

Title:	Opinion and Instruction Document	
	Amendment of UK Regulation (EU) 2017/373 Annexes Part ATS and Part FPD and UK Regulation (EU) No 923/2012	
Package Number (allocated by SARG Rule Making)	0021A	
Headline Purpose:	Complete the harmonisation of air traffic management (ATM) and air navigation services (ANS) under the UK Basic Regulation	
Proposed action:	Update UK Regulation (EU) 2017/373 and enact consequential amendments to UK Regulation (EU) No 923/2012	

*In accordance with its obligations under Articles 76 and 115 of the UK Basic Regulation, the CAA proposed to the Department for Transport that there be a change to the law in the manner set out in this Opinion and Instruction Document (“OID”). However, it being open to the Secretary of State for Transport to adopt a different approach to address the relevant issues, this OID **should not be read as reflecting the actual changes made to the law** (either through its wording or the expression of any policy objective). The text of any changes to the law (and associated explanatory material) will be made available via legislation.gov.uk if/when the Secretary of State for Transport makes and lays the Statutory Instrument (expected to be in late November/early December 2022).*

Objective

The objective of this rulemaking activity is to complete the harmonisation of air traffic management (ATM) and air navigation services (ANS) safety regulation under the umbrella of Regulation (EU) 2018/1139 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 (“[the UK Basic Regulation](#)”), and move away from the current regulatory framework under the [Air Navigation Order 2016](#) (“[the ANO](#)”).

The technical content that is proposed for adoption is sourced from International Civil Aviation Organisation (“[ICAO](#)”) Standards and Recommended Practices (“[SARPs](#)”) and Procedures for Air Navigation Services (“[PANS](#)”). Importantly, these provisions have already been implemented in the UK through Civil Aviation Publications (“[CAPs](#)”), in accordance with the CAA’s obligations under the Civil Aviation Act 1982, the ANO and the Civil Aviation Authority (Chicago Convention) Directions 2007.

This rulemaking activity consolidates and streamlines the relevant existing requirements under one regimen, to the benefit of stakeholders and the CAA by removing the significant complexity that currently exists.

Background

At present, operational procedures (as distinct from requirements for the management of an organisation) relating to the provision of ATM/ANS remain primarily under the aegis of the ANO. The ANO sets out the high-level requirement, with detailed organisational and technical requirements derived from ICAO SARPs and PANS being adopted within CAPs. Examples include:

- [ANO 2016](#) Article 205 on ‘Air traffic service equipment’ with the standards for that equipment detailed within CAP 670 ATS Safety Requirements; and
- [ANO 2016](#) Article 182 on ‘Manual of air traffic services’ with the requirements for the contents of that manual detailed within CAP 670 (ATS Safety Requirements) and CAP 493 (The Manual of Air Traffic Services Part 1).

As such, these CAPs contain the ‘rules’, together with the equivalent of ‘acceptable means of compliance (“[AMC](#)”)’ and ‘guidance material (“[GM](#)”)’ alongside each other in one document.

However, certain requirements relating to the operational provision of ATM/ANS have already transitioned from the ANO framework to the Standardised European Rules of the Air (“[SERA](#)”) (contained within the Annex to Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 (“[UK Reg \(EU\) No 923/2012](#)”)) which details some high-level technical requirements for the provision of air traffic services. Through this rulemaking package, the CAA proposes certain limited amendments to SERA to continue this transition.

The requirements governing the organisational management of ATM/ANS organisations have already largely transitioned from the ANO to fall under the Basic Regulation through Regulation (EU) No. 2017/373 as retained (and amended in domestic law) under the European Withdrawal Act 2018 (“[UK \(EU\) Reg 2017/373](#)”). This Regulation lays down authority requirements, organisational requirements and technical requirements applicable to providers of ATM/ANS and other ATM network functions, and provides for their oversight by the CAA.

However, notable exceptions still exist, where the regulatory framework relating to organisational management remains divided across the ANO and retained EU law; e.g. [ANO 2016](#) Article 180 ‘Requirement for an air traffic control approval’.

Furthermore, Schedule 1 of [the ANO](#) contains certain definitions that differ in their wording (though not generally in their meaning) from the definitions set out in the source ICAO SARPs and PANS.

This disparate ruleset, encompassing both [the ANO](#) and [the Basic Regulation](#) and the rules and procedures made under them, provides significant complexity for ATM/ANS providers and for the CAA in exercising oversight and discharging its functions under section 60 of the [Civil Aviation Act 1982](#) to adopt new and amended ICAO provisions. The CAA considers that completing the harmonisation of ATM/ANS regulation under the umbrella of [the Basic Regulation](#) will address this complexity.

It is therefore the CAA’s view that both operational requirements for ATM/ANS providers (currently primarily under the ANO, with limited provisions already under SERA) and organisational requirements for ATM/ANS providers (currently primarily under [UK \(EU\) Reg 2017/373](#)) should be consolidated under the umbrella of the Basic Regulation through the proposed amendments to SERA and [UK \(EU\) Reg 2017/373](#).

