Draft Annex I to draft Commission Implementing Regulation (EU)/...amending Implementing Regulation (EU) 2017/373 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, and Implementing Regulation (EU) No 923/2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation

ANNEX I — Amendments to Annex I (Part-DEFINITIONS) to Implementing Regulation (EU) 2017/373

1. The definition of 'aerodrome flight information service (AFIS)' in (6) is replaced, as follows:

"aerodrome flight information service (AFIS)" means flight information service for aerodrome traffic provided by a designated air traffic services provider;"

2. New definitions are added, as follows:

'(1a) 'accepting unit' means air traffic control unit next to take control of an aircraft;

(1b) 'advisory airspace' means an airspace of defined dimensions, or a designated route, within which air traffic advisory service is available;

(1c) 'ADS-C agreement' means 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);

(4a) 'aerodrome control tower' means a unit established to provide air traffic control service to aerodrome traffic;

(7a) 'aerodrome traffic' means all traffic on the manoeuvring 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;

(7b) 'aerodrome traffic circuit' means the specified path to be flown by aircraft operating in the vicinity of an aerodrome;

(11a) 'aeronautical fixed station' means a station in the aeronautical fixed service;

(12a) 'aeronautical ground light' means any light specially provided as an aid to air navigation, other than a light displayed on an aircraft;

(16a) '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;

(16b) 'aeronautical station' means a land station in the aeronautical mobile service. In certain instances, an aeronautical station may be located, for example, on board a ship or on a platform at sea;

(16c) 'aeronautical telecommunication service' means a telecommunication service provided for any aeronautical purpose;

(16d) 'aeronautical telecommunication station' means a station in the aeronautical telecommunication service;

(16e) 'AFIS aerodrome' means an aerodrome where AFIS is provided within the airspace associated with such aerodrome;

(16f) 'AFIS unit' means a unit established to provide AFIS and alerting service;

(17a) '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;

(18a) 'aircraft identification' means a group of letters, figures or a combination thereof which is either identical to, or the coded equivalent of, the aircraft call sign to be used in air-ground communications, and which is used to identify the aircraft in ground-ground air traffic service communications;

(18b) 'air-ground communication' means two-way communication between aircraft and stations or locations on the surface of the earth;

(19a) 'air traffic' means all aircraft in flight or operating on the manoeuvring area of an aerodrome;

(19b) '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 instrument flight rules (IFR) flight plans;

(19c) 'air traffic control (ATC) clearance' means authorisation for an aircraft to proceed under conditions specified by an air traffic control unit;

(19d) 'air traffic control (ATC) instruction' means directives issued by ATC for the purpose of requiring a pilot to take a specific action;

(19e) 'air traffic control (ATC) unit' is a generic term meaning variously, area control centre, approach control unit or aerodrome control tower;

(21a) 'airway' means a control area or portion thereof established in the form of a corridor;

(22b) 'ALERFA' is the code word used to designate an alert phase;

(22c) 'alerting service' means a service provided to notify appropriate organisations regarding aircraft in need of search and rescue aid, and assist such organisations as required;

(22d) 'alert phase' means a situation wherein apprehension exists as to the safety of an aircraft and its occupants;

(24a) '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;

(32a) '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;

(32b) '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;

(33a) '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;

(30a) 'ATS surveillance service' means a service provided directly by means of an ATS surveillance system;

(30b) 'ATS surveillance system' means a generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft;

(34a) '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;

(35a) 'broadcast' means a transmission of information relating to air navigation that is not addressed to a specific station or stations;

(35b) 'ceiling' means the height above the ground or water of the base of the lowest layer of cloud below 6 000 m (20 000 ft) covering more than half of the sky;

(36a) 'clearance limit' means the point to which an aircraft is granted an ATC clearance;

(36b) 'cloud base' means the height of the base of the lowest observed or forecast cloud element in the vicinity of an aerodrome or operating site or within a specified area of operations, normally measured above aerodrome elevation or, in the case of offshore operations, above mean sea level;

(37a) 'code (SSR)' means the number assigned to a particular multiple-pulse reply signal transmitted by a transponder in Mode A or Mode C;

(38a) 'conference communications' means communication facilities whereby direct speech conversation may be conducted between three or more locations simultaneously;

(39a) 'control zone' means a controlled airspace extending upwards from the surface of the earth to a specified upper limit;

(39b) 'controlled aerodrome' means an aerodrome at which air traffic control service is provided to aerodrome traffic within the controlled airspace associated with such aerodrome;

(39c) 'controlled airspace' means an airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification;

(39d) 'controlled flight' means any flight which is subject to an ATC clearance;

(39e) 'controller-pilot data link communications (CPDLC)' means a means of communication between air traffic controller and pilot, using data link for ATC communications;

(39f) 'critical area' means an area of defined dimensions extending about the ground equipment of a precision instrument approach within which the presence of vehicles or aircraft will cause unacceptable disturbance of the guidance signals;

(40a) 'cruising level' means a level maintained during a significant portion of a flight;

(40b) 'data link communications' means a form of communication intended for the exchange of messages via a data link;

(40c) 'data link-VOLMET (D-VOLMET)' means the provision of current aerodrome routine meteorological reports (METAR) and aerodrome special meteorological reports (SPECI), aerodrome forecasts (TAF), SIGMET, special air-reports not covered by a SIGMET and, where available, AIRMET via data link;

(42a) 'dependent parallel approaches' means simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended centre lines are prescribed;

(43a) 'DETRESFA' is the code word used to designate a distress phase;

(43b) '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;

(43c) '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;

(46a) 'emergency phase' is a generic term meaning, as the case may be, uncertainty phase, alert phase or distress phase;

(47a) 'essential traffic' means controlled traffic to which the provision of separation by air traffic control service is applicable, but which, in relation to a particular controlled flight is not, or will not be, separated from other controlled traffic by the appropriate separation minimum;

(47b) 'essential local traffic' means any aircraft, vehicle or personnel on or near the manoeuvring area, or traffic in the take-off and climb-out area or the final approach area, which may constitute a hazard to the aircraft concerned;

(47c) 'estimated time of arrival' means for IFR flights, the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation



aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome. For visual flight rules (VFR) flights, the time at which it is estimated that the aircraft will arrive over the aerodrome;

(48a) '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 from which:

- (a) a landing can be made; or
- (b) a missed approach procedure is initiated;

(52a) 'flight plan' means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;

(53a) 'flight visibility' means the visibility forward from the cockpit of an aircraft in flight;

(57a) 'glide path' means a descent profile determined for vertical guidance during a final approach;

(58a) 'ground visibility' means the visibility at an aerodrome, as reported by an accredited observer or by automatic systems;

(61a) 'heading' means the direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid);

(62a) 'holding fix' means a geographical location that serves as a reference for a holding procedure;

(62b) 'holding procedure' means a predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance;

(62c) 'identification' means the situation which exists when the position indication of a particular aircraft is seen on a situation display and positively identified;

(62d) 'IFR' is the symbol used to designate the instrument flight rules;

(62e) 'IFR flight' means a flight conducted in accordance with the instrument flight rules;

(62f) 'IMC' is the symbol used to designate instrument meteorological conditions;

(62g) 'INCERFA' is the code word used to designate an uncertainty phase;

(62h) 'independent parallel approaches' means simultaneous approaches to parallel or near-parallel instrument runways where radar separation minima between aircraft on adjacent extended runway centre lines are not prescribed;



(62i) 'independent parallel departures' means simultaneous departures from parallel or near-parallel instrument runways;

(62j) 'instrument approach operations' means an approach and landing using instruments for navigation guidance based on an instrument approach procedure. There are two methods for executing instrument approach operations:

- (a) a two-dimensional (2D) instrument approach operation, using lateral navigation guidance only; and
- (b) a three-dimensional (3D) instrument approach operation, using both lateral and vertical navigation guidance;

(62k) 'instrument approach procedure (IAP)' means a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle clearance criteria apply. Instrument approach procedures are classified as follows:

- (a) 'non-precision approach (NPA) procedure' means an instrument approach procedure designed for 2D instrument approach operations Type A.
- (b) 'approach procedure with vertical guidance (APV)' means a performance-based navigation (PBN) instrument approach procedure designed for 3D instrument approach operations Type A.
- (c) 'precision approach (PA) procedure' means an instrument approach procedure based on navigation systems (ILS, MLS, GLS and SBAS Cat I) designed for 3D instrument approach operations Type A or B;

(621) '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;

(65a) 'low-visibility operations (LVOs)' means approach or take-off operations on a runway with any RVR less than 550 m or taxiing at an aerodrome at which any RVR is less than 550 m;

(65b) 'manoeuvring area' means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons;

(72a) 'missed approach procedure' means the procedure to be followed if the approach cannot be continued;

(72b) 'mode (SSR)' means the conventional identifier related to specific functions of the interrogation signals transmitted by an SSR interrogator. There are four modes specified in ICAO Annex 10: A, C, S and intermode;

(72c) '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);

(72d) 'near-parallel runways' means non-intersecting runways whose extended centre lines have an angle of convergence/divergence of 15 degrees or less;



