement.
2.31.4	To avoid confusion, identification numbers shall not be reused for a period of at least one year after cancellation of the area to which they refer.		The provision is to be transposed as ASD requirement, and not as ATS requirement.
2.31.5	*Recommendation.— When a prohibited, restricted or danger area is established, the area should be as small as practicable and be contained within simple geometrical limits, so as to permit ease of reference by all concerned.*		The provision is to be transposed as ASD requirement, and not as ATS requirement.
3.1	CHAPTER 3. AIR TRAFFIC CONTROL SERVICE		
3.1	Application Air traffic control service shall be provided: a) to all IFR flights in airspace Classes A, B, C, D and E; b) to all VFR flights in airspace Classes B, C and D; c) to all special VFR flights; d) to all aerodrome traffic at controlled aerodromes.		The provision is already transposed as SERA.8001; due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.200, as follows: **Air traffic control service shall be provided:** **(a) to all IFR flights in airspace Classes A, B, C, D and E;** **(b) to all VFR flights in airspace Classes B, C and D;** **(c) to all special VFR flights;** **(d) to all aerodrome traffic at controlled aerodromes.**
3.2	Provision of air traffic control service The parts of air traffic control service described in 2.3.1 shall be provided by the various units as follows: a) Area control service: 1) by an area control centre; or 2) by the unit providing approach control service in a control zone or in a control area of limited extent which is designated primarily for the provision of approach control service and where		The transposition as ATS IR ATS.TR.205 is proposed as follows: **Provision of air traffic control service** **The parts of air traffic control service described in ATS.TR.105(a) shall be provided by the various units as follows:** **(a) Area control service:** **(1) by an area control centre; or** **(2) by the unit providing approach control service in a control zone or**

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	no area control centre is established. b) Approach control service: 1) by an aerodrome control tower or area control centre when it is necessary or desirable to combine under the responsibility of one unit the functions of the approach control service with those of the aerodrome control service or the area control service; 2) by an approach control unit when it is necessary or desirable to establish a separate unit. c) Aerodrome control service: by an aerodrome control tower.		**in a control area of limited extent which is designated primarily for the provision of approach control service and where no area control centre is established.** **(b) Approach control service:** **(1) by an aerodrome control tower or area control centre when it is necessary or desirable to combine under the responsibility of one unit the functions of the approach control service with those of the aerodrome control service or the area control service;** **(2) by an approach control unit when it is necessary or desirable to establish a separate unit.** **(c) Aerodrome control service: by an aerodrome control tower.**
	Note.— The task of providing specified services on the apron, e.g. apron management service, may be assigned to an aerodrome control tower or to a separate unit.		Not to be transposed as ATS requirement.
3.3.1	Operation of air traffic control service In order to provide air traffic control service, an air traffic control unit shall: a) be provided with information on the intended movement of each aircraft, or variations therefrom, and with current information on the actual progress of each aircraft; b) determine from the information received, the relative positions of known aircraft to each other; c) issue clearances and information for the		The provision is already transposed as SERA.8005(a) 'Operation of air traffic control service'; due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.210(a), as follows: **Operation of air traffic control service** **In order to provide air traffic control service, an air traffic control unit shall:** **(a) be provided with information on the intended movement of each aircraft, or variations therefrom, and with current**

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	purpose of preventing collision between aircraft under its control and of expediting and maintaining an orderly flow of traffic; d) coordinate clearances as necessary with other units: 1) whenever an aircraft might otherwise conflict with traffic operated under the control of such other units; 2) before transferring control of an aircraft to such other units.		**information on the actual progress of each aircraft;** **(b) determine from the information received, the relative positions of known aircraft to each other;** **(c) issue clearances, instructions and information for the purpose of preventing collision between aircraft under its control and of expediting and maintaining an orderly flow of traffic;** **(d) coordinate clearances as necessary with other units:** **(1) whenever an aircraft might otherwise conflict with traffic operated under the control of such other units;** **(2) before transferring control of an aircraft to such other units.**
3.3.2	Information on aircraft movements, together with a record of air traffic control clearances issued to such aircraft, shall be so displayed as to permit ready analysis in order to maintain an efficient flow of air traffic with adequate separation between aircraft.		The transposition as ATS IR ATS.OR.145(a) is proposed as follows: **The ATS provider shall ensure that information on aircraft movements, together with a record of air traffic control clearances issued to such aircraft, are so displayed as to permit ready analysis in order to maintain an efficient flow of air traffic with adequate separation between aircraft.**
3.3.3	*Air traffic control units should be equipped with devices that record background communication and the aural environment at air traffic controller work stations, capable of retaining the information recorded during at least the last twenty-four hours of operation.*		The transposition as ATS IR ATS.OR.465 is proposed as follows: **Air traffic control units shall be equipped with devices that record background communication and the aural environment at air traffic controller work stations, capable of**

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			retaining the information recorded during at least the last 24 hours of operation.
	Note.— Provisions related to the non-disclosure of recordings and transcripts of recordings from air traffic control units are contained in Annex 13, 5.12.		Not to be transposed as ATS requirement.
3.3.4	Clearances issued by air traffic control units shall provide separation: a) between all flights in airspace Classes A and B; b) between IFR flights in airspace Classes C, D and E; c) between IFR flights and VFR flights in airspace Class C; d) between IFR flights and special VFR flights; e) between special VFR flights when so prescribed by the appropriate ATS authority, except that, when requested by an aircraft and if so prescribed by the appropriate ATS authority for the cases listed under b) above in airspace Classes D and E, a flight may be cleared without separation being so provided in respect of a specific portion of the flight conducted in visual meteorological conditions.		Provision already transposed as SERA.8005(b) 'Operation of air traffic control service' with textual modifications to adapt the provision to the EU regulatory context; due to its relevance in the ATS context, it is proposed for transposition also as ATS IR. ATS.TR.210(b), as follows: **Clearances issued by air traffic control units shall provide separation:** **(a) between all flights in airspace Classes A and B;** **(b) between IFR flights in airspace Classes C, D and E;** **(c) between IFR flights and VFR flights in airspace Class C;** **(d) between IFR flights and special VFR flights;** **(e) between special VFR flights unless otherwise prescribed by the competent authority;** **except that, when requested by the pilot of an aircraft and agreed by the pilot of the other aircraft and if so prescribed by the competent authority for the cases listed under b) above in airspace Classes D and E, a flight may be cleared subject to maintaining own separation in respect of a specific portion of the flight below 3 050 m (10 000 ft) during climb or descent, during day in visual meteorological**

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			conditions.
3.3.5	Separation by an air traffic control unit shall be obtained by at least onecke of the following: a) vertical separation, obtained by assigning different levels selected from: 1) the appropriate table of cruising levels in Appendix 3 of Annex 2, or 2) a modified table of cruising levels, when so prescribed in accordance with Appendix 3 of Annex 2 for flight above FL 410, except that the correlation of levels to track as prescribed therein shall not apply whenever otherwise indicated in appropriate aeronautical information publications or air traffic control clearances; b) horizontal separation, obtained by providing: 1) longitudinal separation, by maintaining an interval between aircraft operating along the same, converging or reciprocal tracks, expressed in time or distance; or 2) lateral separation, by maintaining aircraft on different routes or in different geographical areas; c) composite separation, consisting of a combination of vertical separation and one of the other forms of separation contained in b) above, using minima for each which may be lower than, but not less than half of, those used for each of the combined elements when applied		Provision already transposed as SERA.8005(c) 'Operation of air traffic control service'. The SERA text includes textual modifications to adapt the provision to the EU regulatory context, and does not transpose point (c) of Chapter 3.3.5 addressing composite separation. Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.210(c) with textual modifications which establish an exception with regard to the application in case of parallel and near-parallel runway operations and to prevent the use of geometric height information for separation purposes, as follows: **Except for cases of operations on parallel or near-parallel runways as in ATS.TR.255, or when a reduction in separation minima in the vicinity of aerodromes can be applied, separation by an air traffic control unit shall be obtained by at least one of the following:** **(a) vertical separation, obtained by assigning different levels selected from the table of cruising levels in Appendix 3 to the Annex to Regulation 923/2012, except that the correlation of levels to track as prescribed therein shall not apply whenever otherwise indicated in appropriate aeronautical information publications or air traffic control clearances. The vertical separation minimum shall be a nominal 300 m (1 000 ft) up to and including FL 410 and a nominal 600 m (2 000 ft) above**

	individually. Composite separation shall only be applied on the basis of regional air navigation agreements.		**this level. Geometric height information shall not be used to establish vertical separation;** **(b) horizontal separation, obtained by providing:** **(1) longitudinal separation, by maintaining an interval between aircraft operating along the same, converging or reciprocal tracks, expressed in time or distance; or** **(2) lateral separation, by maintaining aircraft on different routes or in different geographical areas.**
	Note.— Guidance material relating to the implementation of composite lateral/vertical separation is contained in the Air Traffic Services Planning Manual *(Doc 9426).*		Not to be transposed as ATS requirement.
3.3.5.1	For all airspace where a reduced vertical separation minimum of 300 m (1 000 ft) is applied between FL 290 and FL 410 inclusive, a programme shall be instituted, on a regional basis, for monitoring the height-keeping performance of aircraft operating at these levels, in order to ensure that the continued application of this vertical separation minimum meets the safety objectives. The scope of regional monitoring programmes shall be adequate to conduct analyses of aircraft group performance and evaluate the stability of altimetry system error.		The transposition of the first sentence of the provision as ATS IR ATS.OR.145(b) is proposed as follows, with textual adaptation deriving from Doc.7030 EUR Chapter 7.2.4.1: **For all airspace between FL 290 and FL 410 inclusive, the competent authority shall ensure that ATS providers concerned participate to the RVSM Monitory programme instituted for monitoring the height-keeping performance of aircraft operating at these levels, in order to ensure that the continued application of this vertical separation minimum meets the safety objectives.**
3.3.5.2	Arrangements shall be put into place, through inter-regional agreement, for the sharing between regions of data from monitoring		Not to be transposed as EU ATS requirement.

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	programmes.		
	Note.— Guidance material relating to vertical separation and monitoring of height-keeping performance is contained in the Manual on Implementation of a 300 m (1 000 ft) Vertical Separation Minimum Between FL 290 and FL 410 Inclusive (Doc 9574).		Not to be transposed as EU ATS requirement.
3.4.1	Separation minima The selection of separation minima for application within a given portion of airspace shall be as follows: a) the separation minima shall be selected from those prescribed by the provisions of the PANS-ATM and the Regional Supplementary Procedures as applicable under the prevailing circumstances except that, where types of aids are used or circumstances prevail which are not covered by current ICAO provisions, other separation minima shall be established as necessary by: 1) the appropriate ATS authority, following consultation with operators, for routes or portions of routes contained within the sovereign airspace of a State; 2) regional air navigation agreements for routes or portions of routes contained within airspace over the high seas or over areas of undetermined sovereignty.		Provision already transposed as SERA.8010(a) 'Separation Minima' with textual modifications to adapt the provision to the EU regulatory context. Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.215(a), as follows: **The selection of separation minima for application within a given portion of airspace shall be made by the ATS provider responsible for the provision of ATS and approved by the competent authority concerned.**
	Note.— Details of current separation minima prescribed by ICAO are contained in the PANS-ATM (Doc 4444) and Part 1 of the Regional Supplementary Procedures *(Doc 7030).*		Not to be transposed as ATS requirement.
	b) the selection of separation minima shall be		Provision already transposed as SERA.8010(b)

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	made in consultation between the appropriate ATS authorities responsible for the provision of air traffic services in neighbouring airspace when: 1) traffic will pass from one into the other of the neighbouring airspaces; 2) routes are closer to the common boundary of the neighbouring airspaces than the separation minima applicable in the circumstances.		'Separation Minima' with textual modifications to adapt the provision to the EU regulatory context. Due to its relevance in the ATS context, it shall be transposed also as ATS IR ATS.TR.215(b). The SERA text includes textual modifications to adapt the provision to the EU regulatory context, as follows: **For traffic that will pass from one into the other of neighbouring airspaces and for routes that are closer to the common boundary of the neighbouring airspaces than the separation minima applicable in the circumstances, the selection of separation minima shall be made in consultation between the ATS providers responsible for the provision of ATS in neighbouring airspace.**
	Note.— The purpose of this provision is to ensure, in the first case, compatibility on both sides of the line of transfer of traffic, and, in the other case, adequate separation between aircraft operating on both sides of the common boundary.		Not to be transposed as ATS requirement.
3.4.2	Details of the selected separation minima and of their areas of application shall be notified: a) to the ATS units concerned; and b) to pilots and operators through aeronautical information publications, where separation is based on the use by aircraft of specified navigation aids or specified navigation techniques.		Provision already transposed as SERA.8010(c) 'Separation Minima'. Due to its relevance in the ATS context, it shall be transposed also as ATS IR ATS.TR.215(c), as follows: **(a) Details of the selected separation minima and of their areas of application shall be notified:** **(1) to the ATS units concerned; and** **(2) to pilots and aircraft operators through aeronautical information publications, where separation is**

			based on the use by aircraft of specified navigation aids or specified navigation techniques.
3.5.1	Responsibility for control of individual flights A controlled flight shall be under the control of only one air traffic control unit at any given time.		The transposition of the provision as ATS IR ATS.TR.225 is proposed as follows: **A controlled flight shall be under the control of only one air traffic control unit at any given time**.
3.5.2	Responsibility for control within a given block of airspace Responsibility for the control of all aircraft operating within a given block of airspace shall be vested in a single air traffic control unit. However, control of an aircraft or groups of aircraft may be delegated to other air traffic control units provided that coordination between all air traffic control units concerned is assured.		The transposition of the provision as ATS IR ATS.TR.225 is proposed, with adaptations to the EU regulatory context, as follows: **Responsibility for the control of all aircraft operating within a given block of airspace shall be vested in a single air traffic control unit. However, control of an aircraft or groups of aircraft may be delegated to other air traffic control units provided that coordination between all air traffic control units concerned is assured.**
3.6.1.	Transfer of responsibility for control 3.6.1 Place or time of transfer The responsibility for the control of an aircraft shall be transferred from one air traffic control unit to another as follows: 3.6.1.1 Between two units providing area control service. The responsibility for the control of an aircraft shall be transferred from a unit providing area control service in a control area to the unit providing area control service in an adjacent control area at the time of crossing the common control area boundary as estimated by the area control centre having control of the		The transposition of the provision as ATS IR ATS.TR.230 is proposed as follows: **Place or time of transfer** **(a) The responsibility for the control of an aircraft shall be transferred from one air traffic control unit to another as follows:** **(1) Between two units providing area control service** **The responsibility for the control of an aircraft shall be transferred from a unit providing area control service in a control area to the unit providing area control service in an adjacent control**

	aircraft or at such other point or time as has been agreed between the two units.		**area at the time of crossing the common control area boundary as estimated by the area control centre having control of the aircraft or at such other point or time as has been agreed between the two units.**
3.6.1.2	Between a unit providing area control service and a unit providing approach control service. The responsibility for the control of an aircraft shall be transferred from a unit providing area control service to a unit providing approach control service, and vice versa, at a point or time agreed between the two units.		The transposition of the provision as ATS IR ATS.TR.230, with the addition of the requirement for transfer of responsibility between two approach control units, is proposed as follows: **(2) Between a unit providing area control service and a unit providing approach control service, or between two units providing approach control service** **The responsibility for the control of an aircraft shall be transferred from one unit providing area control service to another, and vice versa, at a point or time agreed between the two units.** The modification of the original Annex 11 provision is introduced to cover also the case of transfer between 2 APP units, and does not constitute a difference with ICAO SARP, but clarification to cover a gap.
3.6.1.3.1	Between a unit providing approach control service and an aerodrome control tower Arriving aircraft. The responsibility for the control of an arriving aircraft shall be transferred from the unit providing approach control service to the aerodrome control tower, when the aircraft: a) is in the vicinity of the aerodrome, and: 1) it is considered that approach and landing		The transposition of the provision as ATS IR ATS.TR.230 is proposed as follows: **(3) Between a unit providing approach control service and an aerodrome control tower** **(i) Arriving aircraft - The responsibility for the control of an arriving aircraft shall be transferred from the unit**