In addition, the CAA considers it desirable to adopt definitions applicable to those regulations which are consistent with the ICAO SARPs and PANS as part of this transition. It should be noted that there will be no material difference in meaning or effect between the definitions contained within the ANO and those the CAA proposes should be inserted into the relevant regulations as part of this rulemaking package.

In so doing, this rulemaking activity will, ultimately, see the repeal of the ATM/ANS related elements of the ANO and the withdrawal of the multiplicity of ATM/ANS related CAPs, with the transposition of their requirements into [UK Reg \(EU\) 2017/373](#) and its related AMC and GM.

It is intended that this harmonisation activity will be undertaken over a number of years, in phases or work packages, in order to:

- mitigate the workload for CAA and DfT stakeholders that is posed by the overall scope of the ‘change package’;
- ensure that sufficient time exists for the CAA to develop the technical and organisational requirements and consult on such with industry stakeholders; and
- ameliorate the change burden placed upon industry.

This particular work package (0021A) represents the first stage of the harmonisation activity. It seeks to introduce amendments to [UK Reg \(EU\) 2017/373](#) and [UK Reg \(EU\) No 923/2012](#) SERA to:

- Amend the definitions sections of these two regulations;
- Make changes to certain limited enacting terms of both regulations; and
- Introduce minor changes to SERA that have already been implemented within the UK through CAPs as a result of the adoption of amendments to ICAO Annex 11 and ICAO Doc 4444 PANS-ATM via ICAO State Letter.

The CAA considers it desirable that that these amendments should come into effect in line with the Aeronautical Information Regulation and Control (AIRAC) cycle. The AIRAC cycle is an internationally agreed series of dates on which changes to aeronautical information will be published and become effective. The CAA has a long-standing agreement with industry that we will only seek to make significant amendments to regulatory requirements and/or policy effective on AIRAC dates. The CAA therefore considers it desirable that these amendments should come into effect on 23 March 2023, which would be the effective date of AIRAC 03/2023. This date would also enable to CAA to finalise subsequent amendments to the UK Aeronautical Information Package in light of the passing into law of these proposed changes.

These proposed amendments will not materially affect the UK regulatory framework, but will lay the groundwork for subsequent, related work during which the CAA will develop proposals based upon:

- review of existing UK Differences to ICAO to determine whether such Difference should be retained or whether we should harmonise;
- transposition of extant UK requirements (detailed within CAPs) into [UK Reg \(EU\) 2017/373](#) and its associated AMC and GM; and
- development of new technical content to enable the Airspace Modernisation Strategy.

The CAA intends to work with industry on the development of these proposals. Where we intend to propose technical content that differs in its intent and/or meaning to extant UK requirements, CAA will consult with industry through our established consultative mechanisms.

Although the precise form and content remain to be determined, the CAA anticipates that the outcomes of these subsequent work packages will be to introduce amendments that:

- Transpose existing UK requirements from ANO 2016 and ATM/ANS related CAPs into [UK Reg \(EU\) 2017/373](#) and its AMC and GM;
- Enable aspects of the Airspace Modernisation Strategy relating to the provision of flight information services; and,
- Repeal ATM/ANS related requirements from ANO 2016 Part 7 Air Traffic Services and Schedule 1.

What legal powers are being used to achieve the change?

Articles 40 and 43 of [the Basic Regulation](#). Future packages will also engage the powers contained within Article 44 of the Basic Regulation.

Consequence of not making these legislative changes

If these legislative changes are not made, there will be:

- Continued complexity of the ‘ruleset’ governing ATM/ANS within the UK; and
- Difficulty for the CAA in ensuring regulatory compliance with a complex and disparate ruleset.

If a ‘package approach’ to the delivery of the required amendments (of which this proposed change is the first part) is not adopted, there will be a very substantially increased change burden placed upon industry to comply with a very large new ruleset. For that reason, the CAA considers that a managed programme of change should be adopted to consolidate and harmonise the existing ruleset.

Affected Law (and, if Applicable, UK AMC)

<p>What is the existing legal framework (UK law) which is relevant here?</p>	<p>The existing legal framework is, as described previously, shared between the ANO 2016 and UK Reg (EU) 2017/373.</p>
<p>Identify the law that the CAA proposes be changed</p>	<p>Existing content contained within ANO 2016 and CAA CAPs (as the long-standing method of adopting ICAO SARPs and PANS within the UK under the ANO) need to be transposed into UK Reg (EU) 2017/373, with consequential amendments needing to be made to UK Reg (EU) No 923/2012. In time, we will seek to repeal ANO 2016 Part 7 Air Traffic Services and remove certain ATM/ANS related definitions from Schedule 1. We are proposing a ‘package approach’ to this harmonisation task. Aspects of retained regulations</p>