(76a) '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;

(76b) 'position indication' means the visual indication, in non-symbolic and/or symbolic form, on a situation display, of the position of an aircraft, aerodrome vehicle or other object;

(76c) 'position symbol' means the visual indication in symbolic form, on a situation display, of the position of an aircraft, aerodrome vehicle or other object, obtained after automatic processing of positional data derived from any source;

(77a) 'pressure-altitude' means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere;

(78a) 'primary radar' means a radar system which uses reflected radio signals;

(78b) 'primary surveillance radar (PSR)' means a surveillance radar system which uses reflected radio signals;

(78c) 'printed communications' means communications which automatically provide a permanent printed record at each terminal of a circuit of all messages which pass over such circuit;

(79a) 'procedural control' means a term used to indicate that information derived from an ATS surveillance system is not required for the provision of air traffic control service;

(79b) 'procedural separation' means the separation used when providing procedural control;

(79c) 'procedure turn' means a manoeuvre in which a turn is made away from a designated track followed by a turn in the opposite direction to permit the aircraft to intercept and proceed along the reciprocal of the designated track;

(81a) 'radar' means a radio detection device which provides information on range, azimuth and/or elevation of objects;

(81b) 'radar separation' means the separation used when aircraft position information is derived from radar sources;

(81c) '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;

(81d) 'radiotelephony' means a form of radio communication primarily intended for the exchange of information in the form of speech;

(86a) 'runway-in-use' means the runway or runways that, at a particular time, are considered by the air traffic services unit to be the most suitable for use by the types of aircraft expected to land or take off at the aerodrome. Separate or multiple runways may be designated runway-in-use for arriving aircraft and departing aircraft;

(90a) 'secondary radar' means a radar system wherein a radio signal transmitted from the radar station initiates the transmission of a radio signal from another station;

(90b) 'secondary surveillance radar (SSR)' means a surveillance radar system which uses transmitters/receivers (interrogators) and transponders;

(92a) 'sensitive area' means an area extending beyond the critical area where the parking and/or movement of aircraft or vehicles will affect the guidance signal to the extent that it may be rendered unacceptable to aircraft using the signal;

(94a) '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 air traffic services purposes;

(94b) 'situation display' means an electronic display depicting the position and movement of aircraft and other information as required;

(95a) 'special VFR flight' means a VFR flight cleared by ATC to operate within a control zone in meteorological conditions below VMC;

(95b) 'standard instrument departure (SID)' means a designated IFR departure route linking the aerodrome or a specified runway of the aerodrome with a specified significant point, normally on a designated ATS route, at which the en-route phase of a flight commences;

(96a) 'surveillance radar' means radar equipment used to determine the position of an aircraft in range and azimuth;

(99a) '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;

(99b) 'taxiway' means a defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:

- (a) 'aircraft stand taxilane' which means a portion of an apron designated as a taxiway and intended to provide access to aircraft stands only;
- (b) 'apron taxiway' which means a portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron; and
- (c) 'rapid exit taxiway' which means a taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than those which are achieved on other exit taxiways thereby minimising runway occupancy times;

(103a) '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);

(103b) '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;



(103c) '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;

(103d) 'transferring air traffic controller' means the air traffic controller in the process of transferring the responsibility for providing air traffic control service to an aircraft to the next air traffic control unit/air traffic controller along the route of flight;

(103e) '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/air traffic controller along the route of flight;

(103f) 'transition altitude' means the altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes;

(103g) 'transition layer' means the airspace between the transition altitude and the transition level;

(103h) 'transition level' means the lowest flight level available for use above the transition altitude;

(105a) 'uncertainty phase' means a situation wherein uncertainty exists as to the safety of an aircraft and its occupants;

(105b) 'unmanned free balloon' means a non-power-driven, unmanned, lighter-than-air aircraft in free flight;

(105c) 'vectoring' means the provision of navigational guidance to aircraft in the form of specific headings, based on the use of an ATS surveillance system;

(105d) 'VFR' is the symbol used to designate the visual flight rules;

(105e) 'VFR flight' means a flight conducted in accordance with the visual flight rules;

(106a) 'visual approach' means an approach by an IFR flight when either part or all of an instrument approach procedure is not completed and the approach is executed in visual reference to terrain;

(106b) 'visual departure' means a departure by an IFR flight when either part or all of an instrument departure procedure (e.g. standard instrument departure (SID)) is not completed and the departure is executed in visual reference to terrain;

(106d) 'visual meteorological conditions (VMC)' means meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima;

(106e) 'VMC' is the symbol used to designate visual meteorological conditions;

(107a) 'VOLMET' means meteorological information for aircraft in flight;

(107b) 'VOLMET broadcast' means the provision, as appropriate, of current METAR, SPECI, TAF and SIGMET by means of continuous and repetitive voice broadcasts;

(107c) '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) fly-over waypoint a waypoint at which a turn is initiated in order to join the next segment of a route or procedure;'

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ANNEX II — Amendments to Annex IV (Part-ATS) to Implementing Regulation (EU) 2017/373

1. In Section 1 of Subpart A, the new provisions ATS.OR.110, ATS.OR.115, ATS.OR.120, ATS.OR.125, ATS.OR.130, ATS.OR.135, ATS.OR.140, ATS.OR.145 and ATS.OR.150 are added between ATS.OR.105 and ATS.OR.200, as follows:

'ATS.OR.110 Coordination between aerodrome operators and air traffic services providers

An air traffic services provider shall establish arrangements with the operator of the aerodrome at which it provides air traffic services to ensure adequate coordination of activities and services provided as well as exchange of relevant data and information.

ATS.OR.115 Coordination between military authorities and air traffic services providers

Without prejudice to Article 6 of Commission Regulation (EC) No 2150/2005, an air traffic services providers shall ensure that its air traffic services units, 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 facilitate their identification.

(Annex 11 — Section 2.18.3.1, first sentence)

ATS.OR.120 Coordination between meteorological services providers and air traffic services providers

- (a) To ensure that aircraft receive the most up-to-date meteorological information for aircraft operations, an air traffic services provider shall make arrangements with the associated meteorological services provider for air traffic services personnel:
 - (1) 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;
 - (2) to report as soon as possible meteorological phenomena of operational significance, if observed by air traffic services personnel or communicated by aircraft, which have not been included in the aerodrome meteorological report;
 - (3) to report as soon as possible 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).

(b) An air traffic services provider shall ensure that close coordination is maintained between area control centres, flight information centres and associated meteorological watch offices such that information on volcanic ash included in NOTAM and SIGMET messages is consistent.

(Annex 11 — Sections 2.21.1 and 2.21.2)

ATS.OR.125 Coordination between aeronautical information services and air traffic services providers

- (a) An air traffic services provider shall provide to the relevant aeronautical information services provider the aeronautical information to be published as necessary to permit the utilisation of such air traffic services.
- (b) To ensure that the aeronautical information services providers obtain information to enable them to provide up-to-date preflight information and to meet the need for inflight information, an air traffic services provider and aeronautical information services provider shall make arrangements 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.
- (c) Before introducing changes to systems for air navigation under its responsibility, an air traffic services provider shall:
 - (1) ensure close coordination with the aeronautical information services provider(s) concerned;
 - (2) take due account of the time needed by the aeronautical information services provider for the preparation, production and issuance of relevant material for promulgation; and
 - (3) provide the information in a timely manner to the aeronautical information services provider concerned.
- (d) An air traffic services provider shall observe the predetermined, internationally agreed aeronautical information regulation and control (AIRAC) effective dates in addition to 14 days postage time when submitting to aeronautical information services providers the raw information/data subject to the AIRAC cycle.

(Annex 11 — Sections 2.1.4, 2.22.1, 2.22.2, 2.22.3 second sentence)

ATS.OR.130 Time in air traffic services

- (a) An 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.
- (b) An air traffic services provider shall ensure that air traffic services 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.
- (c) 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.

(Annex 11 — Sections 2.26.2, 2.26.3, 2.26.4 (second sentence of Section 2.26.3 transposed as SERA.3401(c) with a slightly modified text))

ATS.OR.135 Contingency arrangements

An air traffic services provider shall develop contingency plans as required 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, as appropriate, with airspace users concerned.

(Annex 11 — Section 2.32, second sentence)

ATS.OR.140 Failure and irregularity of systems and equipment

An air traffic services provider shall establish appropriate arrangements for air traffic services units to immediately report any failure or irregularity of communication, navigation and surveillance systems or any other safety-significant systems or equipment which could adversely affect the safety or efficiency of flight operations and/or the provision of air traffic services.

(PANS ATM — Section 4.14)

ATS.OR.145 Operation of air traffic control service

An air traffic services provider shall ensure that information on aircraft movements, together with a record of ATC 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.

(Annex 11 — Section 3.3.2)

ATS.OR.150 Transfer of responsibility for control and transfer of communications

An air traffic services provider(s) shall establish applicable coordination procedures for transfer of responsibility for control of flights, including transfer of communications and transfer of control points, in letters of agreement and operation manuals, as appropriate.'