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	will be completed in visual reference to the ground, or 2) it has reached uninterrupted visual meteorological conditions, or b) is at a prescribed point or level, as specified in letters of agreement or ATS unit instructions; or c) has landed.		**providing approach control service to the aerodrome control tower, when the aircraft:** **(A) is in the vicinity of the aerodrome, and:** **(a) it is considered that approach and landing will be completed in visual reference to the ground, or** **(b) it has reached uninterrupted visual meteorological conditions, or** **(B) is at a prescribed point or level, or** **(C) has landed,** **as specified in letters of agreement and operation manuals, as appropriate.**
	Note.— Even though there is an approach control unit, control of certain flights may be transferred directly from an area control centre to an aerodrome control tower and vice versa, by prior arrangement between the units concerned for the relevant part of approach control service to be provided by the area control centre or the aerodrome control tower, as applicable.		The Note is proposed for transposition as GM to ATS.TR.230(a)(3) as follows: **Even though there is an approach control unit, control of certain flights may be transferred directly from an area control centre to an aerodrome control tower and vice versa, by prior arrangement between the units concerned for the relevant part of approach control service to be provided by the area control centre or the aerodrome control tower, as applicable.**
3.6.1.3.2	Departing aircraft. The responsibility for control of a departing aircraft shall be transferred from the aerodrome control tower to the unit		The transposition of the provision as ATS IR ATS.TR.230 is proposed as follows: **(ii) Departing aircraft — The**

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	providing approach control service: a) when visual meteorological conditions prevail in the vicinity of the aerodrome: 1) prior to the time the aircraft leaves the vicinity of the aerodrome, or 2) prior to the aircraft entering instrument meteorological conditions, or 3) at a prescribed point or level, as specified in letters of agreement or ATS unit instructions; b) when instrument meteorological conditions prevail at the aerodrome: 1) immediately after the aircraft is airborne, or 2) at a prescribed point or level, as specified in letters of agreement or ATS unit instructions.		**responsibility for control of a departing aircraft shall be transferred from the aerodrome control tower to the unit providing approach control service:** **(A) when visual meteorological conditions prevail in the vicinity of the aerodrome:** **(a) prior to the time the aircraft leaves the vicinity of the aerodrome, or** **(b) prior to the aircraft entering instrument meteorological conditions, or** **(c) at a prescribed point or level,** **as specified in letters of agreement and operation manuals, as appropriate;** **B) when instrument meteorological conditions prevail at the aerodrome:** **(a) immediately after the aircraft is airborne, or** **(b) at a prescribed point or level,** **as specified in letters of agreement and operation manuals, as appropriate.**
	Note.— See Note following 3.6.1.3.1.		Not to be transposed as ATS requirement.
3.6.1.4	Between control sectors/positions within the		The transposition of the provision as ATS IR

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	same air traffic control unit The responsibility for control of an aircraft shall be transferred from one control sector/position to another control sector/ position within the same air traffic control unit at a point, level or time, as specified in ATS unit instructions.		ATS.TR.230 is proposed as follows: **(4) Between control sectors/positions within the same air traffic control unit** **The responsibility for control of an aircraft shall be transferred from one control sector/position to another control sector/ position within the same air traffic control unit at a point, level or time, as specified in ATS unit instructions.**
3.6.2.1	Coordination of transfer Responsibility for control of an aircraft shall not be transferred from one air traffic control unit to another without the consent of the accepting control unit, which shall be obtained in accordance with 3.6.2.2, 3.6.2.2.1, 3.6.2.2.2 and 3.6.2.3.		The transposition as ATS IR ATS.TR.230(b) is proposed as follows, with adaptations to the EU regulatory context: **(1) Responsibility for control of an aircraft shall not be transferred from one air traffic control unit to another without the consent of the accepting control unit, which shall be obtained in accordance with points (b)(2), (b)(3), (b)(4) and (b)(5).**
3.6.2.2	The transferring control unit shall communicate to the accepting control unit the appropriate parts of the current flight plan and any control information pertinent to the transfer requested.		The transposition as ATS IR ATS.TR.230(b) is proposed as follows: **(2) The transferring control unit shall communicate to the accepting control unit the appropriate parts of the current flight plan and any control information pertinent to the transfer requested.**
3.6.2.2.1	Where transfer of control is to be effected using radar or ADS-B data, the control information pertinent to the transfer shall include		The transposition as ATS IR ATS.TR.230(b) is proposed as follows: **(3) Where transfer of control is to be**

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	information regarding the position and, if required, the track and speed of the aircraft, as observed by radar or ADS-B immediately prior to the transfer.		**effected using ATS surveillance systems, the control information pertinent to the transfer shall include information regarding the position and, if required, the track and speed of the aircraft, as observed by ATS surveillance systems immediately prior to the transfer.**
3.6.2.2.2	Where transfer of control is to be effected using ADS-C data, the control information pertinent to the transfer shall include the four-dimensional position and other information as necessary.		The transposition as ATS IR ATS.TR.230b is proposed as follows: **(4) Where transfer of control is to be effected using ADS-C data, the control information pertinent to the transfer shall include the four-dimensional position and other information as necessary.**
3.6.2.3	The accepting control unit shall: a) indicate its ability to accept control of the aircraft on the terms specified by the transferring control unit, unless by prior agreement between the two units concerned, the absence of any such indication is understood to signify acceptance of the terms specified, or indicate any necessary changes thereto; and b) specify any other information or clearance for a subsequent portion of the flight, which it requires the aircraft to have at the time of transfer.		The transposition as ATS IR ATS.TR.230(b) is proposed as follows: **(5) The accepting control unit shall:** **(i) indicate its ability to accept control of the aircraft on the terms specified by the transferring control unit, unless by prior agreement between the two units concerned, the absence of any such indication is understood to signify acceptance of the terms specified, or indicate any necessary changes thereto; and**

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			ii) specify any other information or clearance for a subsequent portion of the flight, which it requires the aircraft to have at the time of transfer.
3.6.2.4	The accepting control unit shall notify the transferring control unit when it has established two-way voice and/or data link communications with and assumed control of the aircraft concerned, unless otherwise specified by agreement between the two control units concerned.	It constitutes a Category B difference from the Standard in Section 3.6.2.4.	The transposition as ATS IR ATS.TR.230(b) is proposed as follows: **(6) Unless otherwise specified by agreement between the two control units concerned, the accepting control unit shall not notify the transferring control unit when it has established two-way voice and/or data link communications with and assumed control of the aircraft concerned.** In the European context, the original provision from ICAO Annex 11 Chapter 3.6.2.4 seems to be obsolete and contradictory with PANS ATM 10.1.2.4.3. Therefore, a 'not' is added to the text. However, the 'unless otherwise specified by agreement between the two control units concerned' still maintains the provision aligned with the original Annex 11 purposes.
3.6.2.5	Applicable coordination procedures, including transfer of control points, shall be specified in letters of agreement and ATS unit instructions as appropriate.		The transposition of the provision as ATS IR ATS.TR.230(a) is proposed, by referring to the need to establish coordination procedures and transfer of control points in letters of agreements and operation manuals.
3.7	Air traffic control clearances		The provision already transposed as SERA.8015(a). Due to its relevance in the ATS

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	Air traffic control clearances shall be based solely on the requirements for providing air traffic control service.		context, it is proposed for transposition also as ATS IR ATS.TR.235(a), as follows: **Air traffic control clearances shall be based solely on the requirements for providing air traffic control service.**
3.7.1.1	Contents of clearances An air traffic control clearance shall indicate: a) aircraft identification as shown in the flight plan; b) clearance limit; c) route of flight; d) level(s) of flight for the entire route or part thereof and changes of levels if required;		The provision is already transposed as SERA.8015(d). Due to its relevance in the ATS context, it shall be transposed also as ATS IR ATS.TR.235(b), as follows: **(b) Contents of clearances** **An air traffic control clearance shall indicate:** **(1) aircraft identification as shown in the flight plan;** **(2) clearance limit;** **(3) route of flight;** **(i) The route of flight shall be detailed in each clearance when deemed necessary; and** **(ii) The phrase 'cleared flight planned route' shall not be used when granting a re-clearance.** **(4) level(s) of flight for the entire route or part thereof and changes of levels if required;**
	Note.— If the clearance for the levels covers only part of the route, it is important for the air traffic control unit to specify a point to which the part of the clearance regarding levels applies whenever necessary to ensure compliance with 3.6.5.2.2 a) of Annex 2.		Not to be transposed as ATS requirement.
	e) any necessary instructions or information on		Provision already transposed as SERA.8015(d);

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	other matters such as approach or departure manoeuvres, communications and the time of expiry of the clearance.		however, due to its relevance in the ATS context, it shall be transposed also as ATS IR ATS.TR.235(b)(5) as follows: **(5) any necessary instructions or information on other matters such as approach or departure manoeuvres, communications and the time of expiry of the clearance.**
	Note.— The time of expiry of the clearance indicates the time after which the clearance will be automatically cancelled if the flight has not been commenced.		The Note, already transposed as GM1 SERA.8015(d)(5), is proposed for transposition as GM1 ATS.TR.235(b)(5), as follows: **The time of expiry of the clearance indicates the time after which the clearance will be automatically cancelled if the flight has not been commenced.**
3.7.1.2	*Standard departure and arrival routes and associated procedures should be established when necessary to facilitate:* *a) the safe, orderly and expeditious flow of air traffic;* *b) the description of the route and procedure in air traffic control clearances.*		The transposition as ATS IR ATS.TR.235(c) is proposed as follows, with adaptations to the EU regulatory context: **(c) In order to facilitate the delivery of the elements in point (b), the ATS provider shall assess the necessity for standard departure and arrival routes and associated procedures to facilitate:** **(1) the safe, orderly and expeditious flow of air traffic;** **(2) the description of the route and procedure in air traffic control clearances.**
	Note.— Material relating to the establishment of standard departure and arrival routes and associated procedures is contained in the Air Traffic Services Planning Manual *(Doc 9426). The design criteria are*		It is proposed to be transposed as GM1 ATS.TR.235(c) as follows: **Guidance related to the establishment of standard departure and arrival routes and**

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	contained in PANS-OPS, Volume II (Doc 8168).		**associated procedures is available in ICAO Doc 9426 (Chapter 4, Appendix A).**
3.7.2.1	Clearances for transonic flight The air traffic control clearance relating to the transonic acceleration phase of a supersonic flight shall extend at least to the end of that phase.		Provision already transposed as SERA.8015(c). Due to its relevance in the ATS context, it shall be transposed also as ATS IR ATS.TR.235(d)(1), as follows: **(d) Clearances for transonic flight** **(1) The air traffic control clearance relating to the transonic acceleration phase of a supersonic flight shall extend at least to the end of that phase.**
3.7.2.2	*The air traffic control clearance relating to the deceleration and descent of an aircraft from supersonic cruise to subsonic flight should provide for uninterrupted descent, at least during the transonic phase.*		Provision already transposed as SERA.8015(c). Due to its relevance in the ATS context, it shall be transposed also as ATS IR ATS.TR.235(d)(2), as follows: **The air traffic control clearance relating to the deceleration and descent of an aircraft from supersonic cruise to subsonic flight shall seek to provide for uninterrupted descent at least during the transonic phase.**
3.7.3.1	Read-back of clearances and safety-related information The flight crew shall read back to the air traffic controller safety-related parts of ATC clearances and instructions which are transmitted by voice. The following items shall always be read back: a) ATC route clearances; b) clearances and instructions to enter, land on, take off from, hold short of, cross and backtrack on any runway; and c) runway-in-use, altimeter settings, SSR codes, level instructions, heading and speed		Provision already transposed as SERA.8015(e)(1) with textual modifications to adapt to the EU regulatory context. It is not to be transposed as ATS requirement as its content is covered by the modified transposition of Section 3.7.3.1.2.

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	instructions and, whether issued by the controller or contained in ATIS broadcasts, transition levels.		
3.7.3.1.1.	Other clearances or instructions, including conditional clearances, shall be read back or acknowledged in a manner to clearly indicate that they have been understood and will be complied with.		Provision already transposed as SERA.8015(e)(2) with textual modifications to adapt to the EU regulatory context. It is not to be transposed into ATS requirement as its content is covered by the modified transposition of Section 3.7.3.1.2.
3.7.3.1.2	The controller shall listen to the read-back to ascertain that the clearance or instruction has been correctly acknowledged by the flight crew and shall take immediate action to correct any discrepancies revealed by the read-back.		Provision already transposed as SERA.8015(e)(3). Due to its relevance in the ATS context, it shall be transposed also as ATS IR ATS.TR.235(g)(1), as follows: **The controller shall listen to the read-back concerning safety-related parts of ATC clearances and instructions as defined in SERA.8015(e)(1) and (2) of Commission Implementing Regulation (EU) No 923/2012, to ascertain that the clearance and/or instruction has been correctly acknowledged by the flight crew and shall take immediate action to correct any discrepancies revealed by the read-back.**
3.7.3.2	Unless specified by the appropriate ATS authority, voice read-back of CPDLC messages shall not be required.		Provision already transposed as SERA.8015(e)(4) with textual modifications to adapt to the EU regulatory context. Due to its relevance in the ATS context, it shall be transposed also as ATS IR ATS.TR.235(g)(2), as follows: **Voice read-back of CPDLC messages shall not be required unless otherwise specified by the ATS provider.**
	Note.— The procedures and provisions relating to the exchange and acknowledgement of CPDLC messages are contained in Annex 10, Volume II, and PANS-ATM,		Not to be transposed as ATS requirement.