	<p>requiring amendment in this work package (0021A) are:</p> <ul style="list-style-type: none"> • UK Reg (EU) 2017/373 Article 2 Definitions: new definitions to be added. • UK Reg (EU) 2017/373 Annex I Part-Definitions: new definitions to be added. • UK Reg (EU) No 923/2012 Enacting terms – a new recital is required. • UK Reg (EU) No 923/2012 Article 2 Definitions: new definitions to be added. • Annex to UK Reg (EU) No 923/2012: amendments required to specific provisions as follows: SERA.3210, SERA.8015, SERA.9005, SERA.12005 and SERA.14065.
<p>Are any consequential amendments needed to other pieces of law?</p>	<p>No immediate consequential changes are required. Subsequent work packages delivered as part of this rulemaking activity will seek to repeal ANO 2016 Part 7 Air Traffic Services and remove certain ATM/ANS related definitions from Schedule 1.</p>
<p>If the change proposed is to retained EU Implementing Rules made under the retained Basic Regulation is there any UK Acceptable Means of Compliance (“AMC”), Guidance Material (“GM”) or Certification Specification (“CS”) that will be changed/newly adopted as a consequence if the law is changed as proposed?</p>	<p>Yes.</p> <p>This work package (0021A) will require the development of a small number of AMC and GM to Annex I of UK Reg (EU) 2017/373 and Article 2 of UK Reg (EU) No 923/2012.</p> <p>Subsequent work packages will require the development of a significant package of AMC and GM to support the provisions that will be adopted within UK Reg (EU) 2017/373 and its Annexes. We anticipate that AMC and GM will be developed for UK Reg (EU) 2017/373 itself, alongside Annex I ‘Part-Definitions’, Annex II Part-AR, Annex III Part-OR, Annex IV Part-ATS, Annex VIII Part-CNS and Annex XI Part-FPD.</p> <p>A significant majority of the AMC and GM will be transposed from existing CAPs, with only editorial amendments being made to the provisions in order to fit the new AMC/GM style. Changes will only arise where we have identified an opportunity, in consultation with industry, to increase our level of compliance with ICAO SARPs and PANS; or, where change is required to implement the Airspace Modernisation Strategy.</p>
<p>Does this proposal relate to an international treaty obligation (e.g. an ICAO SARP)?</p>	<p>Yes. The content is sourced from ICAO Annex 2, ICAO Annex 3, ICAO Annex 10 Volumes II and V, ICAO Annex 11, ICAO Doc 4444 PANS-ATM and ICAO Doc 8168 PANS-Ops.</p>
<p>Are there any deadlines to meet such treaty obligations?</p>	<p>No. The content is already implemented within the UK through CAPs.</p>
<p>Will this treaty obligation be met in full or will a Difference need to be filed?</p>	<p>The content in this work package (0021A) meets our treaty obligations in full.</p>

	Subsequent work packages (0021B etc) will cause us to review the Differences that are currently filed; some existing Differences may be removed.
Is a consultation required?	<p>As previously highlighted, the technical content being proposed for adoption is sourced from ICAO SARPs and PANS which have already been implemented in the UK under the ANO and its related CAPs.</p> <p>This work package (0021A) represents the first stage of the harmonisation activity and has limited scope (as described above), proposing for adoption a number of provisions that have already been implemented within the UK. As such, no consultation is necessary.</p>
Is an Impact Assessment necessary under the Better Regulation Framework?	<p>As set out above, this package makes no material change to the existing regulatory requirements, which are already contained within CAPs. This proposed change simply streamlines and consolidates the existing framework. Accordingly, there will be no impact to stakeholders and no impact assessment is required for this particular package of works.</p> <p>As the CAA works to develop its proposals as part of subsequent related work packages, the impact of the proposed changes will be appropriately assessed.</p>
When is it intended that these provisions should be brought into force?	23 March 2023, for the reasons set out above
Will there be any criminal offences?	The majority of these amendments are to definitions which do not attract criminal offences. The Department for Transport is considering whether to seek a legislative opportunity to take powers for the Secretary of State to make a breach of requirements of retained EU legislation in the field of civil aviation an offence. If such powers are agreed by Parliament in the future, then consideration will be given to whether any additional criminal offences would be appropriate.
If so, is a Justice Impact Test required?	If the power to impose criminal sanctions is granted, the question of a Justice Impact Test will be considered by the CAA in collaboration with the Department for Transport.
What is the intended extent of the provision?	The UK
Are there any devolved issues?	No
Are any transitional provisions needed? If so, what are they?	No

Suggested Changes to existing wording of Law

As set out above, the substance of the amendments detailed below have already been the subject of consultation. These proposals are therefore published for information purposes only. It should be noted that the amendments set out in this section constitute the CAA's initial opinion on possible amendments to the relevant legislation. While it is anticipated that any amendments ultimately enacted will broadly reflect the CAA's proposals, all amendments to legislation are subject to an iterative legislation drafting process by Government lawyers.