2. A new Section 4 of Subpart A is added, as follows:

'Section 4 REQUIREMENTS FOR COMMUNICATIONS

ATS.OR.400 Aeronautical mobile service (air-ground communications) — general

- (a) An air traffic services provider shall use voice and/or data link in air-ground communications for air traffic services purposes.
- (b) When direct pilot-controller two-way voice 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.
- (c) When direct air-ground two-way voice or data link communications are used for the provision of flight information service, including AFIS, recording facilities on all such air-ground communication channels shall be provided by the air traffic services provider, unless otherwise prescribed by the competent authority.

(Annex 11 — Sections 6.1.1.1 and 6.1.1.3)

ATS.OR.405 Use and availability of the VHF emergency channel

- (a) In accordance with Article 3d, the emergency channel (121.500 MHz) shall be used for genuine emergency purposes, as broadly outlined in the following, to provide:
 - (1) a clear channel between aircraft in distress or emergency and a ground station when the normal channels are being utilised for other aircraft;
 - (2) a VHF communication channel between aircraft and aerodromes, not normally used by international air services, in case of an emergency condition arising;
 - (3) a common VHF communication channel between aircraft, either civil or military, and between such aircraft and surface services, involved in common search and rescue operations, prior to changing when necessary to the appropriate frequency;
 - (4) air-ground communication with aircraft when airborne equipment failure prevents the use of the regular channels;
 - (5) a channel for the operation of emergency locator transmitters (ELTs), and for communication between survival craft and aircraft engaged in search and rescue operations; and
 - (6) a common VHF channel for communication between civil aircraft and intercepting aircraft or intercept control units and between civil or intercepting aircraft and air traffic services units in the event of interception of the civil aircraft.
- (b) An air traffic services provider shall provide the frequency 121.500 MHz at:
 - (1) all area control centres and flight information centres;
 - (2) aerodrome control towers and approach control units serving international aerodromes and international alternate aerodromes; and

(3) any additional location designated by the competent authority, where the provision of that frequency is considered necessary to ensure immediate reception of distress calls or to serve the purposes specified in point (a).

(Annex 10 — Volume V, Sections 4.1.3.1.1 and 4.1.3.1.2)

ATS.OR.410 Aeronautical mobile service (air-ground communications) — flight information service

- (a) An air traffic services provider shall ensure, to the practicable extent and as approved by the competent authority, that air-ground communication facilities enable two-way communications to take place between a flight information centre and appropriately equipped aircraft flying anywhere within the flight information region.
- (b) An air traffic services provider shall ensure 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).

(Annex 11 — Sections 6.1.2.1 and 6.1.2.2)

ATS.OR.415 Aeronautical mobile service (air-ground communications) — area control service

An air traffic services 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).

(Annex 11 — Section 6.1.3.1)

ATS.OR.420 Aeronautical mobile service (air-ground communications) — approach control service

- (a) An air traffic services 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.
- (b) Where the unit providing approach control service functions as a separate unit, airground communications shall be conducted over communication channels provided for its exclusive use.

(Annex 11 — Sections 6.1.4.1 and 6.1.4.2)

ATS.OR.425 Aeronautical mobile service (air-ground communications) — aerodrome control service

(a) An air traffic services 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.

(b) Where conditions warrant, an air traffic services provider shall provide separate communication channels for the control of traffic operating on the manoeuvring area.

(Annex 11 — Sections 6.1.5.1 and 6.1.5.2)

ATS.OR.430 Aeronautical fixed service (ground-ground communications) — general

- (a) An air traffic services provider shall ensure that direct-speech and/or data link communications are used in ground-ground communications for air traffic services purposes.
- (b) When communication for ATC coordination purposes is supported by automation, an air traffic services provider shall ensure that the failure of such automated coordination is presented clearly to the air traffic controller(s) responsible for coordinating flights at a transferring unit.

(Annex 11 — Section 6.2.1.1, PANS ATM — Section 10.1.6, first sentence)

ATS.OR.435 Aeronautical fixed service (ground-ground communications) — communication within a flight information region

- (a) Communications between air traffic services units
 - (1) An air traffic services provider shall ensure that a flight information centre has facilities for communications with the following units providing a service within its area of responsibility:
 - (i) the area control centre;
 - (ii) approach control units;
 - (iii) aerodrome control towers; and
 - (iv) AFIS units.
 - (2) An air traffic services provider shall ensure that an area control centre, in addition to being connected with 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; and
 - (iv) air traffic services reporting offices, when separately established.
 - (3) An air traffic services provider shall ensure that an approach control unit, in addition to being connected with 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 tower(s);
 - (ii) with relevant AFIS unit(s); and

- (iii) the associated air traffic services reporting office(s), when separately established.
- (4) An air traffic services provider shall ensure that an aerodrome control tower or an AFIS unit, in addition to being connected with 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.
- (b) Communications between air traffic services units and other units
 - (1) An air traffic services 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 services provider(s) serving the centre;
 - (iii) the aeronautical telecommunication station serving the centre;
 - (iv) appropriate aircraft operators' offices;
 - (v) the rescue coordination centre or, in the absence of such centre, any other appropriate emergency service; and
 - (vi) the international NOTAM office serving the centre.
 - (2) An air traffic services provider shall ensure that an approach control unit, an aerodrome control tower and an 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, firefighting etc.);
 - (iii) the meteorological services provider serving the unit concerned;
 - (iv) the aeronautical telecommunication station serving the unit concerned; and
 - (v) the unit providing apron management service, when separately established.
 - (3) The communication facilities required under points (b)(1)(i) and (b)(2)(i) shall include 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 Implementing Regulation (EU) No 923/2012.
- (c) Description of communication facilities
 - (1) 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.
- (2) 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.
- (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.
- (4) The communication facilities required under points (b)(2)(i);(ii);(iii) shall include provisions for communications by direct speech arranged for conference communications whereby the communications can normally be established within 15 seconds.
- (5) 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 points (b)(1) and (b)(2) shall be provided with automatic recording.

(Annex 11 — Sections 6.2.2.1.1, 6.2.2.1.2, 6.2.2.1.3, 6.2.2.1.4, 6.2.2.2.1, 6.2.2.2.2, 6.2.2.2.3, 6.2.2.3.1, 6.2.2.3.2, 6.2.2.3.3, 6.2.2.3.5, 6.2.2.3.6 and 6.2.2.3.7)

ATS.OR.440 Aeronautical fixed service (ground-ground communications) — communication between flight information regions

- (a) An air traffic services 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. These communication facilities shall in all 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.
- (b) An air traffic services provider 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.
- (c) 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, an 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 communications;
- (2) permit communications to be established normally within 15 seconds; and
- (3) are provided with automatic recording.
- (d) An air traffic services provider concerned shall ensure that adjacent air traffic services units are connected in all cases where special circumstances exist.
- (e) Wherever local conditions are such that it is necessary to clear aircraft into a controlled airspace prior to departure, the air traffic services provider(s) concerned shall ensure that the air traffic services units delivering the clearance to the aircraft are connected with the air traffic control unit serving the adjacent controlled airspace.
- (f) 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, the communications can be established instantaneously, and for other purposes, the communications can normally be established within 15 seconds.
- (g) An air traffic services provider shall provide suitable facilities for automatic recording in all cases where automatic exchange of data between air traffic services computers is required.

(Annex 11 — Sections 6.2.3.1, 6.2.3.1.1, 6.2.3.1.2, 6.2.3.1.3, 6.2.3.1.4, 6.2.3.2, 6.2.3.3, 6.2.3.4 and 6.2.3.5)

ATS.OR.445 Communications for the control/management of vehicles other than aircraft on manoeuvring areas at aerodromes

- (a) Except where communication by a system of visual signals is deemed to be adequate, an air traffic services provider shall ensure two-way radiotelephony communication facilities for:
 - (1) aerodrome control service for the control of vehicles on the manoeuvring area, or
 - (2) AFIS for the management of vehicles on the manoeuvring area where such service is provided in accordance with ATS.TR.305(f).
- (b) When conditions warrant, separate communication channels for the control or the management of vehicles on the manoeuvring area shall be provided.
- (c) Automatic recording facilities on all channels in point (b) shall be provided.

(Annex 11 — Sections 6.3.1.1 and 6.3.1.2)

ATS.OR.450 Automatic recording of surveillance data

An air traffic services 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, are automatically recorded for use in accident and incident investigations, search and rescue, air traffic services and surveillance systems evaluation and training.

(Annex 11 — Section 6.4.1.1)

ATS.OR.455 Retention of recorded information and data

- (a) An air traffic services provider shall retain for a period of at least 30 days the following:
 - (1) recordings of communications channels, as specified in ATS.OR.400(c) and (d);
 - (2) recordings of data and communications, as specified in ATS.OR.435(c)(3) and (5);
 - (3) automatic recordings, as specified in ATS.OR.440;
 - (4) recordings of communications, as specified in ATS.OR.445;
 - (5) recordings of data, as specified in ATS.OR.450; and
 - (6) paper flight progress strips, electronic flight progress and coordination data.
- (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.