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	Chapter 14.		
3.7.4	Coordination of clearances An air traffic control clearance shall be coordinated between air traffic control units to cover the entire route of an aircraft or a specified portion thereof as follows: 3.7.4.1 An aircraft shall be cleared for the entire route to the aerodrome of first intended landing: a) when it has been possible, prior to departure, to coordinate the clearance between all the units under whose control the aircraft will come; or b) when there is reasonable assurance that prior coordination will be effected between those units under whose control the aircraft will subsequently come.		Provision already transposed as SERA.8015(f)(1) and (2) with textual modifications to adapt to the EU regulatory context. Due to its relevance in the ATS context, it shall be transposed as ATS IR ATS.TR.235(h)(1) and (2), as follows: **(h) Coordination of clearances** **An air traffic control clearance shall be coordinated between air traffic control units to cover the entire route of an aircraft or a specified portion thereof as follows:** **(1) An aircraft shall be cleared for the entire route to the aerodrome of first intended landing:** **(i) when it has been possible, prior to departure, to coordinate the clearance between all the units under whose control the aircraft will come; or** **(ii) when there is reasonable assurance that prior coordination will be effected between those units under whose control the aircraft will subsequently come.**
	Note.— Where a clearance is issued covering the initial part of the flight solely as a means of expediting departing traffic, the succeeding en-route clearance will be as specified above even though the aerodrome of first intended landing is under the jurisdiction of an area control centre other than the one issuing the en-route clearance.		The Note is proposed for transposition as GM1 ATS.TR.235(h)(1), as follows: **Where a clearance is issued covering the initial part of the flight solely as a means of expediting departing traffic, the succeeding en-route clearance will be as specified above even**

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			though the aerodrome of first intended landing is under the jurisdiction of an area control centre other than the one issuing the en-route clearance.
3.7.4.2	When coordination as in 3.7.4.1 has not been achieved or is not anticipated, the aircraft shall be cleared only to that point where coordination is reasonably assured; prior to reaching such point, or at such point, the aircraft shall receive further clearance, holding instructions being issued as appropriate.		Provision already transposed as SERA.8015(f)(3) with textual modifications to adapt to the EU regulatory context. Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.235(h)(2), as follows: **(2) When coordination as in point (1) has not been achieved or is not anticipated, the aircraft shall be cleared only to that point where coordination is reasonably assured; prior to reaching such point, or at such point, the aircraft shall receive further clearance, holding instructions being issued as appropriate.**
3.7.4.2.1	When prescribed by the appropriate ATS authority, aircraft shall contact a downstream air traffic control unit, for the purpose of receiving a downstream clearance prior to the transfer of control point.		Provision already transposed as SERA.8015(f)(4). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.235(h)(3), as follows: **(4) When prescribed by the ATS unit, aircraft shall contact a downstream air traffic control unit, for the purpose of receiving a downstream clearance prior to the transfer of control point.**
3.7.4.2.1.1	Aircraft shall maintain the necessary two-way communication with the current air traffic control unit whilst obtaining a downstream clearance.		Provision already transposed as SERA.8015(f)(4)(i). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.235(h)(3)(i), as follows: **Aircraft shall maintain the necessary two-way communication with the current air traffic control unit whilst obtaining a downstream**

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			clearance.
3.7.4.2.1.2	A clearance issued as a downstream clearance shall be clearly identifiable as such to the pilot.		Provision already transposed as SERA.8015(f)(4)(ii). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.235(h)(3)(ii), as follows: **A clearance issued as a downstream clearance shall be clearly identifiable as such to the pilot.**
3.7.4.2.1.3	Unless coordinated, downstream clearances shall not affect the aircraft's original flight profile in any airspace, other than that of the air traffic control unit responsible for the delivery of the downstream clearance.		Provision already transposed as SERA.8015(f)(4)(iii). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.235(h)(3)(iii), as follows: **Unless coordinated, downstream clearances shall not affect the aircraft's original flight profile in any airspace, other than that of the air traffic control unit responsible for the delivery of the downstream clearance.**
	Note.— Requirements relating to the application of downstream clearance delivery service are specified in Annex 10, Volume II. Guidance material is contained in the Manual of Air Traffic Services Data Link Applications *(Doc 9694).*		It is proposed for transposition as GM1 ATS.TR.315, as follows: **Guidance material relating to D-ATIS is contained in the ICAO Manual of Air Traffic Services Data Link Applications (Doc 9694).**
3.7.4.2.1.4	*Where practicable, and where data link communications are used to facilitate down-stream clearance delivery, two-way voice communications between the pilot and the air traffic control unit providing the downstream clearance should be available.*		The Note is proposed for transposition as GM1 ATS.TR.235(h)(2)(i), as follows: **Where practicable, and where data link communications are used to facilitate downstream clearance delivery, two-way voice communications between the pilot and the ATC unit providing the downstream clearance should be available.**
3.7.4.3	When an aircraft intends to depart from an aerodrome within a control area to enter another control area within a period of thirty minutes, or		Provision already transposed as SERA.8015(f)(5). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR

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	such other specific period of time as has been agreed between the area control centres concerned, coordination with the subsequent area control centre shall be effected prior to issuance of the departure clearance.		ATS.TR.235(h)(4), as follows: **(4) When an aircraft intends to depart from an aerodrome within a control area to enter another control area within a period of 30 minutes, or such other specific period of time as has been agreed between the area control centres concerned, coordination with the subsequent area control centre shall be effected prior to issuance of the departure clearance.**
3.7.4.4	When an aircraft intends to leave a control area for flight outside controlled airspace, and will subsequently re-enter the same or another control area, a clearance from point of departure to the aerodrome of first intended landing may be issued. Such clearance or revisions thereto shall apply only to those portions of the flight conducted within controlled airspace.		Provision already transposed as SERA.8015(f)(6). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.235(h)(4), as follows: **(5) When an aircraft intends to leave a control area for flight outside controlled airspace, and will subsequently re-enter the same or another control area, a clearance from the point of departure to the aerodrome of first intended landing may be issued. Such clearance or revisions thereto shall apply only to those portions of the flight conducted within controlled airspace.**
3.7.5.1	Air traffic flow management Air traffic flow management (ATFM) shall be implemented for airspace where air traffic demand at times exceeds, or is expected to exceed, the declared capacity of the air traffic control services concerned.		Regulation (EU) No 255/2010, as amended by Regulation (EU) 2016/1006, includes this Chapter in the list of ICAO provisions relevant for ATFM. It is not to be transposed as ATS requirement.
3.7.5.2	*ATFM should be implemented on the basis of regional air navigation agreements or, if*		It is not to be transposed as ATS requirement.

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	appropriate, through multilateral agreements. Such agreements should make provision for common procedures and common methods of capacity determination.		
3.7.5.3	When it becomes apparent to an ATC unit that traffic additional to that already accepted cannot be accommodated within a given period of time at a particular location or in a particular area, or can only be accommodated at a given rate, that unit shall so advise the ATFM unit, when such is established, as well as, when appropriate, ATS units concerned. Flight crews of aircraft destined to the location or area in question and operators concerned shall also be advised of the delays expected or the restrictions that will be applied.		It is not to be transposed as ATS requirement.
	Note.— Operators concerned will normally be advised, in advance where possible, of restrictions imposed by the air traffic flow management unit when such is established.		It is not to be transposed as ATS requirement.
3.8.1	Control of persons and vehicles at aerodromes The movement of persons or vehicles including towed aircraft on the manoeuvring area of an aerodrome shall be controlled by the aerodrome control tower as necessary to avoid hazard to them or to aircraft landing, taxiing or taking off.		Provision already transposed as SERA.3210(d)(4)(i). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.240(a), as follows: **The movement of persons or vehicles, including towed aircraft, on the manoeuvring area of an aerodrome shall be controlled by the aerodrome control tower as necessary to avoid hazard to them or to aircraft landing, taxiing or taking off.**
3.8.2	In conditions where low visibility procedures are in operation: a) persons and vehicles operating on the manoeuvring area of an aerodrome shall be		Provision already transposed as SERA.3210 (d)(4)(ii). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.240, as follows:

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	restricted to the essential minimum, and particular regard shall be given to the requirements to protect the ILS/MLS sensitive area(s) when Category II or Category III precision instrument operations are in progress; b) subject to the provisions in 3.8.3, the minimum separation between vehicles and taxiing aircraft shall be as prescribed by the appropriate ATS authority taking into account the aids available; c) when mixed ILS and MLS Category II or Category III precision instrument operations are taking place to the same runway continuously, the more restrictive ILS or MLS critical and sensitive areas shall be protected.		**(b) In conditions where low visibility procedures are in operation:** **(1) persons and vehicles operating on the manoeuvring area of an aerodrome shall be restricted to the essential minimum, and particular regard shall be given to the requirements to protect the ILS/MLS sensitive area(s) when Category II or Category III precision instrument operations are in progress;** **(2) subject to the provisions in (c), the minimum separation between vehicles and taxiing aircraft shall be as specified by the ATS provider and approved by the competent authority taking into account the aids available;** **(3) when mixed ILS and MLS Category II or Category III precision instrument operations are taking place to the same runway continuously, the more restrictive ILS or MLS critical and sensitive areas shall be protected.**
	Note.— The period of application of low visibility procedures is determined in accordance with ATS unit instructions. Guidance on low visibility operations on an aerodrome is contained in the Manual of Surface Movement Guidance and Control Systems (SMGCS) *(Doc 9476).*		Not to be transposed as EU ATS requirement.
3.8.3	Emergency vehicles proceeding to the assistance		Provision already transposed as SERA.3210

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	of an aircraft in distress shall be afforded priority over all other surface movement traffic.		(4)(iii). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.240 (c), as follows: **(c) Emergency vehicles proceeding to the assistance of an aircraft in distress shall be afforded priority over all other surface movement traffic.**
3.8.4	Subject to the provisions in 3.8.3, vehicles on the manoeuvring area shall be required to comply with the following rules: a) vehicles and vehicles towing aircraft shall give way to aircraft which are landing, taking off or taxiing; b) vehicles shall give way to other vehicles towing aircraft; c) vehicles shall give way to other vehicles in accordance with ATS unit instructions; d) notwithstanding the provisions of a), b) and c), vehicles and vehicles towing aircraft shall comply with instructions issued by the aerodrome control tower.		Provision already transposed as SERA.3210 (d)(4)(iv). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.240, as follows: **(d) Subject to the provisions in point (c), vehicles on the manoeuvring area shall be required to comply with the following rules:** **(1) vehicles and vehicles towing aircraft shall give way to aircraft which are landing, taking off, taxiing or being towed;** **(2) vehicles shall give way to other vehicles towing aircraft;** **(3) vehicles shall give way to other vehicles in accordance with air traffic services unit instructions;** **(4) notwithstanding the provisions of points (1), (2) and (3), vehicles and vehicles towing aircraft shall comply with instructions issued by the aerodrome control tower.**
3.9	*Provision of radar and ADS-B* *Radar and ADS-B ground systems should provide for the display of safety-related alerts and warnings, including conflict alert, conflict*		It is proposed for transposition as GM1 ATS.TR.160(d)(9), as follows: **ATS surveillance service should provide for the display of safety-related alerts and**

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	prediction, minimum safe altitude warning and unintentionally duplicated SSR codes.		**warnings, including conflict alert, conflict prediction, minimum safe altitude warning and unintentionally duplicated SSR codes.**
3.10	Use of surface movement radar (SMR) *In the absence of visual observation of all or part of the manoeuvring area or to supplement visual observation, surface movement radar (SMR) provided in accordance with the provisions of Annex 14 Volume I, or other suitable surveillance equipment, should be utilized to:* *a) monitor the movements of aircraft and vehicles on the manoeuvring area;* *b) provide directional information to pilots and vehicle drivers as necessary; and* *c) provide advice and assistance for the safe and efficient movement of aircraft and vehicles on the manoeuvring area.*		The transposition of the provision as ATS IR ATS.TR.245 is proposed with textual modifications to adapt to the EU regulatory context and in particular to ensure alignment with Regulation (EU) No 139/2014, as follows: **Where deemed necessary, in the absence of visual observation of all or part of the manoeuvring area, or to supplement visual observation, advanced surface movement guidance and control systems (A-SMGCS), or other suitable surveillance equipment, shall be utilised by the ATS provider in order to:** **(a) monitor the movements of aircraft and vehicles on the manoeuvring area;** **(b) provide directional information to pilots and vehicle drivers as necessary; and** **(c) provide advice and assistance for the safe and efficient movement of aircraft and vehicles on the manoeuvring area.**
	Note.— See the Manual of Surface Movement Guidance and Control Systems (SMGCS) *(Doc 9476), the* Advanced-Surface Movement Guidance and Control Systems (A-SMGCS) Manual *(Doc 9830) and the* Air Traffic Services Planning Manual *(Doc 9426) for guidance on the use of SMR.*		Not to be transposed as EU ATS requirement.
4.1.1	CHAPTER 4. FLIGHT INFORMATION SERVICE Application Flight information service shall be provided to all aircraft which are likely to be affected by the		Provision already transposed as SERA.9001(a). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.300(a), as follows: **(a) Flight information service shall be provided by the appropriate air traffic**

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	information and which are: a) provided with air traffic control service; or b) otherwise known to the relevant air traffic services units.		**services units to all aircraft which are likely to be affected by the information and which are:** **(1) provided with air traffic control service; or** **(2) otherwise known to the relevant air traffic services units.**
	Note.— Flight information service does not relieve the pilot-in-command of an aircraft of any responsibilities and the pilot-in-command has to make the final decision regarding any suggested alteration of flight plan.		Not to be transposed as ATS requirement as it addresses the flight crew. It is already transposed as SERA.9001(b).
4.1.2	Where air traffic services units provide both flight information service and air traffic control service, the provision of air traffic control service shall have precedence over the provision of flight information service whenever the provision of air traffic control service so requires.		Provision already transposed as SERA.9001(c). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.300(b), as follows: **Where air traffic services units provide both flight information service and air traffic control service, the provision of air traffic control service shall have precedence over the provision of flight information service whenever the provision of air traffic control service so requires.**
	Note.— It is recognized that in certain circumstances aircraft on final approach, landing, take-off and climb may require to receive without delay essential information other than that pertaining to the provision of air traffic control service.		It is proposed for transposition as GM1 ATS.TR.300(b), as follows; **It is recognised that in certain circumstances an aircraft on final approach, landing, take-off and climb may require to receive without delay essential information other than that pertaining to the provision of ATC service.**
4.2.1	Scope of flight information service Flight information service shall include the provision of pertinent: a) SIGMET and AIRMET information;		Provision already transposed as SERA.9005(a). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.305(a), as follows:

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	b) information concerning pre-eruption volcanic activity, volcanic eruptions and volcanic ash clouds; c) information concerning the release into the atmosphere of radioactive materials or toxic chemicals; d) information on changes in the availability of radio navigation services; e) information on changes in condition of aerodromes and associated facilities, including information on the state of the aerodrome movement areas when they are affected by snow, ice or significant depth of water; f) information on unmanned free balloons; and of any other information likely to affect safety.		**(a) Flight information service shall include the provision of pertinent:** **(1) SIGMET and AIRMET information;** **(2) information concerning pre-eruption volcanic activity, volcanic eruptions and volcanic ash clouds;** **(3) information concerning the release into the atmosphere of radioactive materials or toxic chemicals;** **(4) information on changes in the availability of radio navigation services;** **(5) information on changes in the condition of aerodromes and associated facilities, including information on the state of the aerodrome movement areas when they are affected by snow, ice or significant depth of water;** **(6) information on unmanned free balloons;** **(7) information on abnormal aircraft configuration and condition; and** (New provision not included in SERA transposed from PANS ATM Chapter 7.4.1.7) **(8) any other information likely to affect safety.**
4.2.2	Flight information service provided to flights shall include, in addition to that outlined in 4.2.1, the provision of information concerning:		Provision already transposed as SERA.9005(b). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR

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	a) weather conditions reported or forecast at departure, destination and alternate aerodromes; b) collision hazards, to aircraft operating in airspace Classes C, D, E, F and G; c) for flight over water areas, in so far as practicable and when requested by a pilot, any available information such as radio call sign, position, true track, speed, etc., of surface vessels in the area.		ATS.TR.305(b), as follows: **(b) Flight information service provided to flights shall include, in addition to that outlined in point (a), the provision of information concerning:** **(1) weather conditions reported or forecast at departure, destination and alternate aerodromes;** **(2) collision hazards, to aircraft operating in airspace Classes C, D, E, F and G;** **(3) for flight over water areas, in so far as practicable and when requested by a pilot, any available information such as radio call sign, position, true track, speed, etc., of surface vessels in the area.**
	Note 1.— The information in b), including only known aircraft the presence of which might constitute a collision hazard to the aircraft informed, will sometimes be incomplete and air traffic services cannot assume responsibility for its issuance at all times or for its accuracy.		The Note is transposed as GM to ATS.TR.305(b)(2), with the following text: **Information relating to collision hazards includes only known activities that constitute risks to the aircraft concerned. The availability of such information to air traffic services may sometimes be incomplete (e.g. limitations in radar or radio coverage, optional radio contact by pilots, limitations in the accuracy of reported information by pilots, or unconfirmed level of information) and, therefore, air traffic services cannot assume responsibility for its issuance at all times or for its accuracy.**
	Note 2.— When there is a need to supplement collision hazard information provided in compliance with b), or		Not to be transposed as EU ATS requirement.