The CAA's proposed amendments to the regulations are set out in table form below. A significant majority of these proposals are sourced from ICAO SARPs and PANS and ICAO's expectation is that this wording should be directly transposed. The CAA considers, therefore, that any wording ultimately used in UK law should reflect the wording used by ICAO as this wording has been internationally agreed and reflects the intent of the ICAO SARP or PANS. Any alteration to the proposed ICAO wording may alter the meaning or effect of the requirement, and may therefore require the UK to file a Difference with ICAO. In the CAA's view, an amendment to the ICAO wording should only be made in the circumstances set out in the Chicago Convention itself, namely where it is either "impracticable or inappropriate to transpose" the original. Details of the proposed changes, and (for information only) their origin, are set out in the table below.

The text of the amendment is arranged to show deleted text, new or amended text as shown below:

- (a) ~~Text to be deleted is shown struck through~~;
- (b) **New text is highlighted in grey**;
- (c) ~~Text to be deleted is shown struck through~~ followed by the replacement text which is highlighted in grey.

Serial	SI Text	Sources & Notes
UK Reg (EU) 2017/373 Article 2 Definitions		
1	Definition (6) is added as follows: (6) 'design of airspace structures' means a process that ensures that airspace structures are properly designed, surveyed and validated before they are deployed and used by aircraft;	Reg (EU) 2020/469 Article 3 amending 2017/373 Article 2.
2	Definition (7) is added as follows: (7) '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;	ICAO Doc 4444 PANS-ATM Section 1
3	Definition (8) is added as follows: (8) 'entity originating aeronautical data and aeronautical information' – means any public or private entity responsible for origination of aeronautical data and aeronautical information used as a source for aeronautical information products and services. These entities do not include ATM/ANS providers referred to in point (2) of Article 2 of this Regulation and aerodromes defined in point (1)(e) of Article 2 of Regulation(EU) 2018/1139.'	Reg (EU) 2020/469 Article 3 amending 2017/373 Article 2.
UK Reg (EU) 2017/373 Annex I Part-Definitions		
4	Definition (6) is replaced as follows: 'aerodrome flight information service (AFIS)' means flight information service and alerting service for aerodrome traffic at an aerodrome;	CAA. The current definition of AFIS was developed by EASA. The purpose of this amendment is to align the definition of AFIS with ICAO's definition of aerodrome control service by removing reference to 'alerting service' and to delete the phrase "at an aerodrome". This text is considered to be superfluous given that it is implied in the use of the term 'aerodrome traffic'.
5	(1A) '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). The terms of the agreement will be exchanged between the ground system and the aircraft by means of a contract, or a series of contracts.	ICAO Doc 4444 PANS-ATM Section 1

6	Definition (1A) 'air ground communication' is renumbered as follows: (1B) 'air-ground communication' means two-way communication between aircraft and stations or locations on the surface of the Earth;	n/a
7	(4A) 'aerodrome control tower' means a unit established to provide air traffic control service to aerodrome traffic;	ICAO Doc 4444 PANS-ATM Section 1
8	(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;	ICAO Doc 4444 PANS-ATM Section 1
9	(7B) 'aerodrome traffic circuit' means the specified path to be flown by aircraft operating in the vicinity of an aerodrome;	ICAO Doc 4444 PANS-ATM Section 1
10	(11A) 'aeronautical fixed station' means a station in the aeronautical fixed service;	ICAO Doc 4444 PANS-ATM Section 1
11	(12A) 'aeronautical ground light' means any light specially provided as an aid to air navigation, other than a light displayed on an aircraft;	ICAO Doc 4444 PANS-ATM Section 1
12	(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;	ICAO Doc 4444 PANS-ATM Section 1
13	(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;	ICAO Doc 4444 PANS-ATM Section 1
14	(16C) 'aeronautical telecommunication station' means a station in a telecommunication service provided for any aeronautical purpose;	ICAO Doc 4444 PANS-ATM Section 1
15	(16D) 'AFIS aerodrome' means an aerodrome where AFIS is provided within the airspace associated with such aerodrome;	Reg (EU) 2020/469 Annex III amending 2017/373 Annex I
16	(16E) 'AFIS unit' means a unit established to provide AFIS and alerting service;	Reg (EU) 2020/469 Annex III amending 2017/373 Annex I
17	(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	ICAO Doc 4444 PANS-ATM Section 1