(Annex 11 — Sections 6.1.1.4, 6.2.2.3.8, 6.2.3.6, 6.3.1.3 and 6.4.1.2 identical to Annex 10 — Volume II, Section 3.5.1.5 'Records of communications', PANS ATM — Section 4.13.4)

ATS.OR.460 Background communication and aural environment recording

- (a) Unless otherwise prescribed by the competent authority, air traffic services units shall be equipped with devices that record background communication and the aural environment at air traffic controller, or the flight information service officer, or the AFIS officer work stations, as applicable, capable of retaining the information recorded during at least the last 24 hours of operation.
- (b) Such recordings shall only be used for the investigation of accidents and incidents which are subject to mandatory reporting.

(Annex 11 — Section 3.3.3)'

3. A new Section 5 to Subpart A is added, as follows:

'Section 5 REQUIREMENTS FOR INFORMATION

ATS.OR.500 Meteorological information — General

(a) An air traffic services provider shall ensure that up-to-date information on existing and forecast meteorological conditions is made available to the relevant air traffic services units as necessary for the performance of their respective functions.

- (b) An air traffic services provider shall ensure that 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, is supplied to the relevant air traffic services units.
- (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.

(Annex 11 — Sections 7.1.1.1 and 7.1.1.2)

ATS.OR.505 Meteorological information for flight information centres and area control centres

- (a) An air traffic services provider shall ensure that flight information centres and area control centres are supplied with the meteorological information stipulated in MET.OR.245(f), particular emphasis being given on 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, if so prescribed by the competent authority.
- (b) An air traffic services 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.

(Annex 11 — Sections 7.1.2.1 and 7.1.2.2)

ATS.OR.510 Meteorological information for units providing approach control service

- (a) An 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 stipulated in MET.OR.242(b).
- (b) An 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.
- (c) An air traffic services 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.
- (d) An air traffic services 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/or AFIS unit and in the aeronautical meteorological station, where such a station exists.

- (e) An air traffic services provider shall ensure that units providing approach control service for final 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/or AFIS unit and in the aeronautical meteorological station, where such a station exists.
- (f) An air traffic services 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 readout 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/or AFIS unit and in the aeronautical meteorological station, where such a station exists.
- (g) An air traffic services 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.

(Annex 11 — Sections 7.1.3.1 first and third sentence, 7.1.3.2, 7.1.3.3, 7.1.3.4, 7.1.3.5 and 7.1.3.6)

ATS.OR.515 Meteorological information for aerodrome control towers and AFIS units

- (a) An air traffic services 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 stipulated in MET.OR.242(a).
- (b) An air traffic services provider shall ensure that aerodrome control towers and AFIS units are provided with current pressure data for setting altimeters for the aerodrome concerned.
- (c) An air traffic services provider shall ensure that aerodrome control towers and AFIS units 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 aeronautical 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.
- (d) An air traffic services 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 aeronautical meteorological station, where such a station exists.

- (e) An 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 same sensor(s) as the corresponding display(s) in the aerodrome control tower and AFIS units and in the aeronautical meteorological station, where such a station exists.
- (f) An air traffic services provider shall ensure that aerodrome control tower 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.
- (g) An air traffic services provider shall ensure that aerodrome control towers and AFIS units and/or other appropriate units are supplied with aerodrome warnings, in accordance with MET.OR.215(b).

(Annex 11 — Sections 7.1.4.1 first sentence, 7.1.4.2, 7.1.4.3, 7.1.4.4, 7.1.4.5, 7.1.4.6 and 7.1.4.7)

ATS.OR.520 Information on aerodrome conditions and the operational status of associated facilities

An air traffic services 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.

(Annex 11 — Section 7.2)

ATS.OR.525 Information on the operational status of navigation services

- (a) An air traffic services provider shall ensure that air traffic services units are kept currently and timely 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.
- (b) An air traffic services provider shall establish appropriate arrangements in accordance with ATM/ANS.OR.B.005(f) to ensure that information in point (a) with regard to the GNSS services is provided.

(Annex 11 — Sections 7.3.1 and 7.3.2)'

4. In Section 1 to Subpart B, ATS.TR.100 is replaced, as follows:

'ATS.TR.100 Objectives of the air traffic services (ATS)

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.

(Annex 11 — Section 2.2) (transposed as SERA.7001)'

5. In Section 1 to Subpart B, new provisions ATS.TR.105: ATS.TR.110; ATS.TR115; ATS.TR.120; ATS.TR.125; ATS.TR.130; ATS.TR.135; ATS.TR.140; ATS.TR.145; ATS.TR.150; ATS.TR.155 and ATS.TR.160 are added, as follows:

'ATS.TR.105 Divisions of the air traffic services

The air traffic services shall comprise the services identified as follows:

- (a) The air traffic control service, to accomplish the objectives as in points (a), (b) and (c) of ATS.TR.100, this service being divided in three parts as follows:
 - 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 accomplish the 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 accomplish the objectives established in points (a) and (c) of ATS.TR.100; and
 - (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 accomplish the objectives established in points (a), (b) and (c) of ATS.TR.100.
- (b) The flight information service and/or air traffic advisory service, to accomplish the objective established in point (d) of ATS.TR.100; and
- (c) The alerting service, to accomplish the objective established in point (e) of ATS.TR.100.

(Annex 11 — Sections 2.3, 2.3.1, 2.3.2 and 2.3.3, PANS ATM — Section 9.1.4)

ATS.TR.110 Establishment of the units providing air traffic services

- (a) The air traffic services 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;

- (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; and
- (3) AFIS units shall be established to provide flight information service and alerting service at AFIS aerodromes and within the airspace associated with such aerodromes.
- (b) Air traffic services reporting office(s) or other arrangements shall be established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure.

(Annex 11 — Sections 2.10.1 and 2.10.2, PANS ATM definition of 'air traffic services reporting office')

ATS.TR.115 Identification of air traffic services units

- (a) Air traffic services units shall be unambiguously named as follows:
 - (1) 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) 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; and
 - (3) 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.
- (b) The name of the air traffic services units and services shall be complemented by one of the following suffixes, as appropriate:
 - (1) area control centre CONTROL;
 - (2) approach control APPROACH;
 - (3) approach control radar arrivals ARRIVAL;
 - (4) approach control radar departures DEPARTURE;
 - (5) air traffic control unit (in general) when providing ATS surveillance services RADAR;
 - (6) aerodrome control TOWER;
 - (7) surface movement control GROUND;
 - (8) clearance delivery DELIVERY;
 - (9) flight information centre INFORMATION; and
 - (10) AFIS unit INFORMATION.

(Annex 11 — Sections 2.12.1 and 2.12.2, Annex 10 — Volume II, Section 5.2.1.7.1)



ATS.TR.120 Language for communication between air traffic services units

Except when communications between air traffic services units are conducted in a mutually agreed language, the English language shall be used for such communications.

(Annex 11 — Section 2.31.2)

ATS.TR.125 Expression of vertical position of aircraft

- (a) For flights in areas where a transition altitude is established, the vertical position of the aircraft shall, except as provided for in point (b) below, be expressed in terms of altitudes at or below the transition altitude and in terms of flight levels at or above the transition level. While passing through the transition layer, the vertical position shall be expressed in terms of flight levels when climbing and in terms of altitudes when descending.
- (b) When an aircraft which has been given clearance to land, or when at AFIS aerodromes an aircraft which has been informed that the runway is available for landing, is completing its approach using atmospheric pressure at aerodrome elevation (QFE), the vertical position of the aircraft shall be expressed in terms of height above aerodrome elevation during that portion of its flight for which QFE may be used, except that it shall be expressed in terms of height above runway threshold elevation:
 - (1) for instrument runways if the threshold is 2 m (7 ft) or more below the aerodrome elevation; and
 - (2) for precision approach runways.

(PANS ATM — Sections 4.10.1.1, 4.10.1.2, 4.10.1.3)(Sections 4.10.1.1 and 4.10.1.3 transposed as SERA.8015(eb)(1), Section 4.10.1.2 transposed as SERA.8015(eb)(5))

ATS.TR.130 Determination of the transition level

- (a) The appropriate air traffic services unit shall establish the transition level to be used in areas where a transition altitude is established, for the appropriate period of time on the basis of QNH (altimeter subscale setting to obtain elevation when on the ground) reports and forecast mean sea level pressure, if required.
- (b) The transition level shall be located above the transition altitude such that at least a nominal 300 m (1 000 ft) vertical separation minimum is ensured between aircraft flying concurrently at the transition altitude and at the transition level.

(PANS ATM — Section 4.10.2.1, Doc 7030 (EUR) — Section 6.3.1.2)

ATS.TR.135 Minimum cruising level for IFR flights

- (a) Air traffic control units shall not assign cruising levels below the minimum flight altitudes established by the Member States, except when specifically authorised by the competent authority.
- (b) Air traffic control units shall:

- (1) determine the lowest usable flight level or levels for the whole or parts of the control area for which they are responsible;
- (2) assign flight levels at or above such level or levels; and
- (3) pass the lowest usable flight level or levels on to pilots on request.