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	in case of temporary disruption of flight information service, traffic information broadcasts by aircraft may be applied in designated airspaces. Guidance on traffic information broadcasts by aircraft and related operating procedures is contained in Attachment B.		
4.2.3	*ATS units should transmit, as soon as practicable, special air-reports to other aircraft concerned, to the associated meteorological office, and to other ATS units concerned. Transmissions to aircraft should be continued for a period to be determined by agreement between the meteorological and air traffic services authorities concerned.*		Provision already transposed as SERA.12020 (a);(b). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.305(d) as follows: **(d) ATS units shall transmit, as soon as practicable, special and non-routine air-reports to:** **(1) other aircraft concerned;** **(2) the associated meteorological watch office (MWO) in accordance with Appendix 5 to Commission Implementing Regulation (EU) No 923/2012; and** **(3) other ATS units concerned.** **Transmissions to aircraft shall be repeated at a frequency and continued for a period of time which shall be determined by the ATS unit concerned.**
4.2.4	Flight information service provided to VFR flights shall include, in addition to that outlined in 4.2.1, the provision of available information concerning traffic and weather conditions along the route of flight that are likely to make operation under the visual flight rules impracticable.		Provision already transposed as SERA.9005(c). Due to its relevance in the ATS context, it proposed for transposition also as ATS IR ATS.TR.305(e) as follows: **(e) Flight information service provided to VFR flights shall include, in addition to that outlined in point (a), the provision of available information concerning traffic and weather conditions along the route of flight that are likely to make**

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			operation under the visual flight rules impracticable.
4.3.1.1	Operational flight information service broadcasts Application The meteorological information and operational information concerning radio navigation services and aerodromes included in the flight information service shall, whenever available, be provided in an operationally integrated form.		Not to be transposed as EU ATS requirement.
4.3.1.2	*Where integrated operational flight information messages are to be transmitted to aircraft, they should be transmitted with the content and, where specified, in the sequence indicated, for the various phases of flight.*		Not to be transposed as EU ATS requirement.
4.3.1.3	*Operational flight information service broadcasts, when provided, should consist of messages containing integrated information regarding selected operational and meteorological elements appropriate to the various phases of flight. These broadcasts should be of three major types, i.e. HF, VHF and ATIS.*		Not to be transposed as EU ATS requirement.
4.3.1.4	Use of the ATIS/OFIS messages in directed request/reply transmissions When requested by the pilot, the applicable OTIS message(s) shall be transmitted by the appropriate ATS unit		Not to be transposed as EU ATS requirement.
4.3.2.1	HF operational flight information service (OFIS) broadcasts		Not to be transposed as EU ATS requirement.

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	HF operational flight information service (OFIS) broadcasts should be provided when it has been determined by regional air navigation agreements that a requirement exists.		
4.3.2.2	*Whenever such broadcasts are provided:* *a) the information should be in accordance with 4.3.2.5, as applicable, subject to regional air navigation agreements;* *b) the aerodromes for which reports and forecasts are to be included should be as determined by regional air navigation agreements;* *c) the time-sequencing of stations participating in the broadcast should be as determined by regional air navigation agreements;* *d) the HF OFIS broadcast message should take into consideration human performance. The broadcast message should not exceed the length of time allocated for it by regional air navigation agreements, care being taken that the readability is not impaired by the speed of the transmission;* *e) each aerodrome message should be identified by the name of the aerodrome to which the information applies;* *f) when information has not been received in time for a broadcast, the latest available information should be included together with the time of that observation;* *g) the full broadcast message should be repeated if this is feasible within the remainder of the time allotted to the broadcasting station*		Not to be transposed as EU ATS requirement.
	h) the broadcast information should be updated		Not to be transposed as EU ATS requirement.

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	immediately a significant change occurs; and *i) the HF OFIS message should be prepared and disseminated by the most appropriate unit(s) as designated by each State.*		
4.3.2.3	*Pending the development and adoption of a more suitable form of speech for universal use in aeronautical radiotelephony communications, HF OFIS broadcasts concerning aerodromes designated for use by international air services should be available in the English language.*		Not to be transposed as EU ATS requirement.
4.3.2.4	*Where HF OFIS broadcasts are available in more than one language, a discrete channel should be used for each language.*		Not to be transposed as EU ATS requirement.
4.3.2.5	*HF operational flight information service broadcast messages should contain the following information in the sequence indicated or as determined by regional air navigation agreements:* *a) En-route weather information* *Information on significant en-route weather phenomena should be in the form of available SIGMET as prescribed in Annex 3.* *b)Aerodrome information including:* *1) name of aerodrome;* *2) time of observation;* *3) essential operational information;* *4) surface wind direction and speed; if appropriate, maximum wind speed;* **5) visibility and, when applicable, runway visual range (RVR);* **6) present weather;* **7) cloud below 1 500 m (5000 ft) or below the highest minimum sector altitude,*		Not to be transposed as EU ATS requirement.

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	whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility when available; and **8) aerodrome forecast.*		
4.3.3.1	*VHF operational flight information service (OFIS) broadcasts* *VHF operational flight information service broadcasts should be provided as determined by regional air navigation agreements.*		Not to be transposed as EU ATS requirement.
4.3.3.2	*Whenever such broadcasts are provided:* *a) the aerodromes for which reports and forecasts are to be included should be as determined by regional air navigation agreements;* *b) each aerodrome message should be identified by the name of the aerodrome to which the information applies;* *c) when information has not been received in time for a broadcast, the latest available information should be included together with the time of that observation;* *d) the broadcasts should be continuous and repetitive;* *e) The VHF OFIS broadcast message should take into consideration human performance. The broadcast message should, whenever practicable, not exceed five minutes, care being taken that the readability is not impaired by the speed of the transmission;* *f) the broadcast message should be updated on a scheduled basis as determined by regional air navigation agreements. In addition it should be expeditiously updated immediately a significant*		Not to be transposed as EU ATS requirement.

	change occurs; and *g) the VHF OFIS message should be prepared and disseminated by the most appropriate unit(s) as designated by each State.*		
4.3.3.3	*Pending the development and adoption of a more suitable form of speech for universal use in aeronautical radiotelephony communications, VHF OFIS broadcasts concerning aerodromes designated for use by international air services should be available in the English language.*		Not to be transposed as EU ATS requirement.
4.3.3.4	*Where VHF OFIS broadcasts are available in more than one language, a discrete channel should be used for each language.*		Not to be transposed as EU ATS requirement.
4.3.3.5	*VHF operational flight information service broadcast messages should contain the following information in the sequence indicated:* *a) name of aerodrome;* *b) time of observation;* *c) landing runway;* *d) significant runway surface conditions and, if appropriate, braking action;* *e) changes in the operational state of the radio navigation services, if appropriate;* *f) holding delay, if appropriate;* *g) surface wind direction and speed; if appropriate, maximum wind speed;* **h) visibility and, when applicable, runway visual range (RVR);* **i) present weather;* **j) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility, when available;*		Not to be transposed as EU ATS requirement.

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	†k) air temperature; *†l) dew point temperature;* *†m) QNH altimeter setting;* *n) supplementary information on recent weather of operational significance and, where necessary, wind shear;* *o) trend forecast, when available; and* *p) notice of current SIGMET messages*		
4.3.4.1	Voice-automatic terminal information service (Voice-ATS) broadcasts Voice-automatic terminal information service (Voice-ATIS) broadcasts shall be provided at aerodromes where there is a requirement to reduce the communication load on the ATS VHF air-ground communication channels. When provided, they shall comprise: a) one broadcast serving arriving aircraft; or b) one broadcast serving departing aircraft; or c) one broadcast serving both arriving and departing aircraft; or d) two broadcasts serving arriving and departing aircraft respectively at those aerodromes where the length of a broadcast serving both arriving and departing aircraft would be excessively long.		The transposition of the provision as ATS IR ATS.TR.310(a) is proposed as follows: **(a) Voice-automatic terminal information service (Voice-ATIS) broadcasts shall be provided at aerodromes where there is a requirement to reduce the communication load on the ATS VHF air–ground communication channels. When provided, they shall comprise:** **(1) one broadcast serving arriving aircraft; or** **(2) one broadcast serving departing aircraft; or** **(3) one broadcast serving both arriving and departing aircraft; or** **(4) two broadcasts serving arriving and departing aircraft respectively at those aerodromes where the length of a broadcast serving both arriving and departing aircraft would be excessively long.**
4.3.4.2	A discrete VHF frequency shall, whenever practicable, be used for Voice-ATIS broadcasts. If a discrete frequency is not available, the		The transposition of the provision as ATS IR ATS.TR.310(b) is proposed as follows: **(b) A discrete VHF frequency shall,**

	transmission may be made on the voice channel(s) of the most appropriate terminal navigation aid(s), preferably a VOR, provided the range and readability are adequate and the identification of the navigation aid is sequenced with the broadcast so that the latter is not obliterated.		**whenever practicable, be used for Voice-ATIS broadcasts. If a discrete frequency is not available, the transmission may be made on the voice channel(s) of the most appropriate terminal navigation aid(s), preferably a VOR, provided the range and readability are adequate and the identification of the navigation aid is sequenced with the broadcast so that the latter is not obliterated.**
4.3.4.3	Voice-ATIS broadcasts shall not be transmitted on the voice channel of an ILS.		The transposition as ATS IR ATS.TR.310(c) is proposed as follows: **Voice-ATIS broadcasts shall not be transmitted on the voice channel of an ILS.**
4.3.4.4	Whenever Voice-ATIS is provided, the broadcast shall be continuous and repetitive.		The transposition as ATS IR ATS.TR.310(d) is proposed as follows: **Whenever Voice-ATIS is provided, the broadcast shall be continuous and repetitive.**
4.3.4.5	The information contained in the current broadcast shall immediately be made known to the ATS unit(s) concerned with the provision to aircraft of information relating to approach, landing and take-off, whenever the message has not been prepared by that (those) unit(s).		The transposition of the provision as ATS IR ATS.TR.310(e) is proposed as follows: **(e) The information contained in the current broadcast shall immediately be made known to the ATS unit(s) concerned with the provision to aircraft of information relating to approach, landing and take-off, whenever the message has not been prepared by that (those) unit(s).**
	Note.— The requirements for the provision of ATIS that applies to both Voice-ATIS and D-ATIS are contained in 4.3.6 below.		Not to be transposed as EU ATS requirement.
4.3.4.6	Voice-ATIS broadcasts provided at designated aerodromes for use by international air services		The transposition as ATS IR ATS.TR.310(f) is proposed as follows:

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	shall be available in the English language as a minimum.		**Voice-ATIS broadcasts provided at designated aerodromes for use by international air services shall be available in the English language as a minimum.**
4.3.4.7	*Where Voice-ATIS broadcasts are available in more than one language, a discrete channel should be used for each language.*		The Note is proposed for transposition as GM1 ATS.TR.310(f), as follows: **Where Voice-ATIS broadcasts are available in more than one language, a discrete channel should be used for each language.**
4.3.4.8	*The Voice-ATIS broadcast message should, whenever practicable, not exceed 30 seconds, care being taken that the readability of the ATIS message is not impaired by the speed of the transmission or by the identification signal of a navigation aid used for transmission of ATIS. The ATIS broadcast message should take into consideration human performance.*		The transposition of the first sentence of the provision as ATS IR ATS.TR.310(g) is proposed with textual modifications to adapt to the EU regulatory context, as follows: **The Voice-ATIS broadcast message shall, whenever practicable, not exceed 30 seconds, care being taken that the readability of the ATIS message is not impaired by the speed of the transmission or by the identification signal of a navigation aid used for transmission of ATIS.** The second sentence is to be transposed as GM1 ATS.TR.310(g) as follows: **The ATIS broadcast message should take into consideration human performance.**
	Note.— Guidance material on human performance can be found in the Human Factors Training Manual *(Doc 9683).*		Not to be transposed as EU ATS requirement.
4.3.5.1	Data link-automatic terminal information service (D-ATIS) Where a D-ATIS supplements the existing availability of Voice-ATIS, the information shall be identical in both content and format to the applicable Voice-ATIS broadcast.		The transposition as ATS IR ATS.TR.315(a) is proposed as follows: **Where a D-ATIS supplements the existing availability of Voice-ATIS, the information shall be identical in both content and format to the applicable Voice-ATIS broadcast.**

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4.3.5.1.1	Where real-time meteorological information is included but the data remains within the parameters of the significant change criteria, the content, for the purpose of maintaining the same designator, shall be considered identical.		The transposition as ATS IR ATS.TR.315(a) is proposed as follows: **Where real-time meteorological information is included but the data remains within the parameters of the significant change criteria established in MET.TR.200(e) and (f), the content, for the purpose of maintaining the same designator, shall be considered identical.**
	Note.— Significant change criteria are specified in 2.3.2 of Appendix 3 to Annex 3.		Not to be transposed as EU ATS requirement.
4.3.5.2	Where a D-ATIS supplements the existing availability of Voice-ATIS and the ATIS requires updating, Voice-ATIS and D-ATIS shall be updated simultaneously.		The transposition as ATS IR ATS.TR.315(b) is proposed as follows: **Where a D-ATIS supplements the existing availability of Voice-ATIS and the ATIS requires updating, Voice-ATIS and D-ATIS shall be updated simultaneously.**
	Note.— Guidance material relating to D-ATIS is contained in the Manual of Air Traffic Services Data Link Applications *(Doc 9694). The technical requirements for the D-ATIS application are contained in Annex 10, Volume III, Part I, Chapter 3*		It proposed to transpose it as GM1 ATS.TR.315 as follows: **Guidance material relating to D-ATIS is contained in the ICAO Manual of Air Traffic Services Data Link Applications (Doc 9694).**
4.3.6.1	Automatic terminal information service (voice and/or data link) Whenever Voice-ATIS and/or D-ATIS is provided: a) the information communicated shall relate to a single aerodrome; b) the information communicated shall be updated immediately a significant change occurs; c) the preparation and dissemination of the ATIS message shall be the responsibility of the air traffic services;		Introductory sentence, points (e) and (f) of this provision are already transposed as SERA.9010 (a)(2). Due to its relevance in the ATS context, it is proposed for transposition as ATS IR in its entirety as ATS.TR.320(a), as follows: **(a) Whenever Voice-ATIS and/or D-ATIS is provided:** **(1) the information communicated shall relate to a single aerodrome;** **(2) the information communicated shall be updated immediately a significant change occurs;**

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	d) individual ATIS messages shall be identified by a designator in the form of a letter of the ICAO spelling alphabet. Designators assigned to consecutive ATIS messages shall be in alphabetical order; e) aircraft shall acknowledge receipt of the information upon establishing communication with the ATS unit providing approach control service or the aerodrome control tower, as appropriate; f) the appropriate ATS unit shall, when replying to the message in e) above or, in the case of arriving aircraft, at such other time as may be prescribed by the appropriate ATS authority, provide the aircraft with the current altimeter setting; and g) the meteorological information shall be extracted from the local meteorological routine or special report.		**(3) the preparation and dissemination of the ATIS message shall be the responsibility of the air traffic services provider;** **(4) individual ATIS messages shall be identified by a designator in the form of a letter of the ICAO spelling alphabet. Designators assigned to consecutive ATIS messages shall be in alphabetical order;** **(5) aircraft shall acknowledge receipt of the information upon establishing communication with the ATS unit providing approach control service or the aerodrome control tower, as appropriate;** **(6) the appropriate ATS unit shall, when replying to the message in (5) or, in the case of arriving aircraft, at such other time as may be prescribed by the competent authority, provide the aircraft with the current altimeter setting; and** **(7) the meteorological information shall be extracted from the local meteorological routine or special report.**
	Note.— In accordance with Sections 4.1 and 4.3 of Appendix 3 to Annex 3, the surface wind direction and speed and runway visual range (RVR) are to be averaged over 2 minutes and 1 minute, respectively; and		Not to be transposed as EU ATS requirement.