	communications, and which is used to identify the aircraft in ground-ground air traffic service communications;	
18	(19A) 'air traffic advisory service' means a service provided within an airspace of defined dimensions, or a designated route (advisory airspace) to ensure separation, in so far as practical, between aircraft which are operating on instrument flight rules (IFR) flight plans;	ICAO Doc 4444 PANS-ATM Section 1
19	(19B) 'air traffic control clearance' or 'ATC clearance' means authorisation for an aircraft to proceed under conditions specified by an air traffic control unit;	ICAO Doc 4444 PANS-ATM Section 1
20	(19C) 'air traffic control instruction' or 'ATC instruction' means directives issued by ATC for the purpose of requiring a pilot to take a specific action;	ICAO Doc 4444 PANS-ATM Section 1
21	(19D) 'air traffic control (ATC) unit' or 'ATC unit' is a generic term meaning variously, area control centre, approach control unit or aerodrome control tower;	ICAO Doc 4444 PANS-ATM Section 1
22	(21A) 'Airway' means a control area or portion thereof established in the form of a corridor.	ICAO Doc 4444 PANS-ATM Section 1
23	(21B) 'ALERFA' is the code word used to designate an alert phase;	ICAO Doc 4444 PANS-ATM Section 1
24	(21C) '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;	ICAO Doc 4444 PANS-ATM Section 1
25	(21D) 'alert phase' means a situation wherein apprehension exists as to the safety of an aircraft and its occupants;	ICAO Doc 4444 PANS-ATM Section 1
26	(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;	ICAO Doc 4444 PANS-ATM Section 1
27	(27A) 'area navigation route' means an ATS route established for the use of aircraft capable of employing area navigation;	ICAO Doc 4444 PANS-ATM Section 1
28	(30A) 'ATS airspaces' means airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which ATS and rules of operation are specified.	ICAO Doc 4444 PANS-ATM Section 1
29	Definition (30A) 'ATS route' is renumbered as follows: (30B) 'ATS route' means a specified route designated for channelling the flow of traffic as necessary for the provision of ATS	ICAO Doc 4444 PANS-ATM Section 1

30	(30C) 'ATS surveillance service' means a service provided directly by means of an ATS surveillance system;	ICAO Doc 4444 PANS-ATM Section 1
31	(30D) '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;	ICAO Doc 4444 PANS-ATM Section 1
32	(30E) radar 'ATS surveillance system separation' means the separation used when aircraft position information is derived from radar ATS surveillance sources	ICAO Doc 4444 PANS-ATM Section 1 Amendment proposed by CAA to reflect that 'ATS surveillance system' is now the appropriate generic term vice 'radar'
33	(33A) 'automatic dependent surveillance – broadcast (ADS-B)' means a means by which aircraft, aerodrome vehicles and other objects can automatically transmit or receive, or transmit and receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link;	ICAO Doc 4444 PANS-ATM Section 1
34	(33B) '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;	ICAO Doc 4444 PANS-ATM Section 1
35	(33C) 'automatic terminal information service (ATIS)' means the automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours a day or a specified portion thereof;	ICAO Doc 4444 PANS-ATM Section 1
36	(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;	ICAO Doc 4444 PANS-ATM Section 1
37	(36A) 'clearance limit' means the point to which an aircraft is granted an ATC clearance;	ICAO Doc 4444 PANS-ATM Section 1
38	(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;	UK Reg (EU) No 965/2012 Annex I(21)

39	(38B) 'conference communications' means communication facilities whereby direct speech conversation may be conducted between three or more locations simultaneously;	ICAO Annex 11 Section 1
40	Definition (38B) is renumbered as follows: (38C) 'confidence level' means the probability that the true value of a parameter is within a certain interval around the estimate of its value;	n/a
41	Definition (39B) is renumbered as follows: (39C) 'controlled airspace' means an airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification;	n/a
42	(39D) 'controlled flight' means any flight which is subject to an ATC clearance;	ICAO Doc 4444 PANS-ATM Section 1
43	(39E) 'controller-pilot data link communications (CPDLC)' means a means of communication between air traffic controller and pilot, using data link for ATC communications;	ICAO Doc 4444 PANS-ATM Section 1
44	(39F) 'critical area' means an area of defined dimensions extending around the ground equipment of a precision instrument approach within which the presence of vehicles or aircraft will cause unacceptable disturbance of the guidance signals;	ICAO Annex 10 Volume I Attachment C Section 2.1.9.1
45	(40H) 'data link-automatic terminal information service (D-ATIS)' means the provision of ATIS via data link;	ICAO Annex 11 Section 1
46	(40I) 'data link communications' means a form of communication intended for the exchange of messages via a data link;	ICAO Annex 11 Section 1
47	(40J) '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;	ICAO Annex 3 Section 1
48	Definitions (40H) to (40J) are renumbered from (40K) to (40M)	n/a
49	(42a) 'dependent parallel approaches' means simultaneous approaches to parallel or near-parallel instrument runways where ATS surveillance separation minima between aircraft on adjacent extended centre lines are prescribed	ICAO Doc 4444 PANS-ATM Section 1

50	(43A) 'DETRESFA' is the code word used to designate a distress phase;	ICAO Doc 4444 PANS-ATM Section 1
51	(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;	ICAO Doc 4444 PANS-ATM Section 1
52	(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;	ICAO Annex 11 Section 1
53	(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;	ICAO Doc 4444 PANS-ATM Section 5.10.1.1
54	(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; (178) 'estimated time of arrival' means: (a) for IFR flights, the time at which it is estimated that the aircraft will arrive over a 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; (b) for visual flight rules (VFR) flights, the time at which it is estimated that the aircraft will arrive over the aerodrome;	ICAO Doc 4444 PANS-ATM Section 6.2 Reg (EU) 2020/469 Annex III amending 2017/373 Annex I
55	(47C) 'Estimated off-block time' means the estimated time at which the aircraft will commence movement associated with departure.	ICAO Doc 4444 PANS-ATM Section 1
56	(47D) 'Estimated time of arrival' means: (a) 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;	ICAO Doc 4444 PANS-ATM Section 1