(PANS ATM — Sections 4.10.3.1 and 4.10.3.2)

ATS.TR.140 Provision of altimeter setting information

- (a) The appropriate air traffic services units shall at all times have available for transmission to aircraft in flight, on request, the information required to determine the lowest flight level which will ensure adequate terrain clearance on routes or on segment of routes for which this information is required.
- (b) Flight information centres and area control centres shall have available for transmission to aircraft, on request, an appropriate number of QNH reports or forecast pressures for the flight information regions and control areas for which they are responsible, and for those adjacent.
- (c) The flight crew shall be provided with the transition level in due time prior to reaching it during descent.
- (d) A QNH altimeter setting shall be included:
 - (1) in the descent clearance, when first cleared to an altitude below the transition level,
 - (2) in approach clearances or clearances to enter the traffic circuit, and
 - (3) in taxi clearances for departing aircraft,

except when it is known that the aircraft has already received the information in a directed transmission.

- (e) A QFE altimeter setting as described in ATS.TR.125(b) shall be provided to aircraft on request or on a regular basis in accordance with local arrangements.
- (f) The appropriate air traffic services units shall round down the altimeter settings provided to aircraft to the nearest lower whole hectopascal.

(PANS ATM — Sections 4.10.4.1, 4.10.4.2, 4.10.4.3, 4.10.4.5, 4.10.4.6 and 4.10.4.7) (PANS ATM - Section 4.10.4.3 transposed as SERA.8015(eb)(2), Section 4.10.4.5 transposed as SERA.8015(eb)(3), Section 4.10.4.6 transposed as SERA.8015(eb)(4))

ATS.TR.145 Suspension of visual flight rules operations on and in the vicinity of an aerodrome

- (a) Any or all VFR operations on and in the vicinity of an aerodrome may be suspended by any of the following units, persons or authorities whenever safety requires such action:
 - (1) the approach control unit or the appropriate area control centre;
 - (2) the aerodrome control tower;

- (3) the competent authority.
- (b) When any or all VFR operations on and in the vicinity of an aerodrome are suspended, the aerodrome control tower shall observe the following procedures:
 - (1) hold all VFR departures;
 - (2) recall all local flights operating under VFR or obtain approval for special VFR operations;
 - (3) notify the approach control unit or area control centre as appropriate of the action taken; and
 - (4) notify all operators, or their designated representatives, of the reason for taking such action, if necessary or requested.

(PANS ATM — Sections 7.13.1 and 7.13.3)

ATS.TR.150 Aeronautical ground lights

An air traffic services provider shall establish procedures for the operation of aeronautical ground lights, whether or not they are on or in the vicinity of an aerodrome.

(PANS ATM — Section 7.15.1)

ATS.TR.155 ATS surveillance services

- (a) An air traffic services provider may use ATS surveillance systems in the provision of air traffic services. In such case, the air traffic services provider shall specify the functions for which ATS surveillance information is used.
- (b) When providing ATS surveillance services, an air traffic services provider shall:
 - (1) ensure that the ATS surveillance system(s) in use provides (provide) for a continuously updated presentation of surveillance information, including position indications;
 - (2) when air traffic control service is provided:
 - (i) determine the number of aircraft simultaneously provided with ATS surveillance services which can be safely handled under the prevailing circumstances;
 - (ii) provide air traffic controllers at all times with full and up-to-date information regarding:
 - A. established minimum flight altitudes within the area of responsibility;
 - B. the lowest usable flight level or levels determined in accordance with ATS.TR.130 and ATS.TR.135; and
 - C. established minimum altitudes applicable to procedures based on tactical vectoring and direct routing, including the necessary temperature correction or method to correct the effect of low temperatures on minimum altitudes.

- (c) An air traffic services provider shall, in accordance with the functions for which ATS surveillance information is used in the provision of air traffic services, establish procedures for:
 - (1) establishing identification of aircraft;
 - (2) providing position information to aircraft;
 - (3) vectoring aircraft;
 - (4) providing navigation assistance to aircraft;
 - (5) providing information regarding adverse weather, if applicable;
 - (6) transferring of control of aircraft;
 - (7) failure of ATS surveillance system(s);
 - (8) SSR transponder failure, in accordance with the provisions of Section 13 of Implementing Regulation (EU) No 923/2012;
 - (9) ATS surveillance-based safety-related alerts and warnings, when implemented; and
 - (10) interruption or termination of ATS surveillance service.
- (d) Before providing an ATS surveillance service to an aircraft, identification shall be established and the pilot informed. Thereafter, identification shall be maintained until the termination of the ATS surveillance service. If identification is subsequently lost, the pilot shall be informed accordingly and, when applicable, appropriate instructions shall be issued.
- (e) When an identified controlled flight is observed to be on a conflicting path with an unknown aircraft, deemed to constitute a collision hazard, the pilot of the controlled flight shall, whenever practicable:
 - (1) be informed of the unknown aircraft, and, if the pilot so requests or if the situation so warrants in the opinion of the controller, avoiding action shall be suggested; and
 - (2) be notified when the conflict no longer exists.
- (f) Unless otherwise prescribed by the competent authority, verification of the pressurealtitude-derived level information displayed shall be effected at least once by each suitably equipped air traffic services unit on initial contact with the aircraft concerned or, if this is not feasible, as soon as possible thereafter.
- (g) Only verified pressure-altitude-derived level information shall be used to determine that aircraft:
 - (1) maintain a level;
 - (2) vacate a level;
 - (3) pass a level in climb or descent; or
 - (4) reach a level.



(PANS ATM — Sections 8.2.2 and 8.4.2 (the principle, not the exact text), 8.5.5.1.2 (first sentence), 8.6.2.1.1, 8.6.2.1.2, 8.6.8.1 and 8.8.2.1) (PANS ATM Section 8.8.2.1 transposed as SERA.7002, Section 8.5.5.1.2 (first sentence) transposed as SERA.13010(b))

ATS.TR.160 Provision of air traffic services for flight testing

Additional or alternative conditions and procedures to those contained in Annex IV Subpart B, to be applied by air traffic services units for the provision of air traffic services for flight testing, may be specified by the competent authority.

(Regulation (EU) 2017/373, Annex IV, Subpart B, ATS.TR.100(b))'

6. A new Section 2 to Subpart B is added, as follows:

'Section 2

AIR TRAFFIC CONTROL SERVICE

ATS.TR.200 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.

(Annex 11 — Section 3.1) (transposed as SERA.8001)

ATS.TR.205 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 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 approach control unit when it is necessary or desirable to establish a separate unit; or
 - (2) 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.
- (c) Aerodrome control service: by an aerodrome control tower.

ATS.TR.210 Operation of air traffic control service

- (a) In order to provide air traffic control service, an air traffic control unit shall:
 - (1) 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;
 - (2) determine from the information received, the relative positions of known aircraft to each other;
 - (3) issue clearances, instructions and/or information for the purpose of preventing collision between aircraft under its control and of expediting and maintaining an orderly flow of traffic;
 - (4) coordinate clearances as necessary with other units:
 - (i) whenever an aircraft might otherwise conflict with traffic operated under the control of such other units;
 - (ii) before transferring control of an aircraft to such other units.
- (b) Clearances issued by air traffic control units shall provide separation:
 - (1) between all flights in airspace Classes A and B;
 - (2) between IFR flights in airspace Classes C, D and E;
 - (3) between IFR flights and VFR flights in airspace Class C;
 - (4) between IFR flights and special VFR flights;
 - (5) 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 point (2) 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 conditions.

- (c) 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:
 - (1) vertical separation, obtained by assigning different levels selected from the table of cruising levels in Appendix 3 to the Annex to Implementing Regulation (EU) No 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 ATC 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 this level. Geometric height information shall not be used to establish vertical separation;

- (2) horizontal separation, obtained by providing:
 - (i) longitudinal separation, by maintaining an interval between aircraft operating along the same, converging or reciprocal tracks, expressed in time or distance; or
 - (ii) lateral separation, by maintaining aircraft on different routes or in different geographical areas.
- (d) When the air traffic controller becomes aware that the type of separation or minimum used to separate two aircraft cannot be maintained, the air traffic controller shall establish another type of separation or another minimum prior to the time when the current separation minimum would be infringed.

(Annex 11 — Sections 3.3.1, 3.3.4 and 3.3.5, PANS ATM — Section 5.2.1.4, Section 8.5.5.1.1 third sentence) (Annex 11 — Section 3.3.1 transposed as SERA.8005(a), Section 3.3.4 transposed as SERA.8005(b), Section 3.3.5 transposed as SERA.8005(c))

ATS.TR.215 Selection and notification of separation minima for the application of ATS.TR.210(c)

- (a) The selection of separation minima for application within a given portion of airspace shall be made by the air traffic services provider responsible for the provision of air traffic services and approved by the competent authority concerned.
- (b) 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 air traffic services providers responsible for the provision of air traffic services in neighbouring airspace.
- (c) Details of the selected separation minima and of their areas of application shall be notified:
 - (1) to the air traffic services 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.