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	the wind information is to refer to conditions along the runway for departing aircraft and to conditions at the touchdown zone for arriving aircraft. A template for the local meteorological report, including the corresponding ranges and resolutions of each element, are in Appendix 3 to Annex 3. Additional criteria for the local meteorological report are contained in Chapter 4 of, and in Attachment D to, Annex 3.		
4.3.6.2	When rapidly changing meteorological conditions make it inadvisable to include a weather report in the ATIS, the ATIS messages shall indicate that the relevant weather information will be given on initial contact with the appropriate ATS unit.		The transposition as ATS IR ATS.TR.320(b) is proposed as follows: **When rapidly changing meteorological conditions make it inadvisable to include a weather report in the ATIS, the ATIS messages shall indicate that the relevant weather information will be given on initial contact with the appropriate ATS unit.**
4.3.6.3 .	Information contained in a current ATIS, the receipt of which has been acknowledged by the aircraft concerned, need not be included in a directed transmission to the aircraft, with the exception of the altimeter setting, which shall be provided in accordance with 4.3.6.1 f).		Provision already transposed as SERA.9010 (a)(3). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.320(c), as follows: **Information contained in a current ATIS, the receipt of which has been acknowledged by the aircraft concerned, need not be included in a directed transmission to the aircraft, with the exception of the altimeter setting, which shall be provided in accordance with point (a).**
4.3.6.4	If an aircraft acknowledges receipt of an ATIS that is no longer current, any element of information that needs updating shall be transmitted to the aircraft without delay.		Provision already transposed as SERA.9010(a)(4). Due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.320(d), as follows: **(d) If an aircraft acknowledges receipt of an ATIS that is no longer current, the ATS unit shall transmit without delay to the aircraft any element of information that**

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			needs updating.
4.3.6.5	*Contents of ATIS should be kept as brief as possible. Information additional to that specified in 4.3.7 to 4.3.9, for example information already available in aeronautical information publications (AIPs) and NOTAM, should only be included when justified in exceptional circumstances.*		It is proposed for transposition as GM1 ATS.TR.320(b) and (c), as follows: **(b) Contents of ATIS messages should be kept as brief as possible.** **(c) Information additional to that specified in SERA.9010 of Commission Implementing Regulation (EU) No 923/2012; for example information already available in AIPs and NOTAM, should only be included when justified in exceptional circumstances.**
4.3.7	ATIS for arriving and departing aircraft ATIS messages containing both arrival and departure information shall contain the following elements of information in the order listed: a) name of aerodrome; b) arrival and/or departure indicator; c) contract type, if communication is via D-ATIS; d) designator; e) time of observation, if appropriate; f) type of approach(es) to be expected; g) the runway(s) in use; status of arresting system constituting a potential hazard, if any; h) significant runway surface conditions and, if appropriate, braking action; i) holding delay, if appropriate; j) transition level, if applicable; k) other essential operational information;		Provision already transposed as SERA.9010(b). Due to its relevance in the ATS context, GM1 ATS.TR.320(a) is introduced establishing a cross reference with SERA.9010(b) where the elements of information concerned are established.
	l) surface wind direction (in degrees magnetic) and speed, including significant variations and,		

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	if surface wind sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers; *m) visibility and, when applicable, RVR and, if visibility/RVR sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers;; *n) present weather; *o) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility when available; p) air temperature; q) dew point temperature; r) altimeter setting(s); s) any available information on significant meteorological phenomena in the approach and climb-out areas including wind shear, and information on recent weather of operational significance; t) trend forecast, when available; and u) specific ATIS instructions.		
4.3.8	ATIS for arriving aircraft ATIS messages containing arrival information only shall contain the following elements of information in the order listed: a) name of aerodrome;		Provision already transposed as SERA.9010(c). Due to its relevance in the ATS context, GM1 ATS.TR.320(a) is introduced establishing a cross reference with SERA.9010(c) where the elements of information concerned are established.

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	b) arrival indicator; c) contract type, if communication is via D-ATIS; d) designator; e) time of observation, if appropriate; f) type of approach(es) to be expected; g) main landing runway(s); status of arresting system constituting a potential hazard, if any; h) significant runway surface conditions and, if appropriate, braking action; i) holding delay, if appropriate; j) transition level, if applicable;		
	k) other essential operational information; l) surface wind direction (in degrees magnetic) and speed, including significant variations and, if surface wind sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers; *m) visibility and, when applicable, RVR and, if visibility/RVR sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers; *n) present weather; *o) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility when available; p) air temperature;		

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	†q) dew point temperature; r) altimeter setting(s); s) any available information on significant meteorological phenomena in the approach area including wind shear, and information on recent weather of operational significance; t) trend forecast, when available; and u) specific ATIS instructions.		
4.3.9	ATIS for departing aircraft ATIS messages containing departure information only shall contain the following elements of information in the order listed: a) name of aerodrome; b) departure indicator; c) contract type, if communication is via D-ATIS; d) designator; e) time of observation, if appropriate; f) runway(s) to be used for take-off; status of arresting system constituting a potential hazard, if any; g) significant surface conditions of runway(s) to be used for take-off and, if appropriate, braking action; h) departure delay, if appropriate; i) transition level, if applicable; j) other essential operational information; k) surface wind direction (in degrees magnetic) and speed, including significant variations and, if surface wind sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the		Provision already transposed as SERA.9010(d). Due to its relevance in the ATS context, GM1 ATS.TR.320(a) is introduced establishing a cross reference with SERA.9010(d) where the elements of information concerned are established.

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	runway to which the information refers; *l) visibility and, when applicable, RVR and, if visibility/RVR sensors related specifically to the sections of runway(s) in use are available and the information is required by operators, the indication of the runway and the section of the runway to which the information refers; *m) present weather;		
	*n) cloud below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater; cumulonimbus; if the sky is obscured, vertical visibility when available; o) air temperature; †p) dew point temperature; q) altimeter setting(s); r) any available information on significant meteorological phenomena in the climb-out area including wind shear; s) trend forecast, when available; and t) specific ATIS instructions.		
4.4.1 .	VOLMET broadcasts and D-VOLMET service *HF and/or VHF VOLMET broadcasts and/or D-VOLMET service should be provided when it has been determined by regional air navigation agreements that a requirement exists.*		The transposition as ATS IR is proposed as ATS.TR.325 to address the responsibility of the competent authority to determine when VOLMET and D-VOLMET services have to be provided, as follows: **When so prescribed by the competent authority, HF and/or VHF VOLMET broadcasts and/or D-VOLMET service shall be provided using standard radiotelephony phraseologies.** ICAO Annex 3 definitions of VOLMET, VOLMET BROADCAST and D-VOLMET,

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			detailing their content, are transposed.
	Note.— Annex 3, 11.5 and 11.6 provide details of VOLMET broadcasts and D-VOLMET service.		ICAO Annex 3 definitions of VOLMET, VOLMET BROADCAST and D-VOLMET, detailing their content, are transposed.
4.4.2	*VOLMET broadcasts should use standard radiotelephony phraseologies.*		The transposition as ATS IR is proposed within ATS.TR.325, together with the transposition of Chapter 4.4.1.
	Note.— Guidance on standard radiotelephony phraseologies o be used in VOLMET broadcasts is given in the Manual on Coordination between Air Traffic Services, Aeronautical information Services and Aeronautical Meteorological Services *Doc 9377), Appendix 1.*		The transposition of this Note is proposed as GM1 ATS.TR.325.
5.1.1	CHAPTER 5. ALERTING SERVICE Application Alerting service shall be provided: a) for all aircraft provided with air traffic control service; b) in so far as practicable, to all other aircraft having filed a flight plan or otherwise known to the air traffic services; and c) to any aircraft known or believed to be the subject of unlawful interference.		Provision already transposed as SERA.10001(a). Due to its relevance in the ATS context, it is proposed for transposition as ATS IR ATS.TR.400(a), as follows: **Alerting service shall be provided by the air traffic services units:** **(1) for all aircraft provided with air traffic control service;** **(2) in so far as practicable, to all other aircraft having filed a flight plan or otherwise known to the air traffic services; and** **(3) to any aircraft known or believed to be the subject of unlawful interference.**
5.1.2	Flight information centres or area control centres shall serve as the central point for collecting all information relevant to a state of emergency of an aircraft operating within the flight		The transposition as ATS IR ATS.TR.400(b) is proposed, as follows: **Flight information centres or area control centres shall serve as the central point for**

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	information region or control area concerned and for forwarding such information to the appropriate rescue coordination centre.		**collecting all information relevant to a state of emergency of an aircraft operating within the flight information region or control area concerned and for forwarding such information to the appropriate rescue coordination centre.**
5.1.3	In the event of a state of emergency arising to an aircraft while it is under the control of an aerodrome control tower or approach control unit, such unit shall notify immediately the flight information centre or area control centre responsible which shall in turn notify the rescue coordination centre, except that notification of the area control centre, flight information centre, or rescue coordination centre shall not be required when the nature of the emergency is such that the notification would be superfluous.		The transposition as ATS IR ATS.TR.400(c) is proposed, as follows: **In the event of a state of emergency arising to an aircraft while it is under the control of an aerodrome control tower or approach control unit or in contact with an AFIS unit, such unit shall notify immediately the flight information centre or area control centre responsible which shall in turn notify the rescue coordination centre, except that notification of the area control centre, flight information centre, or rescue coordination centre shall not be required when the nature of the emergency is such that the notification would be superfluous.**
5.1.3.1	Nevertheless, whenever the urgency of the situation so requires, the aerodrome control tower or approach control unit responsible shall first alert and take other necessary steps to set in motion all appropriate local rescue and emergency organizations which can give the immediate assistance required.		The transposition as ATS IR ATS.TR.400(d) is proposed, as follows: **Nevertheless, whenever the urgency of the situation so requires, the aerodrome control tower or approach control unit responsible or the relevant AFIS unit shall first alert and take other necessary steps to set in motion all appropriate local rescue and emergency organisations which can give the immediate assistance required, in accordance with local instructions.**
5.2.1	Notification of rescue coordination centres		The transposition as ATS IR ATS.TR.405 is

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	Without prejudice to any other circumstances that may render such notification advisable, air traffic services units shall, except as prescribed in 5.5.1, notify rescue coordi-nation centres immediately when an aircraft is considered to be in a state of emergency in accordance with the following: a) Uncertainty phase when: 1) no communication has been received from an aircraft within a period of thirty minutes after the time a communication should have been received, or from the time an unsuccessful attempt to establish communication with such aircraft was first made, whichever is the earlier, or when 2) an aircraft fails to arrive within thirty minutes of the estimated time of arrival last notified to or estimated by air traffic services units, whichever is the later, except when no doubt exists as to the safety of the aircraft and its occupants. b) Alert phase when: 1) following the uncertainty phase, subsequent attempts to establish communication with the aircraft or inquiries to other relevant sources have failed to reveal any news of the aircraft, or when 2) an aircraft has been cleared to land and fails to land within five minutes of the estimated time of landing and communication has not been re-established with the aircraft, or when 3) information has been received which		proposed, with textual modifications to adapt to the EU regulatory context, as follows: **(a) Without prejudice to any other circumstances that may render such notification advisable, air traffic services units shall, except as prescribed in ATS.TR.420(a), notify rescue coordination centres immediately when an aircraft is considered to be in a state of emergency in accordance with the following:** **(1) Uncertainty phase when:** **(i) no communication has been received from an aircraft within a period of 30 minutes after the time a communication should have been received, or from the time an unsuccessful attempt to establish communication with such aircraft was first made, whichever is the earlier; or** **ii) an aircraft fails to arrive within 30 minutes of the estimated time of arrival last notified to or estimated by air traffic services units, whichever is the later,** **except when no doubt exists as to the safety of the aircraft and its occupants.** **(2) Alert phase when:**

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	indicates that the operating efficiency of the aircraft has been impaired, but not to the extent that a forced landing is likely, except when evidence exists that would allay apprehension as to the safety of the aircraft and its occupants, or when 4) an aircraft is known or believed to be the subject of unlawful interference. c) Distress phase when: 1) following the alert phase, further unsuccessful attempts to establish communication with the aircraft and more widespread unsuccessful inquiries point to the probability that the aircraft is in distress, or when 2) the fuel on board is considered to be exhausted, or to be insufficient to enable the aircraft to reach safety, or when 3) information is received which indicates that the operating efficiency of the aircraft has been impaired to the extent that a forced landing is likely, or when 4) information is received or it is reasonably certain that the aircraft is about to make or has made a forced landing, except when there is reasonable certainty that the aircraft and its occupants are not threatened by grave and imminent danger and do not require immediate assistance.		**(i) following the uncertainty phase, subsequent attempts to establish communication with the aircraft or inquiries to other relevant sources have failed to reveal any news of the aircraft; or** **(ii) an aircraft has been cleared to land and fails to land within 5 minutes of the estimated time of landing and communication has not been re-established with the aircraft; or** **(iii) at AFIS aerodromes, under circumstances as prescribed by the competent authority; or** **(iv) information has been received which indicates that the operating efficiency of the aircraft has been impaired, but not to the extent that a forced landing is likely, except when evidence exists that would allay apprehension as to the safety of the aircraft and its occupants; or** **(v) an aircraft is known or believed to be the subject of unlawful interference.** **(3) Distress phase when:**

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			(i) following the alert phase, further unsuccessful attempts to establish communication with the aircraft and more widespread unsuccessful inquiries point to the probability that the aircraft is in distress; or **(ii) the fuel on board is considered to be exhausted, or to be insufficient to enable the aircraft to reach safety; or** **(iii) information is received which indicates that the operating efficiency of the aircraft has been impaired to the extent that a forced landing is likely; or** **(iv) information is received or it is reasonably certain that the aircraft is about to make or has made a forced landing,** **except when there is reasonable certainty that the aircraft and its occupants are not threatened by grave and imminent danger and do not require immediate assistance.** The initiation of the Alert Phase at AFIS

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			aerodromes is left within the competences of the competent authority, as the conditions established by the Standard in Section 5.2.1 b) 2) are only applicable when ATC is provided.
5.2.2	The notification shall contain such of the following information as is available in the order listed: a) INCERFA, ALERFA or DETRESFA, as appropriate to the phase of the emergency; b) agency and person calling; c) nature of the emergency; d) significant information from the flight plan; e) unit which made last contact, time and means used; f) last position report and how determined; g) colour and distinctive marks of aircraft; h) dangerous goods carried as cargo; i) any action taken by reporting office; and j) other pertinent remarks.		The transposition as ATS IR ATS.TR.405(b) is proposed, as follows: **The notification shall contain such of the following information as is available in the order listed:** **(1) INCERFA, ALERFA or DETRESFA, as appropriate to the phase of the emergency;** **(2) agency and person calling;** **(3) nature of the emergency;** **(4) significant information from the flight plan;** **(5) unit which made last contact, time and means used;** **(6) last position report and how determined;** **(7) colour and distinctive marks of aircraft;** **(8) dangerous goods carried as cargo;** **(9) any action taken by reporting office; and** **(10) other pertinent remarks.**
5.2.2.1	*Such part of the information specified in 5.2.2, which is not available at the time notification is made to a rescue coordination centre, should be sought by an air traffic services unit prior to the declaration of a distress phase, if there is reasonable certainty that this phase will eventuate.*		The transposition as ATS IR ATS.TR.405(c) is proposed, as follows: **c) Such part of the information specified in point (b), which is not available at the time notification is made to a rescue coordination centre, shall be sought by an air traffic services unit prior to the declaration of a distress phase where**

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			time permits and where there is reasonable certainty that this phase will eventuate .
5.2.3	Further to the notification in 5.2.1, the rescue coordination centre shall, without delay, be furnished with: a) any useful additional information, especially on the development of the state of emergency through subsequent phases; or b) information that the emergency situation no longer exists.		The transposition as ATS IR ATS.TR.405(d) is proposed, with textual modifications to adapt to the EU regulatory context, as follows: **(d) Further to the notification in point(a), air traffic services units shall, without delay, furnish the rescue coordination centre with:** **(a) any useful additional information, especially on the development of the state of emergency through subsequent phases; or** **(b) information that the emergency situation no longer exists.**
	Note.— The cancellation of action initiated by the rescue coordination centre is the responsibility of that centre.		The Note is proposed for transposition as GM1 ATS.TR.405(d), as follows: **The cancellation of action initiated by the rescue coordination centre is the responsibility of that centre.**
5.3	Use of communication facilities Air traffic services units shall, as necessary, use all available communication facilities to endeavour to establish and maintain communication with an aircraft in a state of emergency, and to request news of the aircraft.		The transposition as ATS IR ATS.TR.410 is proposed, as follows: **Air traffic services units shall, as necessary, use all available communication facilities to endeavour to establish and maintain communication with an aircraft in a state of emergency, and to request news of the aircraft.**
5.4	Plotting aircraft in a state of emergency When a state of emergency is considered to exist, the flight of the aircraft involved shall be plotted on a chart in order to determine the probable future position of the aircraft and its	The missed transposition of the second sentence of Standard in Section 5.4 constitutes a Category C difference. However, with the technology widely implemented in the EU and with the requirements for the surveillance data storage it is believed that	The transposition of the first sentence as ATS IR ATS.TR.415 is proposed, as follows: **When a state of emergency is considered to exist, the ATS unit(s) aware of the emergency shall plot the flight of the aircraft involved on**