	(b) for visual flight rules (VFR) flights, the time at which it is estimated that the aircraft will arrive over the aerodrome.	
57	(52A) 'flight procedure' means a set of predetermined flight manoeuvres intended to be followed by a pilot, published by electronic, printed or digital means, or both. Flight procedure is conducted either in accordance with instrument flight rules (IFR) or visual flight rules (VFR);	Reg (EU) 2020/469 Annex III amending 2017/373 Annex I
58	(52B) 'flight procedure designer' means a qualified person who performs design, documentation, validation, continuous maintenance, and periodic review of flight procedures;	Reg (EU) 2020/469 Annex III amending 2017/373 Annex I
59	(52C) 'flight procedure design services' means services for the design, documentation, validation, maintenance and periodic review of flight procedures necessary for the safety, regularity and efficiency of air navigation;	Reg (EU) 2020/469 Annex III amending 2017/373 Annex I
60	(52D) 'flight plan' means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;	ICAO Doc 4444 PANS-ATM Section 1
61	(53A) 'flight visibility' means the visibility forward from the cockpit of an aircraft in flight;	ICAO Doc 4444 PANS-ATM Section 1
62	(57C) 'glide path' means a descent profile determined for vertical guidance during a final approach;	ICAO Doc 4444 PANS-ATM Section 1
63	(60A) 'ground visibility' means the visibility at an aerodrome, as reported by an accredited observer or by automatic systems;	ICAO Doc 4444 PANS-ATM Section 1
64	(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);	ICAO Doc 4444 PANS-ATM Section 1
65	(62B) 'holding fix' means a geographical location that serves as a reference for a holding procedure;	ICAO Doc 4444 PANS-ATM Section 1
66	(62C) 'holding procedure' means a predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance;	ICAO Doc 4444 PANS-ATM Section 1
67	(62E) 'instrument flight rules (IFR)' are rules which allow an aircraft which is equipped with suitable navigation equipment appropriate to the route to be flown in accordance with the applicable requirements on air operations.	Reg (EU) 2020/469 Annex III amending 2017/373 Annex I

68	(62F) 'IFR flight' means a flight conducted in accordance with the instrument flight rules.	ICAO Doc 4444 PANS-ATM Section 1
69	(62G) 'INCERFA' is the code word used to designate an uncertainty phase;	ICAO Doc 4444 PANS-ATM Section 1
70	(62H) 'Independent parallel approaches' means simultaneous approaches to parallel or near-parallel instrument runways where ATS surveillance separation minima between aircraft on adjacent extended runway centre lines are not prescribed.	ICAO Doc 4444 PANS-ATM Section 1
71	(62L) 'Independent parallel departures' means simultaneous departures from parallel or near-parallel instrument runways.	ICAO Doc 4444 PANS-ATM Section 1
72	(62M) '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; (b) a three-dimensional (3D) instrument approach operation, using both lateral and vertical navigation guidance;	ICAO Doc 4444 PANS-ATM Section 1
73	(62N) '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;]	ICAO Doc 4444 PANS-ATM Section 1

74	(62O) '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;	ICAO Doc 4444 PANS-ATM Section 1
75	Definitions (62B) to (62D) are renumbered as follows: (62P) to (62R)	n/a
76	(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;	Reg (EU) 2020/469 Annex III amending 2017/373 Annex I
77	(65B) 'manoeuvring area' means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons;	ICAO Doc 4444 PANS-ATM Section 1
78	Definition (65A) 'metadata' is renumbered as follows: (65C) 'metadata' means data about data	n/a
79	(72A) 'missed approach procedure' means the procedure to be followed if the approach cannot be continued	ICAO Doc 4444 PANS-ATM Section 1
80	(72B) 'mode Secondary Surveillance Radar (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;	ICAO Doc 4444 PANS-ATM Section 1
81	Definition (72A) 'movement area' and (72B) 'navigation aid' are renumbered as follows: (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; (72D) 'navigation aid' means a facility or system external to the aircraft, which generates electro-magnetic signals to be used by aircraft navigation systems for position determination or flight path guidance	n/a
82	(72E) 'near-parallel runways' means non-intersecting runways whose extended centre lines have an angle of convergence/divergence of 15 degrees or less;	ICAO Doc 4444 PANS-ATM Section 1
83	(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;	ICAO Doc 4444 PANS-ATM Section 1