(Annex 11 — Sections 3.4.1 and 3.4.2) (Section 3.4.1 transposed as SERA.8010(a) and (b), Section 3.4.2 transposed as SERA.8010(c))

ATS.TR.220 Application of wake turbulence separation

Air traffic control units shall apply wake turbulence separation minima to aircraft in the approach and departure phases of flight under the following circumstances:

(a) an aircraft is operating directly behind another aircraft at the same altitude or less than 300 m (1 000 ft) below it; or

- (b) both aircraft are using the same runway, or parallel runways separated by less than 760 m (2 500 ft); or
- (c) an aircraft is crossing behind another aircraft, at the same altitude or less than 300 m (1 000 ft) below it,

except for arriving VFR flights, and for arriving IFR flights executing visual approach when the aircraft has reported the preceding aircraft in sight and has been instructed to follow and maintain own separation from that aircraft, for which the air traffic control unit shall issue caution for wake turbulence.

(PANS ATM — Sections 5.8.1.1, 5.8.1.2 first sentence, 8.7.3.4.1) (Section 8.7.3.4.1) transposed in SERA.8012, the text not being identical)

ATS.TR.225 Responsibility for control

- (a) A controlled flight shall be under the control of only one air traffic control unit at any given time.
- (b) 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.

(Annex 11 — Sections 3.5.1 and 3.5.2)

ATS.TR.230 Transfer of responsibility for control

(a) 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:

(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 aircraft or at such other point or time as has been agreed between the two units.

(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 to another, and vice versa, at a point or time agreed between the two units.

- (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 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 VMC; or
- (B) is at a prescribed point or level; or
- (C) has landed,

as specified in letters of agreement and operation manuals, as appropriate.

- (ii) Departing aircraft The responsibility for control of a departing aircraft shall be transferred from the aerodrome control tower to the unit providing approach control service:
 - (A) when VMC 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 (IMC), or
 - (c) at a prescribed point or level,
 - (B) when IMC 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.

(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 air traffic services unit instructions.

(b) Coordination of transfer

- (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).
- (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) Where transfer of control is to be 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.

- (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.
- (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
 - (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.
- (6) Unless otherwise specified by an 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.
- (7) Standardised phraseology shall be used in the coordination between air traffic services units and/or sectors. Only when standardised phraseology cannot serve an intended transmission, plain language shall be used.

(Annex 11 - Sections 3.6.1, 3.6.1.1, 3.6.1.2, 3.6.1.3.1, 3.6.1.3.2 3.6.1.4, 3.6.2.1, 3.6.2.2, 3.6.2.2.1, 3.6.2.2.2, 3.6.2.3, 3.6.2.4 and 3.6.2.5)(Point (b)(7) partially duplicated from SERA.14001)

ATS.TR.235 ATC clearances

- (a) ATC clearances shall be based solely on the requirements for providing air traffic control service.
 - (1) Clearances shall be issued solely for expediting and separating air traffic and be based on known traffic conditions which affect safety in aircraft operation. Such traffic conditions include not only aircraft in the air and on the manoeuvring area over which control is being exercised, but also any vehicular traffic or other obstructions not permanently installed on the manoeuvring area in use.
 - (2) Air traffic control units shall issue such ATC clearances as necessary to prevent collisions and to expedite and maintain an orderly flow of air traffic.
 - (3) ATC clearances shall be issued early enough to ensure that they are transmitted to the aircraft in sufficient time for it to comply with them.
 - (4) When the pilot-in-command of an aircraft informs an air traffic control unit that an ATC clearance is not satisfactory, the air traffic control unit shall issue an amended clearance, if practicable.
 - (5) When vectoring or assigning a direct routing not included in the flight plan, which takes an IFR flight off published ATS route or instrument procedure, an air traffic controller providing ATS surveillance service shall issue clearances such that the prescribed obstacle clearance will exist at all times until the aircraft reaches the



point where the pilot will re-join the flight plan route, or join a published ATS route or instrument procedure.

(b) Contents of clearances

An ATC 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;
- (5) any necessary instructions or information on other matters, such as ATFM departure slot if applicable, approach or departure manoeuvres, communications and the time of expiry of the clearance.
- (c) In order to facilitate the delivery of the elements in point (b), an air traffic services provider shall assess the necessity for establishing standard departure and arrival routes and associated procedures to facilitate the:
 - (1) safe, orderly and expeditious flow of air traffic; and
 - (2) description of the route and procedure in ATC clearances.
- (d) Clearances for transonic flight
 - (1) The ATC clearance relating to the transonic acceleration phase of a supersonic flight shall extend at least to the end of that phase.
 - (2) The ATC 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.
- (e) Changes in clearance regarding route or level
 - (1) When issuing a clearance covering a requested change in route or level, the exact nature of the change shall be included in the clearance.
 - (2) When traffic conditions will not permit clearance of a requested change, the word 'UNABLE' shall be used. When warranted by circumstances, an alternative route or level shall be offered.
- (f) Conditional clearances

Conditional phrases, such as 'behind landing aircraft' or 'after departing aircraft', shall not be used for movements affecting the active runway(s) except when the aircraft or vehicles concerned are seen by the appropriate air traffic controller and pilot. The aircraft or vehicle causing the condition in the clearance issued shall be the first aircraft/vehicle to pass in front of the other aircraft concerned. In all cases, a conditional clearance shall be given in the following order and consist of:

- (1) the call sign;
- (2) the condition;
- (3) the clearance; and
- (4) a brief reiteration of the condition.
- (g) Read-back of clearances and safety-related information
 - (1) The air traffic 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 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.
 - (2) Voice read-back of CPDLC messages shall not be required unless otherwise specified by the air traffic services provider.
- (h) Coordination of clearances

An ATC 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.
- (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) When prescribed by the air traffic services 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.
 - (i) Aircraft shall maintain the necessary two-way communication with the current air traffic control unit whilst obtaining a downstream clearance.
 - (ii) A clearance issued as a downstream clearance shall be clearly identifiable as such to the pilot.
 - (iii) 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.

- (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.
- (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.

(Annex 11 — Sections 3.7, 3.7.1.1, 3.7.1.2, 3.7.2.1, 3.7.2.2, 3.7.3.1.2, 3.7.3.2, 3.7.4, 3.7.4.1, 3.7.4.2, 3.7.4.2.1, 3.7.4.2.1.1, 3.7.4.2.1.2, 3.7.4.2.1.3, 3.7.4.3 and 3.7.4.4, PANS ATM — Sections 4.5.1.1, 4.5.1.2, 4.5.1.4, 4.5.1.5, 4.5.7.2.1 (first sentence), 4.5.7.2.2, 4.5.7.4.1, 4.5.7.4.2, 8.6.5.2 as amended by EANPG #57 Final Report, 12.2.7, Annex 2 — Section 3.6.1.1) (Annex 11 Section 3.7 transposed as SERA.8015(a), Section 3.7.1.1 transposed as SERA.8015(d), Sections 3.7.2.1 and 3.7.2.2 transposed as SERA.8015(c), Section 3.7.3.1.2 transposed as SERA.8015(e)(3), Section 3.7.3.2 transposed as SERA.8015(e)(3), Sections 3.7.4.2.1.1, 3.7.4.2.1.2, 3.7.4.2.1.3, 3.7.4.3 and 3.7.4.4 transposed as SERA.8015(f)) (Annex 2 — Section 3.6.1.1 transposed as SERA.8015(b)(2)) (PANS ATM — Sections 4.5.1.1, 4.5.1.2, 4.5.1.4, 4.5.1.5 transposed as SERA.8015(a), Sections 4.5.7.2.1 (first sentence) and 4.5.7.2.2 transposed as SERA.8015(d)(3), Sections 4.5.7.4.1 and 4.5.7.4.2 transposed as SERA.8015(ea), Section 3.6.1.1 transposed as SERA.8015(b)(2)) (PANS ATM — Sections 4.5.1.1, 4.5.1.2, 4.5.1.4, 4.5.1.5 transposed as SERA.8015(a), Sections 4.5.7.2.1 (first sentence) and 4.5.7.2.2 transposed as SERA.8015(d)(3), Sections 4.5.7.4.1 and 4.5.7.4.2 transposed as SERA.8015(ea), Sections 4.5.7.4.1 and 4.5.7.4.2 transposed as SERA.8015(ea), Section 12.2.7 transposed as SERA.8015(ec))

ATS.TR.240 Control of persons and vehicles at controlled aerodromes

- (a) 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.
- (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 critical and sensitive area(s) of radio navigation aids;
 - (2) subject to the provisions in point (c), the method(s) to separate vehicles and taxiing aircraft shall be as specified by the air traffic services 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.
- (c) Emergency vehicles proceeding to the assistance of an aircraft in distress shall be afforded priority over all other surface movement traffic.
- (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 or taxiing;
- (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.

(Annex 11 - Sections 3.8.1, 3.8.2, 3.8.3 and 3.8.4) (Sections 3.8.1, 3.8.2, 3.8.3 and 3.8.4 transposed as SERA.3210(d)(4))

ATS.TR.245 Use of surface movement surveillance equipment at aerodromes

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 air traffic services unit 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.