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	maximum range of action from its last known position. The flights of other aircraft known to be operating in the vicinity of the aircraft involved shall also be plotted in order to determine their probable future positions and maximum endurance.	such requirement is superfluous and obsolete.	**a chart or other appropriate tool in order to determine the probable future position of the aircraft and its maximum range of action from its last known position.** In consideration of the technological developments and of the systems available at the majority of the ATS units, it is proposed to explicitly allow their use for the purposes of the Standard in Section 5.4 The second sentence is not to be transposed as ATS requirement.
5.5.1	Information to the operator When an area control or a flight information centre decides that an aircraft is in the uncertainty or the alert phase, it shall, when practicable, advise the operator prior to notifying the rescue coordination centre.		The transposition as ATS IR ATS.TR.420(a) is proposed, as follows: **When an area control centre or a flight information centre decides that an aircraft is in the uncertainty or the alert phase, it shall, when practicable, advise the aicraft operator prior to notifying the rescue coordination centre.**
	Note.— If an aircraft is in the distress phase, the rescue coordination centre has to be notified immediately in accordance with 5.2.1.		Not to be transposed as ATS requirement. Section 5.2.1 covers the immediate notification in case of distress phase.
5.5.2	All information notified to the rescue coordination centre by an area control or flight information centre shall, whenever practicable, also be communicated, without delay, to the operator.		The transposition as ATS IR ATS.TR.420(b) is proposed, as follows: **Whenever practicable, an area control centre or flight information centre shall, without delay, communicate all information notified to the rescue coordination centre to the aircraft operator.**
5.6.1	Information to aircraft operating in the vicinity of an aircraft in a state of emergency		Provision already transposed as SERA.10005(a); however, due to its relevance in the ATS context, it is proposed for transposition also as ATS IR

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	When it has been established by an air traffic services unit that an aircraft is in a state of emergency, other aircraft known to be in the vicinity of the aircraft involved shall, except as provided in 5.6.2, be informed of the nature of the emergency as soon as practicable.		ATS.TR.425(a), as follows: **(a) When it has been established by an air traffic services unit that an aircraft is in a state of emergency, other aircraft known to be in the vicinity of the aircraft involved shall, except as provided in point (b), be informed of the nature of the emergency as soon as practicable.**
5.6.2	When an air traffic services unit knows or believes that an aircraft is being subjected to unlawful interference, no reference shall be made in ATS air-ground communications to the nature of the emergency unless it has first been referred to in communications from the aircraft involved and it is certain that such reference will not aggravate the situation.		Provision already transposed as SERA.10005(b); however, due to its relevance in the ATS context, it is proposed for transposition also as ATS IR ATS.TR.425(b), as follows: **(b) When an air traffic services unit knows or believes that an aircraft is being subjected to unlawful interference, no reference shall be made in ATS air–ground communications to the nature of the emergency unless it has first been referred to in communications from the aircraft involved and it is certain that such reference will not aggravate the situation.**
6	AIR TRAFFIC SERVICES REQUIREMENTS FOR COMMUNICATIONS		
6.1	Aeronautical mobile service (air-ground communications)		
6.1.1.1	General Radiotelephony and/or data link shall be used in air-ground communications for air traffic services purposes.		The transposition as ATS IR ATS.OR.400(a) is proposed, as follows: **The ATS provider shall use voice and/or data link in air–ground communications for air traffic services purposes.**
	Note.— Requirements for ATS units to be		The transposition as GM1 ATS.OR.405 is

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	provided with and to maintain guard on the emergency channel 121.5 MHz are specified in Annex 10, Volumes II and V.		proposed, as follows; **Requirements for air traffic services units to maintain continuous guard on the emergency channel 121.5 MHz are specified in provision SERA.14080(b) of Commission Implementing Regulation (EU) No 923/2012.**
6.1.1.2	Where RCP types have been prescribed by States for ATM functions, ATS units shall, in addition to the requirements specified in 6.1.1.1, be provided with communication equipment which will enable them to provide ATS in accordance with the prescribed RCP type(s).		Not to be transposed as ATS requirement.
	Note.— Information on RCP and associated procedures, and guidance concerning the approval process, will be contained in the Manual on Required Communication Performance (RCP) (Doc 9869) (in preparation). This document also contains references to other documents produced by States and international bodies concerning communication systems and RCP.		Not to be transposed as ATS requirement.
6.1.1.3	When direct pilot-controller two-way radiotelephony or data link communications are used for the provision of air traffic control service, recording facilities shall be provided on all such air-ground communication channels.		The transposition as ATS IR ATS.OR.400(c) is proposed, as follows: **(c) When direct pilot–controller two-way voice or data link communications are used for the provision of ATC service, recording facilities shall be provided on all such air–ground communication channels.** With the newly introduced point (d), it is proposed to extend the applicability of the requirement in point (c) to FIS/AFIS provision, subject to determination of the competent

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			authority, as follows: **(d) When direct air–ground two-way voice or data link communications are used for the provision of FIS and AFIS, recording facilities on all such air–ground communication channels shall be provided by the ATS provider, when so prescribed by the competent authority.**
	Note.— Requirements for retention of all automatic recordings of communications in ATC are specified in Annex 10, Volume II, 3.5.1.5.		Not to be transposed as ATS requirement.
6.1.1.4	Recordings of communications channels as required in paragraph 6.1.1.3 shall be retained for a period of at least 30 days.		The proposed ATS IR ATS.OR.460(a)(1) transposes this principle. **(a) The ATS provider shall retain for a period of at least 30 days the following:** **(1) recordings of communications channels, as specified in ATS.OR.400(b);** This proposed requirement is further complemented with the proposed transposition of Annex 10 Volume II Chapter 3.5.1.5 'Records of communications', as follows: **(b) When the recordings and logs listed in point (a) are pertinent to accident and incident investigations, they shall be retained for longer periods until it is evident that they will no longer be required.**
6.1.2.1	For flight information service Air-ground communication facilities shall	The proposed provision, which constitutes a Category C difference, includes the text 'to the practicable extent and as approved by the	The transposition as ATS IR ATS.OR.410(a) is proposed, as follows: **(a) The ATS provider shall ensure, to the**

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	enable two-way communications to take place between a unit providing flight information service and appropriately equipped aircraft flying anywhere within the flight information region.	Competent Authority', as ensuring air-ground communication anywhere within the FIR is considered unrealistic and not achievable, in particular over mountainous areas. This is further demonstrated by the differences filed by some EASA Member States (e.g. Austria and Norway).	**practicable extent and as approved by the competent authority, that air-ground communication facilities enable two-way communications to take place between a unit providing flight information service and appropriately equipped aircraft flying anywhere within the flight information region.** Point (b) proposes to extend the requirement in point (a) to AFIS, under the conditions specified in the Recommendation in Annex 11 Chapter 6.1.2.2 **(b) The ATS provider shall ensure, to the practicable extent and as approved by the competent authority, that air–ground communication facilities enable direct, rapid, continuous and static-free two-way communications to take place between an AFIS unit and appropriately equipped aircraft operating within the airspace defined as in ATS.TR.110(a)(3) or, when such airspace is not defined, in the vicinity of the aerodrome.**
6.1.2.2	*Whenever practicable, air-ground communication facilities for flight information service should permit direct, rapid, continuous and static-free two-way communications.*		The transposition as GM1 ATS.OR.410(a) is proposed, as follows: **Whenever practicable, air–ground communication facilities for flight information service should permit direct, rapid, continuous and static-free two-way communications.**
6.1.3.1	For area control service Air-ground communication facilities shall enable two-way communications to take place between a unit providing area control service		The transposition as ATS IR ATS.OR.415 is proposed, with textual modifications to adapt to the EU regulatory context, as follows: **For area control service**

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	and appropriately equipped aircraft flying anywhere within the control area(s).		**The ATS provider shall ensure that air–ground communication facilities enable two-way communications to take place between a unit providing area control service and appropriately equipped aircraft flying anywhere within the control area(s).**
6.1.3.2.	*Whenever practicable, air-ground communication facilities for area control service should permit direct, rapid, continuous and static-free two-way communications.*		The transposition as AMC1 ATS.OR.415 is proposed as follows: **Whenever practicable, air–ground communication facilities for area control service should permit direct, rapid, continuous and static-free two-way communications.**
6.1.3.3	*Where air-ground voice communication channels are used for area control service and are worked by air-ground communicators, suitable arrangements should be made to permit direct pilot-controller voice communications, as and when required.*		The transposition as GM1 ATS.OR.415 is proposed as follows: **Where air–ground voice communication channels are used for area control service and are worked by air-ground communicators, suitable arrangements should be made to permit direct pilot–controller voice communications, as and when required.**
6.1.4.1	For approach control service Air-ground communication facilities shall enable direct, rapid, continuous and static-free two-way communications to take place between the unit providing approach control service and appropriately equipped aircraft under its control.		The transposition as ATS IR ATS.OR.420(a) is proposed, as follows: **The ATS provider shall ensure that air–ground communication facilities enable direct, rapid, continuous and static-free two-way communications to take place between the unit providing approach control service and appropriately equipped aircraft under its control.**
6.1.4.2.	Where the unit providing approach control service functions as a separate unit, air-ground communications shall be conducted over communication channels provided for its		The transposition as ATS IR ATS.4R.420(b) is proposed, as follows: **Where the unit providing approach control service functions as a separate unit, air–**

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	exclusive use.		**ground communications shall be conducted over communication channels provided for its exclusive use.**
6.1.5.1	For aerodrome control service Air-ground communication facilities shall enable direct, rapid, continuous and static-free two-way communications to take place between an aerodrome control tower and appropriately equipped aircraft operating at any distance within 45 km (25 NM) of the aerodrome concerned.		The transposition as ATS IR ATS.OR.425(a) is proposed, as follows: **The ATS provider shall ensure that air–ground communication facilities enable direct, rapid, continuous and static-free two-way communications to take place between an aerodrome control tower and appropriately equipped aircraft operating at any distance within 45 km (25 NM) of the aerodrome concerned**.
6.1.5.2 .	*Where conditions warrant, separate communication channels should be provided for the control of traffic operating on the manoeuvring area.*		The transposition as ATS IR ATS.OR.425(b) is proposed, as follows: **Where conditions warrant, the ATS provider shall provide separate communication channels for the control of traffic operating on the manoeuvring area.**
6.2	Aeronautical fixed service (ground-ground communication)		
6.2.1.1	Aeronautical fixed service (ground-ground communications) General Direct-speech and/or data link communications shall be used in ground-ground communications for air traffic services purposes.		The transposition as ATS IR ATS.OR.430(a) is proposed, with textual modifications to adapt to the EU regulatory context, as follows: **The ATS provider shall ensure that direct-speech and/or data link communications are used in ground-ground communications for air traffic services purposes.**
	Note 1.— Indication by time of the speed with which the communication should be established is provided as a guide to communication services, particularly to determine the types of communication channels required, e.g. that "instantaneous" is intended to refer		The transposition of the Note as GM1 ATS.OR.430(a) is proposed as follows: **Indication by time of the speed with which the communication should be established is provided as a guide to communication services,**

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	to communications which effectively provide for immediate access between controllers; "fifteen seconds" to accept switchboard operation and "five minutes" to mean methods involving retransmission.		**particularly to determine the types of communication channels required, e.g. that "instantaneous" is intended to refer to communications which effectively provide for immediate access between controllers; '15 seconds' to accept switchboard operation and '5 minutes' to mean methods involving retransmission.**
	Note 2.— Requirements for retention of all automatic recordings of communications in ATC are specified in Annex 10, Volume II, 3.5.1.5.		Not to be transposed as EU ATS requirement, as the content of Annex 10 Volume II is considered for transposition in the context of the transposition of Chapter 6.1.1.4.
6.2.1.2	Where RCP types have been prescribed by States for ATM functions, ATS units shall, in addition to the requirements specified in 6.2.1.1, be provided with communication equipment which will enable them to provide ATS in accordance with the prescribed RCP type(s).		Not to be transposed as ATS requirement. See Section 2.8.1.
6.2.2	Communications within a flight information region		
6.2.2.1	Communications between air traffic services units		
6.2.2.1.1	A flight information centre shall have facilities for communications with the following units providing a service within its area of responsibility: a) the area control centre, unless collocated; b) approach control units; c) aerodrome control towers.		The transposition as ATS IR ATS.OR.435(a)(1) is proposed, as follows: **Communications within a flight information region** **(a) Communications between air traffic services units** **(1) The ATS provider shall ensure that a flight information centre has facilities for communications with the following units providing**

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			a service within its area of responsibility: **(i) the area control centre, unless co-located;** **(ii) approach control units;** **(iii) aerodrome control towers;** **(iv) AFIS units.**
6.2.2.1.2	An area control centre, in addition to being connected to the flight information centre as prescribed in 6.2.2.1.1, shall have facilities for communications with the following units providing a service within its area of responsibility: a) approach control units; b) aerodrome control towers; c) air traffic services reporting offices, when separately established.		The transposition as ATS IR ATS.OR.435(a)(2) is proposed, with textual modifications to adapt to the EU regulatory context, as follows: **(2) The ATS provider shall ensure that an area control centre, in addition to being connected to the flight information centre as prescribed in point (1), has facilities for communications with the following units providing a service within its area of responsibility:** **(i) approach control units;** **(ii) aerodrome control towers;** **(iii) AFIS units;** **(iv) air traffic services reporting offices, when separately established.**
6.2.2.1.3	An approach control unit, in addition to being connected to the flight information centre and the area control centre as prescribed in 6.2.2.1.1 and 6.2.2.1.2, shall have facilities for communications with the associated aerodrome control tower(s) and, when separately established, the associated air traffic services reporting office(s).		The transposition as ATS IR ATS.OR.435(a)(3) is proposed, , as follows: **(3) The ATS provider shall ensure that an approach control unit, in addition to being connected to the flight information centre and the area control centre as prescribed in points (1) and (2), has facilities for communications with:** **(i) the associated aerodrome control**

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			tower(s); **(ii) with relevant AFIS unit(s); and** **(iii) when separately established, the associated air traffic services reporting office(s).**
6.2.2.1.4	An aerodrome control tower, in addition to being connected to the flight information centre, the area control centre and the approach control unit as prescribed in 6.2.2.1.1, 6.2.2.1.2 and 6.2.2.1.3, shall have facilities for communications with the associated air traffic services reporting office, when separately established.		The transposition as ATS IR ATS.OR.435(a)(4) is proposed, as follows: **The ATS provider shall ensure that an aerodrome control tower and AFIS unit, in addition to being connected to the flight information centre, the area control centre and the approach control unit as prescribed in points (1), (2) and (3), has facilities for communications with the associated air traffic services reporting office, when separately established.**
6.2.2.2.1	Communications between air traffic services units and other units A flight information centre and an area control centre shall have facilities for communications with the following units providing a service within their respective area of responsibility: a) appropriate military units; b) the meteorological office serving the centre; c) the aeronautical telecommunications station serving the centre; d) appropriate operator's offices; e) the rescue coordination centre or, in the absence of such centre, any other appropriate emergency service; f) the international NOTAM office serving the centre.		The transposition as ATS IR ATS.OR.435(b)(1) is proposed, as follows: **(b) Communications between air traffic services units and other units** **(1) The ATS provider shall ensure that a flight information centre and an area control centre have facilities for communications with the following units providing a service within their respective area of responsibility:** **(i) appropriate military units;** **(ii) the meteorological office serving the centre;** **(iii) the aeronautical telecommunications station serving the centre;**