84	Definition (76A) 'position' is renumbered as follows: (76B) 'position' means , in a geographical context, a set of coordinates (latitude and longitude) referenced to the mathematical reference ellipsoid, which define the position of a point on the surface of the Earth;	n/a
85	(76C) 'position indication' means the visual indication, in non-symbolic or symbolic form, or both, on a situation display, of the position of an aircraft, aerodrome vehicle or other object;	ICAO Doc 4444 PANS-ATM Section 1
86	(76D) '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	ICAO Doc 4444 PANS-ATM Section 1
87	(77A) 'pressure-altitude' means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere;	ICAO Doc 4444 PANS-ATM Section 1
88	(78A) 'primary radar' means a radar system which uses reflected radio signals;	ICAO Doc 4444 PANS-ATM Section 1
89	(78B) 'primary surveillance radar (PSR)' means a surveillance radar system which uses reflected radio signals	ICAO Doc 4444 PANS-ATM Section 1
90	(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;	ICAO Annex 11 Section 1
91	(81A) 'radar' means a radio detection device which provides information on range, azimuth and/or elevation of objects	ICAO Doc 4444 PANS-ATM Section 1
92	(81B) '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;	ICAO Annex 11 Section 1
93	(81C) 'radiotelephony (RT)' means a form of radio communication primarily intended for the exchange of information in the form of speech;	ICAO Annex 11 Section 1
94	(81D) 'Receiving unit/controller' means an air traffic services unit/air traffic controller to which a message is sent;	ICAO Doc 4444 PANS-ATM Section 1
95	(81E) 'required communication performance specification' or 'RCP specification' means a set of requirements for air traffic service	ICAO Doc 4444 PANS-ATM Section 1

	provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication;	
96	(81F) 'required surveillance performance specification' or 'RSP specification' means a set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance;	ICAO Doc 4444 PANS-ATM Section 1
97	(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;	Reg (EU) 2020/469 Annex III amending 2017/373 Annex I
98	(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;	ICAO Doc 4444 PANS-ATM Section 1
99	(90B) 'secondary surveillance radar (SSR)' means a surveillance radar system which uses transmitters and receivers (interrogators) and transponders;	ICAO Doc 4444 PANS-ATM Section 1
100	(92A) 'sending unit/controller' means an Air traffic services unit/air traffic controller transmitting a message;	ICAO Doc 4444 PANS-ATM Section 1
101	(92B) 'sensitive area' means an area extending beyond the critical area where the parking or movement of aircraft or vehicles will affect the guidance signal to the extent that it may be rendered as an unacceptable disturbance to aircraft using the signal;	ICAO Annex 10 Volume I Attachment C Section 2.1.9.1
102	(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;	ICAO Doc 4444 PANS-ATM Section 1
103	(94B) 'situation display' means an electronic display depicting the position and movement of aircraft and other information as required;	ICAO Doc 4444 PANS-ATM Section 1
104	Definition (94A) 'SNOWTAM' is renumbered as follows: (94C) 'SNOWTAM' means a special series NOTAM given in a standard format, which provides a surface condition report notifying the presence or cessation of hazardous conditions due to snow, ice, slush, frost or water associated with snow, slush, ice, or frost on the movement area	n/a

105	(95A) 'special VFR flight' means a VFR flight cleared by ATC to operate within a control zone in meteorological conditions below VMC;	ICAO Doc 4444 PANS-ATM Section 1
106	(95B) 'standard instrument arrival (STAR)' means a designated IFR arrival route that links a significant point, normally on an ATS route, with a point from which a published instrument approach procedure can be commenced;	ICAO Doc 4444 PANS-ATM Section 1
107	(95C) 'standard instrument departure (SID)' means a designated IFR departure route that links 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;	ICAO Doc 4444 PANS-ATM Section 1
108	(96A) 'surveillance radar' means radar equipment used to determine the position of an aircraft in range and azimuth	ICAO Doc 4444 PANS-ATM Section 1
109	(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;	ICAO Doc 4444 PANS-ATM Section 1
110	(100A) 'terminal control area (TMA)' means a control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes;	ICAO Doc 4444 PANS-ATM Section 1
111	(103C) '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;	ICAO Doc 4444 PANS-ATM Section 1
112	(103D) '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;	ICAO Doc 4444 PANS-ATM Section 1
113	Definition (103C) 'transition altitude' is renumbered as follows: (103F) 'transition altitude' means the altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes;	n/a
114	(103G) 'transition layer' means the airspace between the transition altitude and the transition level;	ICAO Doc 4444 PANS-ATM Section 1
115	Definition (103D) 'transition level' is renumbered as follows:	n/a