(Annex 11 — Section 3.10)

ATS.TR.250 Essential traffic and essential local traffic information

- (a) Essential traffic information shall be given to controlled flights concerned whenever they constitute essential traffic to each other.
- (b) Essential local traffic information known to the air traffic controller shall be given without delay to departing and arriving aircraft concerned.

(PANS ATM — Sections 5.10.1.2 and 6.2.1)

ATS.TR.255 Operations on parallel or near-parallel runways

When independent or dependent operations on instrument approach or departure to/from parallel or near-parallel runways are conducted, procedures shall be established by the air traffic services provider and approved by the competent authority.

(New provision establishing general principle to allow such types of operations. PANS ATM — Section 6.7 is relevant)

ATS.TR.260 Selection of the runway-in-use

The aerodrome control tower shall select the runway-in-use for take-off and landing of aircraft taking into consideration the surface wind speed and direction as well as other local relevant factors, such as:





- (a) runway configuration;
- (b) meteorological conditions;
- (c) instrument approach procedures;
- (d) approach and landing aids available;
- (e) aerodrome traffic circuits and air traffic conditions;
- (f) length of the runway(s);
- (g) other factors indicated in local instructions.

(PANS ATM — Section 7.2.2 (second sentence))

ATS.TR.265 Control of aerodrome surface traffic in low-visibility conditions

- (a) When there is a requirement for traffic to operate on the manoeuvring area in conditions of visibility which prevent the aerodrome control tower from applying visual separation between aircraft, and between aircraft and vehicles, the following shall apply:
 - (1) at the intersection of taxiways, an aircraft or vehicle on a taxiway shall not be permitted to hold closer to the other taxiway than the holding position limit defined by intermediate holding positions, stop bar or taxiway intersection marking, in accordance with the applicable aerodrome design specifications;
 - (2) the longitudinal separation method on taxiways shall be as specified for each particular aerodrome by the air traffic services provider and approved by the competent authority, taking into account the characteristics of the aids available for surveillance and control of ground traffic, the complexity of the aerodrome layout and the characteristics of the aircraft using the aerodrome.
- (b) Procedures applicable to the start and continuation of low-visibility operations shall be established in accordance with ATS.OR.110 and shall be approved by the competent authority.

(PANS ATM — Sections 7.12.1.1, 7.12.1.1.1, 7.12.1.1.2 and 7.12.2.1)

ATS.TR.270 Authorisation of special VFR

- (a) Special VFR flights may be authorised to operate within a control zone, subject to an ATC clearance. Except when permitted by the competent authority for helicopters in special cases such as but not limited to police, medical, search and rescue operations and firefighting flights, the following additional conditions shall be applied:
 - (1) such special VFR flights may be conducted during day only, unless otherwise permitted by the competent authority;
 - (2) by the pilot:
 - (i) clear of cloud and with the surface in sight;
 - the flight visibility is not less than 1 500 m or, for helicopters, not less than 800 m;



- (iii) fly at a speed of 140 kt IAS or less to give adequate opportunity to observe other traffic and any obstacles in time to avoid a collision.
- (b) An air traffic control unit shall not issue a special VFR clearance to aircraft to take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or aerodrome traffic circuit when the reported meteorological conditions at that aerodrome are below the following minima:
 - (1) the ground visibility is less than 1 500 m or, for helicopters, less than 800 m;
 - (2) the ceiling is less than 180 m (600 ft).
- (c) An air traffic control unit shall handle requests for such an authorisation individually.

(PANS ATM - Sections 7.14.1, 7.14.1.1 and 7.14.1.3) (Sections 7.14.1 and 7.14.1.3) transposed with modifications in SERA.5010)'

7. A new Section 3 to Subpart B is added, as follows:

'Section 3

FLIGHT INFORMATION SERVICE

ATS.TR.300 Application

- (a) Flight information service shall be provided by the appropriate air traffic 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.
- (b) 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.
- (c) A flight information service provider shall establish arrangements for:
 - (1) recording and transmission of information on the progress of flights; and
 - (2) coordination and transfer of responsibility for the provision of flight information service.

(Annex 11 — Sections 4.1.1 and 4.1.2, PANS ATM — Sections 9.1.1 and 9.1.2) (Annex 11 - Sections 4.1.1 and 4.1.2 transposed as SERA.9001)

ATS.TR.305 Scope of flight information service

- (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
- (8) any other information likely to affect safety.
- (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; and
 - (4) messages, including clearances, received from other air traffic services units to relay to aircraft.
- (c) AFIS provided to flights shall include, in addition to relevant items outlined in points (a) and (b), the provision of information concerning:
 - (1) collision hazards with aircraft, vehicles and persons operating on the manoeuvring area; and
 - (2) the runway-in-use.
- (d) Air traffic services units shall transmit, as soon as practicable, special and non-routine air-reports to:
 - (1) other aircraft concerned;
 - (2) the associated meteorological watch office in accordance with Appendix 5 to Implementing Regulation (EU) No 923/2012; and
 - (3) other air traffic services units concerned.

Transmissions to aircraft shall be repeated at a frequency and continued for a period of time which shall be determined by the air traffic services unit concerned.

(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 operation under the visual flight rules impracticable.

(f) When so prescribed by the competent authority, the AFIS unit shall manage the movement of vehicles and persons on the manoeuvring area in accordance with the set or subset of provisions in ATS.TR.240.

(Annex 11 — Sections 4.2.1, 4.2.2, Recommendation in 4.2.3 and 4.2.4, Circular 211-AN/128, EUROCONTROL AFIS Manual Section 3.7.3.2, PANS ATM — Section 7.4.1.7 (Title)) (Annex 11 - Section 4.2.1 transposed as SERA.9005(a), Section 4.2.2 transposed as SERA.9005(b), Section 4.2.4 transposed as SERA.9005(c), Recommendation in Section 4.2.3 transposed as SERA.12020(a) and (b))

ATS.TR.310 Voice-automatic terminal information service (Voice-ATIS) broadcasts

- (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 air traffic services 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.
- (b) A discrete VHF frequency shall, 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.
- (c) Voice-ATIS broadcasts shall not be transmitted on the voice channel of an ILS.
- (d) Whenever Voice-ATIS is provided, the broadcast shall be continuous and repetitive.
- (e) The information contained in the current broadcast shall immediately be made known to the air traffic services 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).
- (f) Voice-ATIS broadcasts provided at designated aerodromes for use by international air services shall be available in the English language as a minimum.

(Annex 11 — Sections 4.3.4.1, 4.3.4.2, 4.3.4.3, 4.3.4.4, 4.3.4.5 and 4.3.4.6)

ATS.TR.315 Data link-automatic terminal information service (D-ATIS)

(a) 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. 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.

(b) 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.

(Annex 11 — Section 4.3.5.1, 4.3.5.1.1 and 4.3.5.2)

ATS.TR.320 Automatic terminal information service (voice and/or data link)

- (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 when a significant change occurs;
 - (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 spelling alphabet in accordance with SERA.14020 of Implementing Regulation (EU) No 923/2012. Designators assigned to consecutive ATIS messages shall be in alphabetical order;
 - (5) aircraft shall acknowledge receipt of the information upon establishing communication with the air traffic services unit providing approach control service or the aerodrome control tower or AFIS unit, as appropriate;
 - (6) the appropriate air traffic services unit shall, when replying to the message in point(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 routine report or local special report.
- (b) When rapidly changing meteorological conditions make it inadvisable to include the meteorological information as in point (a)(7) in the ATIS, the ATIS messages shall indicate that the relevant meteorological information will be given on initial contact with the appropriate air traffic services unit.
- (c) 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).
- (d) If an aircraft acknowledges receipt of an ATIS that is no longer current, the air traffic services unit shall without delay:
 - (1) communicate to the aircraft any element of information which has to be updated; or
 - (2) instruct the aircraft to obtain the current ATIS information.

(Annex 11 — Sections 4.3.6.1, 4.3.6.2, 4.3.6.3 and 4.3.6.4) (Introductory sentence, points e) and f) of Section 4.3.6.1 transposed as SERA.9010(a)(2), Section 4.3.6.3 transposed as SERA.9010 (a)(3)), Section 4.3.6.4 transposed as SERA.9010 (a)(4))

ATS.TR.325 VOLMET broadcasts and D-VOLMET broadcasts

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.

(Annex 11 — Section 4.4, Recommendations in Sections 4.4.1 and 4.4.2'

8. A new Section 4 to Subpart B is added, as follows:

'Section 4

ALERTING SERVICE

ATS.TR.400 Application

(a) 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.
- (b) 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 information region or control area concerned and for forwarding such information to the appropriate rescue coordination centre.
- (c) 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 if the nature of the emergency is such that the notification would be superfluous.
- (d) Nevertheless, whenever:
 - (1) an aircraft accident has occurred on or in the vicinity of the aerodrome; or
 - (2) information is received that the safety of an aircraft which is or will come under the jurisdiction of the aerodrome control tower or of the AFIS unit may have or has been impaired; or
 - (3) requested by the flight crew; or
 - (4) when otherwise deemed necessary or desirable or 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.