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			(iv) appropriate aircraft operator's offices; **(v) the rescue coordination centre or, in the absence of such centre, any other appropriate emergency service;** **(vi) the international NOTAM office serving the centre.**
6.2.2.2.2	An approach control unit and an aerodrome control tower shall have facilities for communications with the following units providing a service within their respective area of responsibility: a) appropriate military units; b) rescue and emergency services (including ambulance, fire, etc.); c) the meteorological office serving the unit concerned; d) the aeronautical telecommunications station serving the unit concerned; e) the unit providing apron management service, when separately established.		The transposition as ATS IR ATS.OR.435(b)(2) is proposed, as follows: **(b) The ATS provider shall ensure that an approach control unit and an aerodrome control tower and AFIS unit have facilities for communications with the following units providing a service within their respective area of responsibility:** **(i) appropriate military units;** **(ii) rescue and emergency services (including ambulance, fire, etc.);** **(iii) the meteorological office serving the unit concerned;** **(iv) the aeronautical telecommunications station serving the unit concerned;** **(v) the unit providing apron management service, when separately established.**
6.2.2.2.3	The communication facilities required under 6.2.2.2.1 a) and 6.2.2.2.2 a) shall include provisions for rapid and reliable communications between the air traffic services		The transposition as ATS IR ATS.OR.435(b)(3) is proposed, as follows: **The communication facilities required under points (b)(1)(i) and (b)(2)(i) shall include**

	unit concerned and the military unit(s) responsible for control of interception operations within the area of responsibility of the air traffic services unit.		**provisions for rapid and reliable communications between the air traffic services unit concerned and the military unit(s) responsible for control of interception operations within the area of responsibility of the air traffic services unit, in order to fulfil obligations established in Section 11 of Commission Implementing Regulation (EU) No 923/2012.**
6.2.2.3.1	Description of communication facilities The communication facilities required under 6.2.2.1, 6.2.2.2.1 a) and 6.2.2.2.2 a), b) and c) shall include provisions for: a) communications by direct speech alone, or in combination with data link communications, whereby for the purpose of transfer of control using radar or ADS-B, the communications can be established instantaneously and for other purposes the communications can normally be established within fifteen seconds; and b) printed communications, when a written record is required; the message transit time for such communications being no longer than five minutes.		The transposition as ATS IR ATS.OR.435(c)(1) is proposed, as follows: **The communication facilities required under point (a), point (b)(1)(i) and points (b)(2)(i), (b)(2)(ii) and (b)(2)(iii) shall include provisions for:** **(i) communications by direct speech alone, or in combination with data link communications, whereby for the purpose of transfer of control using radar or ADS-B, the communications can be established instantaneously and for other purposes the communications can normally be established within 15 seconds; and** **(ii) printed communications, when a written record is required; the message transit time for such communications being no longer than 5 minutes.**
6.2.2.3.2	*In all cases not covered by 6.2.2.3.1, the communication facilities should include provisions for:*		The transposition as ATS IR ATS.OR.435(c)(2) is proposed, combining the transposition of Section 6.2.2.3.1, as follows:

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	a) communications by direct speech alone, or in combination with data link communications, whereby the communications can normally be established within fifteen seconds; and *b) printed communications, when a written record is required; the message transit time for such communications being no longer than five minutes.*		**In all cases not covered by point (c)(1), the communication facilities shall include provisions for:** **(i) communications by direct speech alone, or in combination with data link communications, whereby the communications can normally be established within 15 seconds; and** **(ii) printed communications, when a written record is required; the message transit time for such communications being no longer than 5 minutes.**
6.2.2.3.3	In all cases where automatic transfer of data to and/or from air traffic services computers is required, suitable facilities for automatic recording shall be provided.		The transposition as ATS IR ATS.OR.435(c)(3) is proposed, as follows: **In all cases where automatic transfer of data to and/or from air traffic services computers is required, suitable facilities for automatic recording shall be provided.**
6.2.2.3.4	*The communication facilities required in accordance with 6.2.2.1 and 6.2.2.2 should be supplemented, as and where necessary, by facilities for other forms of visual or audio communications, for example, closed circuit television or separate information processing systems.*		The transposition as GM1 ATS.OR.435(a);(b) is proposed as follows: **The communication facilities in points (a) and (b) of ATS.OR.435 could be supplemented, as and where necessary, by facilities for other forms of visual or audio communications; for example, closed circuit television or separate information processing systems.**
6.2.2.3.5	The communication facilities required under 6.2.2.2.2 a), b) and c) shall include provisions for communications by direct speech arranged for conference communications.		The transposition as ATS IR ATS.OR.435(c)(4) is proposed, combining the transposition of Section 6.2.2.3.6, as follows: **The communication facilities required under points (b)(2)(i);(ii);(iii);(iv) shall include provisions for communications by direct speech arranged for conference**

			communications whereby the communications can normally be established within 15 seconds.
6.2.2.3.6.	*The communication facilities required under 6.2.2.2.2 d) should include provisions for communications by direct speech arranged for conference communications, whereby the communications can normally be established within fifteen seconds.*		The transposition as ATS IR is proposed; see Section 6.2.2.3.5.
6.2.2.3.7	All facilities for direct-speech or data link communications between air traffic services units and between air traffic services units and other units described under 6.2.2.2.1 and 6.2.2.2.2 shall be provided with automatic recording.		The transposition as ATS IR ATS.OR.435(c)(5) is proposed, as follows: **All facilities for direct-speech or data link communications between ATS units and between ATS units and other units described under points (b)(1) and (b)(2) shall be provided with automatic recording.**
6.2.2.3.8	Recordings of data and communications as required in 6.2.2.3.3 and 6.2.2.3.7 shall be retained for a period of at least 30 days.		The proposed ATS IR ATS.OR.460(a)(2) transposes this principle. **(a) The ATS provider shall retain for a period of at least 30 days the following:** **(…)** **(2) recordings of data and communications, as specified in ATS.OR.435(c)(3), (4) and (5);**
6.2.3.1	Communications between flight information regions Flight information centres and area control centres shall have facilities for communications with all adjacent flight information centres and area control centres.		The transposition as ATS IR ATS.OR.440(a) is proposed, as follows: **The ATS provider shall ensure that flight information centres and area control centres have facilities for communications with all adjacent flight information centres and area control centres.**
6.2.3.1.1	These communication facilities shall in all cases include provisions for messages in a form suitable for retention as a permanent record, and		The transposition as ATS IR ATS.OR.440(a) is proposed, as follows: **These communication facilities shall in all**

	delivery in accordance with transit times specified by regional air navigation agreements.		**cases include provisions for messages in a form suitable for retention as a permanent record, and delivery in accordance with transit times specified by ICAO regional air navigation agreements.**
6.2.3.1.2	Unless otherwise prescribed on the basis of regional air navigation agreements, facilities for communications between area control centres serving contiguous control areas shall, in addition, include provisions for direct-speech and, where applicable, data link communications, with automatic recording, whereby for the purpose of transfer of control using radar, ADS-B or ADS-C data, the communications can be established instantaneously and for other purposes the communications can normally be established within fifteen seconds.		The transposition as ATS IR ATS.OR.440(b) is proposed, as follows: **The ATS providers shall ensure that facilities for communications between area control centres serving contiguous control areas, in addition, include provisions for direct-speech and, where applicable, data link communications, with automatic recording, whereby for the purpose of transfer of control using ATS surveillance data, the communications can be established instantaneously and for other purposes the communications can normally be established within 15 seconds.**
6.2.3.1.3	When so required by agreement between the States concerned in order to eliminate or reduce the need for interceptions in the event of deviations from assigned track, facilities for communications between adjacent flight information centres or area control centres other than those mentioned in 6.2.3.1.2 shall include provisions for direct speech alone, or in combination with data link communications. The communication facilities shall be provided with automatic recording.		The transposition as ATS IR ATS.TR.440(c) is proposed, combining the transposition of Section 6.2.3.1.4, as follows: **When so required by agreement between the States concerned in order to eliminate or reduce the need for interceptions in the event of deviations from assigned track, the air traffic services provider shall ensure that facilities for communications between adjacent flight information centres or area control centres other than those mentioned in point (b):** **(1) include provisions for direct speech alone, or in combination with data link**

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			communications; **(2) permit communications to be established normally within 15 seconds; and** **(3) are provided with automatic recording.**
6.2.3.1.4	*The communication facilities in 6.2.3.1.3 should permit communications to be established normally within fifteen seconds.*		The transposition as ATS IR ATS.OR.440(c) is proposed, combining the transposition of Section 6.2.3.1.3.
6.2.3.2	*Adjacent ATS units should be connected in all cases where special circumstances exist.*		The transposition as ATS IR ATS.OR.440(d) is proposed, as follows: **The ATS providers concerned shall ensure that adjacent ATS units are connected in all cases where special circumstances exist.**
	Note.— Special circumstances may be due to traffic density, types of aircraft operations and/or the manner in which the airspace is organized and may exist even if the control areas and/or control zones are not contiguous or have not (yet) been established.		The transposition as GM1 ATS.OR.440(d) is proposed as follows: **Special circumstances may be due to traffic density, types of aircraft operations and/or the manner in which the airspace is organised and may exist even if the control areas and/or control zones are not contiguous or have not (yet) been established.**
6.2.3.3	*Wherever local conditions are such that it is necessary to clear aircraft into an adjacent control area prior to departure, an approach control unit and/or aerodrome control tower should be connected with the area control centre serving the adjacent area.*		The transposition as ATS IR ATS.OR.440(e) is proposed, as follows: **Wherever local conditions are such that it is necessary to clear aircraft into an adjacent control area prior to departure, the ATS providers concerned shall ensure that an approach control unit and/or aerodrome control tower should be connected with the area control centre serving the adjacent area.**
6.2.3.4	*The communication facilities in 6.2.3.2 and 6.2.3.3 should include provisions for*		The transposition as ATS IR ATS.OR.440(f) is proposed, as follows:

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	communications by direct speech alone, or in combination with data link communications, with automatic recording, whereby for the purpose of transfer of control using radar, ADS-B or ADS-C data, the communications can be established instantaneously and for other purposes the communications can normally be established within fifteen seconds.		**The communication facilities supporting connections to be established in accordance with points (d) and (e) shall include provisions for communications by direct speech alone, or in combination with data link communications, with automatic recording, whereby for the purpose of transfer of control using ATS surveillance or ADS-C data, the communications can be established instantaneously, and for other purposes, the communications can normally be established within 15 seconds.**
6.2.3.5	In all cases where automatic exchange of data between air traffic services computers is required, suitable facilities for automatic recording shall be provided.		The transposition as ATS IR ATS.OR.440(g) is proposed, as follows: **The ATS provider shall provide suitable facilities for automatic recording in all cases where automatic exchange of data between air traffic services computers is required.**
6.2.3.6	Recordings of data and communications as required in 6.2.3.5 shall be retained for a period of at least 30 days.		The proposed ATS IR ATS.OR.460(a)(3) transposes this principle. **(a) The ATS provider shall retain for a period of at least 30 days the following:** **(…)** **(3) recordings of data and communications, as specified in ATS.OR.440(g);**
6.2.4	Procedures for direct-speech communications *Appropriate procedures for direct-speech communications should be developed to permit immediate connections to be made for very urgent calls concerning the safety of aircraft, and the interruption, if necessary, of less urgent calls in progress at the time.*		The transposition as ATS IR ATS.OR.445 is proposed, as follows: **The ATS provider shall develop appropriate procedures for direct-speech communications to permit immediate connections to be made for very urgent calls concerning the safety of aircraft, and the interruption, if necessary, of**

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			less urgent calls in progress at the time.
6.3.1.1	Surface movement control service 6.3.1 Communications for the control of vehicles other than aircraft on manoeuvring areas at controlled aerodromes 6.3.1.1 Two-way radiotelephony communication facilities shall be provided for aerodrome control service for the control of vehicles on the manoeuvring area, except where communication by a system of visual signals is deemed to be adequate.		The transposition as ATS IR ATS.OR.450(a) is proposed, as follows: **The ATS provider shall provide two-way radiotelephony communication facilities for aerodrome control service for the control of vehicles on the manoeuvring area, except where communication by a system of visual signals is deemed to be adequate.**
6.3.1.2	Where conditions warrant, separate communication channels shall be provided for the control of vehicles on the manoeuvring area. Automatic recording facilities shall be provided on all such channels.		The transposition as ATS IR ATS.OR.450(b) and (c) is proposed, as follows: **(b) Where conditions warrant, separate communication channels for the control of vehicles on the manoeuvring area shall be provided.** **(c) Automatic recording facilities on all channels in point (b) shall be provided.**
6.3.1.3	Recordings of communications as required in 6.3.1.2 shall be retained for a period of at least 30 days.		The proposed ATS IR ATS.OR.460(a)(4) transposes this principle. **(a) The ATS provider shall retain for a period of at least 30 days the following:** **(…)** **(4) recordings of communications, as specified in ATS.OR.450;**
6.4	Aeronautical radio navigation service		
6.4.1.1	Automatic recording of surveillance data Surveillance data from primary and secondary radar equipment or other systems (eg ADS-B, ADS-C), used as an aid to air traffic services, shall be automatically recorded for use in		The transposition as ATS IR ATS.OR.455 is proposed, as follows: **The ATS provider shall ensure that surveillance data from primary and secondary radar equipment or other systems (e.g. ADS-B, ADS-C), used as an aid to air traffic services,**

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	accident and incident investigations, search and rescue, air traffic control and surveillance systems evaluation and training.		**are automatically recorded for use in accident and incident investigations, search and rescue, air traffic control and surveillance systems evaluation and training.**
6.4.1.2	Automatic recordings shall be retained for a period of at least thirty days. When the recordings are pertinent to accident and incident investigations, they shall be retained for longer periods until it is evident that they will no longer be required.		The proposed ATS IR ATS.OR.460(a)(5) transposes this principle. **(a) The ATS provider shall retain for a period of at least 30 days the following:** **(…)** **(5) recordings of data, as specified in ATS.OR.455;**
7	AIR TRAFFIC SERVICES REQUIREMENTS FOR INFORMATION		
7.1	Meteorological information		
7.1.1.1	General Air traffic services units shall be supplied with up-to-date information on existing and forecast meteorological conditions as necessary for the performance of their respective functions. The information shall be supplied in such a form as to require a minimum of interpretation on the part of air traffic services personnel and with a frequency which satisfies the requirements of the air traffic services units concerned.		The transposition as ATS IR ATS.OR.500(a) and (c) is proposed, as follows: **(a) The ATS provider shall ensure that up-to-date information on existing and forecast meteorological conditions are made available to the relevant air traffic services units, as necessary for the performance of their respective functions.** **(c) The information in points (a) and (b) shall be supplied in such a form as to require a minimum of interpretation on the part of air traffic services personnel and with a frequency which satisfies the requirements of the air traffic services units concerned.**
7.1.1.2	*Air traffic services units should be supplied with available detailed information on the location, vertical extent, direction and rate of movement*		The transposition as ATS IR ATS.OR.500(b) is proposed, including reference to the content of the Note to Section 7.1.1.2, as follows:

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	of meteorological phenomena in the vicinity of the aerodrome, and particularly in the climb-out and approach areas, which could be hazardous to aircraft operations.		**(b) Available detailed information on the location, vertical extent, direction and rate of movement of meteorological phenomena in the vicinity of the aerodrome, and particularly in the climb-out and approach areas, which could be hazardous to aircraft operations, shall be supplied to the relevant air traffic services units.**
	Note.— The meteorological phenomena are listed in Annex 3, Chapter 4, 4.6.8.		Not to be transposed.
7.1.1.3	*When computer-processed upper air data are made available to air traffic services units in digital form for use by air traffic services computers, the contents, format and transmission arrangements should be as agreed between the Meteorological Authority and the appropriate ATS Authority.*		The provision is considered covered by ATS.OR.500(c).
7.1.2.1	Flight information centres and area control centres Flight information centres and area control centres shall be supplied with meteorological information as described in Annex 3, Appendix 9, 1.3, particular emphasis being given to the occurrence or expected occurrence of deterioration in a weather element as soon as this can be determined. These reports and forecasts shall cover the flight information region or control area and such other areas as may be determined on the basis of regional air navigation agreements.		The transposition as ATS IR ATS.OR.505(a) is proposed, with the establishment of a reference to the corresponding MET requirement, as follows: **(a) The ATS provider shall ensure that flight information centres and area control centres are supplied with the meteorological information stipulated in MET.OR.245(f) and (g), particular emphasis being given to the occurrence or expected occurrence of deterioration in a weather element as soon as this can be determined. These reports and forecasts shall cover the flight information region or control area and, if so required by the competent**

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			authority, such other areas.
	Note.— For the purpose of this provision, certain changes in meteorological conditions are construed as deterioration in a weather element, although they are not ordinarily considered as such. An increase in temperature may, for example, adversely affect the operation of certain types of aircraft.		The transposition as GM1 ATS.OR.505, as follows: **Certain changes in meteorological conditions are construed as deterioration in a weather element, although they are not ordinarily considered as such. An increase in temperature may, for example, adversely affect the operation of certain types of aircraft.**
7.1.2.2	Flight information centres and area control centres shall be provided, at suitable intervals, with current pressure data for setting altimeters, for locations specified by the flight information centre or area control centre concerned.		The transposition as ATS IR ATS.OR.505(b) is proposed, as follows: **The ATS provider shall ensure that flight information centres and area control centres are provided, at suitable intervals, with current pressure data for setting altimeters, for locations specified by the flight information centre or area control centre concerned.**
7.1.3.1	Units providing approach control service Units providing approach control service shall be supplied with meteorological information as described in Annex 3, Appendix 9, 1.2 for the airspace and the aerodromes with which they are concerned. Special reports and amendments to forecasts shall be communicated to the units providing approach control service as soon as they are necessary in accordance with established criteria, without waiting for the next routine report or forecast. Where multiple sensors are used, the displays to which they are related shall be clearly marked to identify the runway and section of the runway monitored by each sensor.		The transposition as ATS IR ATS.OR.510(a) and (b) and (c) is proposed, with the establishment of a reference to the corresponding MET requirement, as follows: **(a) The air traffic services provider shall ensure that units providing approach control service are supplied with meteorological information for the airspace and the aerodromes with which they are concerned, as established in MET.OR.242(b).** **(b) Special reports and amendments to forecasts shall be communicated to the units providing approach control service as soon as they are necessary in accordance with established criteria,**

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			without waiting for the next routine report or forecast. **(c) The air traffic services provider shall ensure that, where multiple anemometers are used, the displays to which they are related are clearly marked to identify the runway and section of the runway monitored by each anemometer.**
	Note.— See Note following 7.1.2.1.		Not to be transposed as ATS requirement.
7.1.3.2	Units providing approach control service shall be provided with current pressure data for setting altimeters, for locations specified by the unit providing approach control service.		The transposition as ATS IR ATS.OR.510(d) is proposed, as follows: **The ATS provider shall ensure that units providing approach control service are provided with current pressure data for setting altimeters, for locations specified by the unit providing approach control service.**
7.1.3.3	Units providing approach control service for final approach, landing and take-off shall be equipped with surface wind display(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the aerodrome control tower and in the meteorological station, where such a station exists.		The transposition as ATS IR ATS.OR.510(e) is proposed, as follows: **The ATS provider shall ensure that units providing approach control service for final approach, landing and take-off are equipped with surface wind display(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the aerodrome control tower and in the meteorological station, where such a station exists.**
7.1.3.4	Units providing approach control service for final approach, landing and take-off at aerodromes where runway visual range values are assessed by instrumental means shall be		The transposition as ATS IR ATS.OR.510(f) is proposed, as follows: **The ATS provider shall ensure that units providing approach control service for final**

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	equipped with display(s) permitting read-out of the current runway visual range value(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the aerodrome control tower and in the meteorological station, where such a station exists.		**approach, landing and take-off at aerodromes where runway visual range values are assessed by instrumental means are equipped with display(s) permitting read-out of the current runway visual range value(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the aerodrome control tower and in the meteorological station, where such a station exists.**
7.1.3.5 .	*Units providing approach control service for final approach, landing and take-off at aerodromes where the height of cloud base is assessed by instrumental means should be equipped with display(s) permitting read-out of the current value(s) of the height of cloud base. The displays should be related to the same location(s) of observations and be fed from the same sensor(s) as the corresponding display(s) in the aerodrome control tower and in the meteorological station, where such a station exists.*		The transposition as ATS IR ATS.OR.510(g) is proposed, as follows: **The ATS provider shall ensure that units providing approach control service for final approach, landing and take-off at aerodromes where the height of cloud base is assessed by instrumental means are equipped with display(s) permitting read-out of the current value(s) of the height of cloud base. The displays shall be related to the same location(s) of observations and be fed from the same sensor(s) as the corresponding display(s) in the aerodrome control tower and in the meteorological station, where such a station exists.**
7.1.3.6	Units providing approach control service for final approach, landing and take-off shall be supplied with information on wind shear which could adversely affect aircraft on the approach or take-off paths or during circling approach.		The transposition as ATS IR ATS.OR.510(h) is proposed, as follows: **The ATS provider shall ensure that units providing approach control service for final approach, landing and take-off are supplied with information on wind shear which could adversely affect aircraft on the approach or**

			take-off paths or during circling approach.
	Note.— Provisions concerning the issuance of wind shear warnings and alerts and ATS requirements for meteorological information are given in Annex 3, Chapter 7 and Appendices 6 and 9.		Contents of ICAO Annex 3 Chapter 7 and Appendix 6 are not to be transposed as ATS requirement, as covered by MET requirements in Annex V (PART-MET).
7.1.4.1	Aerodrome control towers Aerodrome control towers shall be supplied with meteorological information as described in Annex 3, Appendix 9, 1.1 for the aerodrome with which they are concerned. Special reports and amendments to forecasts shall be communicated to the aerodrome control towers as soon as they are necessary in accordance with established criteria, without waiting for the next routine report or forecast.		The transposition as ATS IR ATS.OR.515(a) and (b) is proposed, as follows: **(a) The ATS provider shall ensure that aerodrome control towers and, unless otherwise prescribed by the competent authority, AFIS units are supplied with meteorological information for the aerodrome with which they are concerned, as established in MET.OR.242(a).** **(b) Special reports and amendments to forecasts shall be communicated to the aerodrome control towers and AFIS units as soon as they are necessary in accordance with established criteria, without waiting for the next routine report or forecast.**
	Note.— See Note following 7.1.2.1.		Not to be transposed as ATS requirement.
7.1.4.2	Aerodrome control towers shall be provided with current pressure data for setting altimeters for the aerodrome concerned.		The transposition as ATS IR ATS.OR.515(c) is proposed, as follows: **The ATS provider shall ensure that aerodrome control towers and AFIS units are provided with current pressure data for setting altimeters for the aerodrome concerned.**
7.1.4.3	Aerodrome control towers shall be equipped with surface wind display(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s)		The transposition as ATS IR ATS.OR.515(d) is proposed, as follows: **The ATS provider shall ensure that aerodrome control towers and AFIS Units are equipped**

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	as the corresponding display(s) in the meteorological station, where such a station exists. Where multiple sensors are used, the displays to which they are related shall be clearly marked to identify the runway and section of the runway monitored by each sensor.		**with surface wind display(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such a station exists. Where multiple sensors are used, the displays to which they are related shall be clearly marked to identify the runway and section of the runway monitored by each sensor.**
7.1.4.4	Aerodrome control towers at aerodromes where runway visual range values are measured by instrumental means shall be equipped with display(s) permitting read-out of the current runway visual range value(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such a station exists.		The transposition as ATS IR ATS.OR.515(e) is proposed, as follows: **The ATS provider shall ensure that aerodrome control towers and AFIS units at aerodromes where runway visual range values are measured by instrumental means are equipped with display(s) permitting read-out of the current runway visual range value(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such a station exists.**
7.1.4.5	*Aerodrome control towers at aerodromes where the height of cloud base is assessed by instrumental means should be equipped with display(s) permitting read-out of the current value(s) of the height of cloud base. The displays should be related to the same location(s) of observations and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such station exists.*		The transposition as ATS IR ATS.OR.515(f) is proposed, as follows: **The air traffic services provider shall ensure that aerodrome control towers and AFIS units at aerodromes where the height of cloud base is assessed by instrumental means are equipped with display(s) permitting read-out of the current value(s) of the height of cloud base. The displays shall be related to the same location(s) of observations and be fed from the**

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			same sensor(s) as the corresponding display(s) in the aerodrome control tower and AFIS units and in the meteorological station, where such a station exists.
7.1.4.6	Aerodrome control towers shall be supplied with information on wind shear which could adversely affect aircraft on the approach or take-off paths or during circling approach and aircraft on the runway during the landing roll or take-off run.		The transposition as ATS IR ATS.OR.515(g) is proposed, as follows: **The ATS provider shall ensure that aerodrome control towers and AFIS units are supplied with information on wind shear which could adversely affect aircraft on the approach or take-off paths or during circling approach, and aircraft on the runway during the landing roll or take-off run.**
7.1.4.7	*Aerodrome control towers and/or other appropriate units should be supplied with aerodrome warnings.*		The transposition as ATS IR ATS.OR.515(h) is proposed, with the establishment of a reference to the corresponding MET requirement, as follows: **The ATS provider shall ensure that aerodrome control towers and/or other appropriate units are supplied with aerodrome warnings, as provided in accordance with MET.OR.215(b).**
	Note.— The meteorological conditions for which aerodrome warnings are issued are listed in Annex 3, Appendix 6, 5.1.3.		Not to be transposed as ATS requirement.
7.1.5	Communication stations Where necessary for flight information purposes, current meteorological reports and forecasts shall be supplied to communication stations. A copy of such information shall be forwarded to the flight information centre or the area control centre.		Not to be transposed as ATS requirement. There is consensus in the RMG.0464 about the fact that the provision is not detailed enough and therefore its applicability to the EU context is uncertain.
7.2	Information on aerodrome conditions and the operational status of associated facilities		The transposition as ATS IR ATS.OR.520 is proposed, with reference to the reporting made by the aerodrome operator, as follows:

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	Aerodrome control towers and units providing approach control service shall be kept currently informed of the operationally significant conditions of the movement area, including the existence of temporary hazards, and the operational status of any associated facilities at the aerodrome(s) with which they are concerned.		**The ATS provider shall ensure that aerodrome control towers, AFIS units and units providing approach control service are kept currently informed of the operationally significant conditions of the movement area, including the existence of temporary hazards, and the operational status of any associated facilities at the aerodrome(s) with which they are concerned, as reported by the aerodrome operator.**
7.3.1	Information on the operational status of navigation services ATS units shall be kept currently informed of the operational status of radio navigation services and visual aids essential for take-off, departure, approach and landing procedures within their area of responsibility and those radio navigation services and visual aids essential for surface movement.		The transposition as ATS IR ATS.OR.525(a) is proposed, as follows: **(a) The ATS provider shall ensure that ATS units are kept currently informed of the operational status of radio navigation services and visual aids essential for take-off, departure, approach and landing procedures within their area of responsibility and of those radio navigation services and visual aids essential for surface movement.**
7.3.2	*Information on the operational status, and any changes thereto, of radio navigation services and visual aids as referred to in 7.3.1 should be received by the appropriate ATS unit(s) on a timely basis consistent with the use of the service(s) and aid(s) involved.*		The transposition as ATS IR ATS.OR.525(b) is proposed, as follows: **(b) The ATS providers shall ensure that information referred to in point (a) is received by the appropriate ATS unit(s) on a timely basis consistent with the use of the service(s) and aid(s) involved.**
7.3.2	*Note.— Guidance material regarding the provision of information to ATS units in respect to visual and non-visual navigation aids is contained in the* Air Traffic Services Planning Manual *(Doc 9426). Specifications for monitoring visual aids are contained in Annex 14, Volume I, and related guidance material is in the*		The transposition as GM1 ATS.OR.525 is proposed as follows: **Guidance material regarding the provision of information to ATS units with respect to visual and non-visual navigation aids is contained in**

	Aerodrome Design Manual *(Doc 9157), Part 5. Specifications for monitoring non-visual aids are contained in Annex 10, Volume I.*		**Appendix A to Chapter 10, Part I of the ICAO Air Traffic Services Planning Manual (Doc 9426).**
7.4	Information on unmanned free balloons Operators of unmanned free balloons shall keep the appropriate air traffic services units informed of details of flights of unmanned free balloons in accordance with the provisions contained in Annex 2.		Not to be transposed as ATS requirement as it is an operator's responsibility and it is already covered in Appendix 2 to the SERA Regulation.
7.5.1	Information concerning volcanic activity ATS units shall be informed, in accordance with local agreement, of pre-eruption volcanic activity, volcanic eruptions and volcanic ash cloud which could affect airspace used by flights within their area of responsibility.		Not to be transposed as ATS requirement, as it is already covered by MET.OR.200(c) in Annex V (PART-MET).
7.5.2	Area control centres and flight information centres shall be provided with volcanic ash advisory information issued by the associated VAAC.		Not to be transposed as ATS requirement, as it is already covered by MET.OR.245(d) in Annex V (PART-MET).
	Note.— VAACs are designated by regional air navigation agreements in accordance with Annex 3, 3.5.1.		Not to be transposed as ATS requirement.
7.6	Information concerning radioactive materials and toxic chemical "clouds" ATS units shall be informed, in accordance with local agreement, of the release into the atmosphere of radioactive materials or toxic chemicals which could affect airspace used by flights within their area of responsibility.		Not to be transposed as ATS requirement. As far as information regarding radioactive materials, the provision is covered by MET.OR.245(f)(5). In order to cover the requirement concerning the toxic chemical clouds, it is proposed to amend MET.OR.245 by the introduction of point (g) as follows: **(g) when available, provide the relevant ATS units, in accordance with local agreement, information regarding the release into the atmosphere of**

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			radioactive materials or toxic chemicals which could affect the airspace used by flights within their area of responsibility.
Appendix 1	Principles governing the identification of navigation specifications and the identification of ATS routes other than standard departure and arrival routes		The provision is to be transposed as ASD requirement, and not as ATS requirement.
Appendix 2	Principles governing the establishment and identification of significant points		The provision is to be transposed as ASD requirement, and not as ATS requirement.
Appendix 3	Principles governing the identification of standard departure and arrival routes and associated procedures		The provision is to be transposed as ASD requirement, and not as ATS requirement.
Appendix 4	ATS airspace classes — services provided and flight requirements		Not to be transposed as ATS requirements, as already transposed in Section 6 of the SERA Regulation.
Appendix 5	Aeronautical data quality requirements		Not to be transposed as ATS requirements, as included in PART-AIS proposed with NPA 2016-02.
Attachment A	Material relating to a method of establishing ATS routes defined by VOR		The provision is to be transposed as ASD requirement, and not as ATS requirement.
Attachment B	Traffic information broadcasts by aircraft (TIBA) and related operating procedures		Not to be transposed as EU ATS requirement. There is no evidence of TIBA implementation in EU, as it seems to be a practice in Africa and New Zealand only. Cases of disruption of ATS provisions should be covered by contingency arrangements.
Attachment C	Material relating to contingency planning		Not to be transposed as EU ATS requirement. GM4 ATS.OR.135 ‘Contingency arrangements’ is proposed with reference to EUROCONTROL Guidelines for Contingency Planning of Air

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			Navigation Services