	(103H) 'transition level' means the lowest flight level available for use above the transition altitude;	
116	(105A) 'uncertainty phase' means a situation wherein uncertainty exists as to the safety of an aircraft and its occupants;	ICAO Doc 4444 PANS-ATM Section 1
117	(105B) 'unmanned free balloon' means a non-power-driven, unmanned, lighter-than-air aircraft in free flight;	ICAO Doc 4444 PANS-ATM Section 1
118	Definitions (105A) 'validation' and (105B) 'verification' are renumbered as follows: (105C) 'validation' means, in relation to data, the process of ensuring that data meets the requirements for the specified application or intended use; (105D) 'verification' means, in relation to data, the evaluation of the output of an aeronautical data process to ensure correctness and consistency with respect to the inputs and applicable data standards, rules and conventions used in that process;	n/a
119	(105E) 'vectoring' means the provision of navigational guidance to aircraft in the form of specific headings, based on the use of an ATS surveillance system;	ICAO Doc 4444 PANS-ATM Section 1
120	(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;	ICAO Doc 4444 PANS-ATM Section 1
121	(107A) 'VOLMET' means meteorological information for aircraft in flight;	ICAO Annex 3 Section 1
122	(107B) 'VOLMET broadcast' means the provision, as appropriate, of current METAR, SPECI, TAF and SIGMET by means of continuous and repetitive voice broadcasts;	ICAO Annex 3 Section 1
123	(107C) 'voice-automatic terminal information service (Voice-ATIS)' means the provision of ATIS by means of continuous and repetitive voice broadcasts;	ICAO Annex 11 Section 1
124	Definition (107A) 'waypoint' is renumbered as follows: (107D) '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	n/a

	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;	
UK Reg (EU) No 923/2012 Article 2 Definitions		
126	Insert new definition, as follows: (8A) 'aerodrome flight information service (AFIS)' means flight information service for aerodrome traffic;	CAA. The current definition of AFIS was developed by EASA. The purpose of this amendment is to align the definition of AFIS with ICAO's definition of aerodrome control service by removing reference to 'alerting service' and to delete the phrase "at an aerodrome". This text is considered to be superfluous given that it is implied in the use of the term 'aerodrome traffic'.
127	Insert new definition, as follows: (61a) "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.'	ICAO Annex 10 Vol I Attachment C Section 2.1.9.1(a)
128	Insert new definition, as follows: (118a) "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.'	ICAO Annex 10 Vol I Attachment C Section 2.1.9.1(b)
Annex to UK Reg (EU) No 923/2012		
129	Point (d)(4)(ii)(A) of SERA.3210 is amended, 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 ILS/MLS sensitive area(s) when Category II or Category III precision instrument operations are in progress critical and sensitive area(s) of radio navigation aids;'	ICAO Annex 11 Section 3.8.2(a)
130	Point (d)(4)(ii)(B) of SERA.3210 is amended, as follows: '(B) subject to the provisions in (iii), the minimum separation between method or methods 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;'	ICAO Annex 11 Section 3.8.2(b)

131	Point (d)(4)(iv)(A) of SERA.3210 is amended, as follows: (A) vehicles and vehicles towing aircraft shall give way to aircraft which are landing, taking-off or taxiing or being towed ;	ICAO Annex 11 Section 3.8.4
132	Point (e) of SERA.8015 is amended, as follows: Read back of clearances, instructions and safety-related information	ICAO Doc 4444 PANS-ATM Section 4.5.7.5
133	Point (eb)(3) of SERA.8015 is replaced, as follows: Except when it is known that the aircraft has already received the information in a directed transmission, an QNH altimeter setting shall be included in: (i) the descent clearance, when first cleared to an altitude below the transition level; (ii) the approach clearance or the clearance to enter the traffic circuit; (iii) the taxi clearance for departing aircraft.	ICAO Doc 4444 PANS-ATM Section 4.10.4.5
134	SERA.9005(a) is amended as follows: (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 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; (8) information on space weather phenomena that have an impact on high frequency radio communications, communications via satellite, GNSS-based navigation and surveillance systems, and/or pose a radiation risk to aircraft occupants at flight levels; and (9) any other information likely to affect safety. and of any other information likely to affect safety.	ICAO Annex 11 Section 4.2.1 ICAO Doc 4444 PANS-ATM Section 9.1.3.8

135	<p>SERA.9005(b) is amended as follows:</p> <p>(b) Flight information service provided to flights shall include, in addition to that outlined in (a), the provision of information concerning:</p> <p>(1) weather conditions reported or forecast at departure, destination and alternate aerodromes;</p> <p>(2) collision hazards, to aircraft operating in airspace Classes C, D, E, F and G;</p> <p>(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</p> <p>(4) messages, including clearances, received from other air traffic services units to relay to aircraft.</p>	ICAO Annex 11 Section 4.2.2
136	<p>SERA.12005 is amended, as follows:</p> <p>(7) volcanic ash cloud; or</p> <p>(8) pre-eruption volcanic activity or a volcanic eruption; or</p> <p>(9) the runway braking action encountered is not as good as reported.</p>	ICAO Doc 4444 PANS-ATM Section 4.12.3.1(i)
137	<p>Point (a)(2) of SERA.14065 is amended as follows:</p> <p>(2) call sign and, for aircraft in the SUPER or heavy HEAVY wake turbulence category, the word “Super” or “Heavy” if that aircraft has been so identified by the competent authority;</p>	ICAO Doc 4444 PANS-ATM Section 7.3(b)