(Annex 11 — Sections 5.1.1, 5.1.2, 5.1.3 and 5.1.3.1, PANS ATM — Section 7.1.2.1, 7.1.2.2, first sentence) (Annex 11 - Section 5.1.1 transposed as SERA.10001(a))

ATS.TR.405 Notification to rescue coordination centres

- (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:
 - 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:
 - (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:

- (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.

- (b) 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 it was determined;
 - (7) colour and distinctive marks of aircraft;
 - (8) dangerous goods carried as cargo;
 - (9) any action taken by the reporting office; and
 - (10) other pertinent remarks.
- (c) Such part of the information specified in point (b), which is not available at the time the 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 time permits and where there is reasonable certainty that this phase will eventuate.
- (d) Further to the notification in point (a), air traffic services units shall, without delay, furnish the rescue coordination centre with:
 - (1) any useful additional information, especially on the development of the state of emergency through subsequent phases; or
 - (2) information that the emergency situation no longer exists.

(Annex 11 — Sections 5.2.1, 5.2.2, 5.2.2.1 and 5.2.3)

ATS.TR.410 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.

(Annex 11 — Section 5.3)

ATS.TR.415 Plotting aircraft in a state of emergency

When a state of emergency is considered to exist, the air traffic services unit(s) aware of the emergency shall plot the flight of the aircraft involved on 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.

(Annex 11 — Section 5.4)

ATS.TR.420 Information to the operator

- (a) 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 aircraft operator prior to notify the rescue coordination centre.
- (b) 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.

(Annex 11 — Sections 5.5.1 and 5.5.2)

ATS.TR.425 Information to aircraft operating in the vicinity of an aircraft in a state of emergency

- (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.
- (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 air traffic services 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.

(Annex 11 — Sections 5.6.1 and 5.6.2) (Section 5.6.1 transposed as SERA.10005(a), Section 5.6.2 transposed as SERA.10005(b))'

Draft Annex III to draft Commission Implementing Regulation (EU)/...amending Implementing Regulation (EU) 2017/373 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, and Implementing Regulation (EU) No 923/2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation

ANNEX III — Amendments to Annex V (Part-MET) to Regulation (EU) 2017/373

- 1. The introductory sentence of point (a) of MET.OR.242 is replaced, as follows:
 - (a) 'An aerodrome meteorological office shall provide, as necessary, its associate aerodrome control tower and AFIS unit with:'
- 2. Point (f)(8) to MET.OR.245 is replaced, as follows:
 - (8) 'information received on pre-eruption volcanic activity and/or a volcanic eruption as agreed between the meteorological watch office and the ACC/FIC;'
- 3. A new point (g) to MET.OR.245 is added, as follows:
 - (g) 'when available, provide the relevant air traffic services units, in accordance with local agreement, with information regarding the release into the atmosphere of toxic chemicals which could affect the airspace used by flights within their area of responsibility.'

Draft Annex IV to draft Commission Implementing Regulation (EU)/...amending Implementing Regulation (EU) 2017/373 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, and Implementing Regulation (EU) No 923/2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation

ANNEX IV — Amendments to the Annex to Regulation (EU) No 923/2012

- 1. Point (d)(4)(ii)(A) of SERA.3210 is replaced, as follows:
 - '(A) 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 critical and sensitive area(s) of radio navigation aids;'
- 2. Point (d)(4)(ii)(B) of SERA.3210 is replaced, as follows:
 - (B) subject to the provisions in (iii), the method(s) to separate vehicles and taxiing aircraft shall be as specified by the air navigation service provider (ANSP) and approved by the competent authority taking into account the aids available;'
- 3. Point (a)(3) of SERA.8005 is replaced, as follows:
 - (3) issue clearances, instructions and/or information for the purpose of preventing collision between aircraft under its control and of expediting and maintaining an orderly flow of traffic;'
- 4. The introductory sentence of point (c) of SERA.8005 is replaced, as follows:
 - '(c) Except for cases of operations on parallel or near-parallel runways as in ATS.TR.255 of Implementing Regulation (EU) 2017/373, or when a reduction in separation minima in the vicinity of aerodromes can be applied, separation by an ATC unit shall be obtained by at least one of the following:'
- 5. Point (c)(1) of SERA.8005 is replaced, as follows:
 - (1) vertical separation, obtained by assigning different levels selected from the table of cruising levels in Appendix 3 to the Annex to Implementing Regulation (EU) No 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 ATC 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 this level. Geometric height information shall not be used to establish vertical separation;'

- 6. Point (c) of SERA.8012 is replaced, as follows:
 - (c) an aircraft is crossing behind another aircraft, at the same altitude or less than 300 m (1 000 ft) below it,'
- 7. Additional text is added after point (c) of SERA.8012, as follows:

'except for arriving VFR flights, and for arriving IFR flights executing visual approach when the aircraft has reported the preceding aircraft in sight and has been instructed to follow and maintain own separation from that aircraft, for which the ATC unit shall issue caution for wake turbulence.'

- 8. A new point (b)(6) of SERA.8015 is added, as follows:
 - '(6) When vectoring or assigning a direct routing not included in the flight plan, which takes an IFR flight off published ATS route or instrument procedure, an air traffic controller providing ATS surveillance service shall issue clearances such that the prescribed obstacle clearance will exist at all times until the aircraft reaches the point where the pilot will re-join the flight plan route, or join a published ATS route or instrument procedure.'
- 9. Point (d)(5) of SERA.8015 is replaced, as follows:
 - (5) any necessary instructions or information on other matters, such as ATFM departure slot if applicable, approach or departure manoeuvres, communications and the time of expiry of the clearance.'
- 10. Point (eb)(3) of SERA.8015 is replaced, as follows:
 - (3) A QNH altimeter setting shall be included:
 - (i) in the descent clearance, when first cleared to an altitude below the transition level;
 - (ii) in approach clearances or clearances to enter the traffic circuit; and
 - (iii) in taxi clearances for departing aircraft,

except when it is known that the aircraft has already received the information in a directed transmission.'

- 11. The introductory sentence of point (eb)(5) of SERA.8015 is replaced, as follows:
 - (5) When an aircraft which has been given clearance to land, or when at AFIS aerodromes an aircraft has been informed that the runway is available for landing, is completing its approach using atmospheric pressure at aerodrome elevation

(QFE), the vertical position of the aircraft shall be expressed in terms of height above aerodrome elevation during that portion of its flight for which QFE may be used, except that it shall be expressed in terms of height above runway threshold elevation:'

- 12. A new point (a)(7) of SERA.9005 is added, as follows:
 - (7) information on abnormal aircraft configuration and condition; and
- 13. The text previously concluding point (a) of SERA.9005 is numbered as (a)(8), as follows:
 - (8) any other information likely to affect safety.'
- 14. Point (b)(3) of SERA.9005 is replaced, as follows:
 - (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; and'
- 15. A new point (b)(4) of SERA.9005 is added, as follows:
 - '(4) messages, including clearances, received from other air traffic services units to relay to aircraft.'
- 16. A new point (d) of SERA.9005 is added, as follows:
 - '(d) AFIS provided to flights shall include, in addition to relevant items outlined in points (a) and (b), the provision of information concerning:
 - (1) collision hazards with aircraft, vehicles and persons operating on the manoeuvring area; and
 - (2) the runway-in-use.'
- 17. Point (a)(4) of SERA.9010 is replaced, as follows:
 - (4) If an aircraft acknowledges receipt of an ATIS that is no longer current, the ATS unit shall without delay:
 - (i) communicate to the aircraft any element of information which has to be updated; or
 - (ii) instruct the aircraft to obtain the current ATIS information.'

- 18. Point (b) of SERA.13010 is replaced, as follows:
 - (b) Unless otherwise prescribed by the competent authority, verification of the pressure-altitude-derived level information displayed shall be effected at least once by each suitably equipped ATS unit on initial contact with the aircraft concerned or, if this is not feasible, as soon as possible thereafter.'
- 19. A new point (d) of SERA.14095 is added, as follows:
 - '(d) In accordance with Article 4a, the emergency channel (121.500 MHz) shall be used for genuine emergency purposes, as broadly outlined in the following:
 - (1) to provide a clear channel between aircraft in distress or emergency and a ground station when the normal channels are being utilised for other aircraft;
 - (2) to provide a VHF communication channel between aircraft and aerodromes, not normally used by international air services, in case of an emergency condition arising;
 - (3) to provide a common VHF communication channel between aircraft, either civil or military, and between such aircraft and surface services, involved in common search and rescue operations, prior to changing when necessary to the appropriate frequency;
 - (4) to provide air–ground communication with aircraft when airborne equipment failure prevents the use of the regular channels;
 - (5) to provide a channel for the operation of emergency locator transmitters (ELTs), and for communication between survival craft and aircraft engaged in search and rescue operations;
 - (6) to provide a common VHF channel for communication between civil aircraft and intercepting aircraft or intercept control units and between civil or intercepting aircraft and air traffic services units in the event of interception of the civil aircraft.'