

11 August 2022

Policy Statement

POLICY FOR THE CLASSIFICATION OF UK AIRSPACE

1 Introduction

- 1.1 The [CAA \(Air Navigation\) Directions 2017](#) (as amended)¹ require the CAA to publish a national policy for the classification of UK airspace. The purpose of this Airspace Policy Statement is to provide that national policy and it shall be referred to herein as the 'Airspace Classification Policy'.
- 1.2 International Civil Aviation Organisation (ICAO) Annex 11 on air traffic services (ATS) requires that airspaces are classified and designated in accordance with the airspace classification system².
- 1.3 The classification and designation of ATS airspaces follows a determination of the need for air traffic services³. When it has been determined that ATS will be provided in particular portions of the airspace or at particular aerodromes, then those portions of the airspace or those aerodromes shall be designated in relation to the air traffic services that are to be provided⁴. As such:
 - (a) Those portions of the airspace where it is determined that flight information service and alerting service will be provided shall be designated as flight information regions (FIR).
 - (b) Those portions of the airspace where it is determined that flight information service and alerting service will be provided between flight level (FL) 245 and FL 660⁵ shall be designated as upper flight information regions (UIR).
 - (c) Those portions of UK airspace where it is determined that air traffic control service will be provided to instrument flight rules (IFR) flights shall be designated as control areas or control zones.
 - (d) Those portions of controlled airspace wherein it is determined that air traffic control service will also be provided to visual flight rules (VFR) flights shall be designated as classes B, C, or D airspace.
 - (e) Where designated within a FIR or UIR, control areas (CTA) and control zones (CTR) shall form part of that FIR or UIR.
- 1.4 This policy supports the requirement placed upon the CAA and described in the CAA (Air Navigation) Directions 2017 (as amended), to regularly review UK airspace classifications; the process for undertaking this task is described in the '[Procedure for the CAA to Review the Classification of Airspace](#)' (CAP 1991).
- 1.5 This policy statement supersedes that titled 'The Application of ICAO Airspace Classifications in UK FIRs' issued on 13 November 2014.

¹ The Civil Aviation Authority (Air Navigation) Directions 2017 (as amended) Article 3(a).

² ICAO Annex 11 section 2.6 transposed into law through UK (EU) Reg No 923/2012 Standardised European Rules of the Air (SERA) SERA.6001.

³ ICAO Annex 11 section 2.4.

⁴ ICAO Annex 11 section 2.5.

⁵ AIP ENR 2.1 refers.

- 1.6 References to EU regulations in this document are to those regulations as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018. For example, Reg (EU) No 923/2012 Standardised European Rules of the Air (SERA) is now UK (EU) Reg No 923/2012 SERA.

2 Scope

- 2.1 All airspace within the UK FIRs and UIRs is within the scope of this policy statement.

3 Definitions

- 3.1 For the purposes of this policy statement, the following definitions apply⁶:

- (a) 'Aerodrome' means a defined area (including any buildings, installations and equipment) on land or water or on a fixed, fixed off-shore or floating structure intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft. (UK (EU) Reg No 923/2012 Article 2(6))
- (b) '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. (UK (EU) Reg No 923/2012 Article 2(9))
- (c) 'Air traffic' means all aircraft in flight or operating on the manoeuvring area of an aerodrome. (UK (EU) Reg No 923/2012 Article 2(26))
- (d) 'Air traffic control (ATC) service' means a service provided for the purpose of preventing collisions between aircraft, and on the manoeuvring area between aircraft and obstructions; and expediting and maintaining an orderly flow of traffic. (UK (EU) Reg No 923/2012 Article 2(30))
- (e) 'Air traffic service (ATS) means a generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service). (UK (EU) Reg No 923/2012 Article 2(32))
- (f) 'Air traffic services (ATS) airspaces' means airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified. (UK (EU) Reg No 923/2012 Article 2(33))
- (g) 'ATS route' means a specified route designed for channelling the flow of traffic as necessary for the provision of air traffic services. (UK (EU) Reg No 923/2012 Article 2(46))

Note.

- (1) The term 'ATS route' is used to mean variously airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.
- (2) An ATS route is defined by route specifications which include an ATS route designator, the track to or from significant points (waypoints), distance between significant points, reporting requirements, and as determined by the competent authority, the lowest safe altitude. (UK (EU) Reg No 923/2012 Article 2(46) GM1)
- (h) 'ATS surveillance service' is a term used to indicate a service provided directly by means of an ATS surveillance system. (ICAO Doc 4444 PANS-ATM)

⁶ Additional terms and abbreviations used within this document are defined within the UK Air Traffic Management Vocabulary (CAP 1430).

- (i) 'ATS surveillance system' is a generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.
Note. A comparable ground-based system is one that has been demonstrated by comparative assessment or other methodology, to have a level of safety and performance equal to or better than monopulse SSR. (ICAO Doc 4444 PANS-ATM)
- (j) 'Control area (CTA)' means a controlled airspace extending upwards from a specified limit above the earth. (UK (EU) Reg No 923/2012 Article 2(56))
- (k) 'Controlled airspace' means an airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification. (UK (EU) Reg No 923/2012 Article 2(58))
Note. Controlled airspace is a generic term which covers ATS airspace classes A, B, C, D and E. (UK (EU) Reg No 923/2012 Article 2(58) GM1)
- (l) 'Control zone (CTR)' means a controlled airspace extending upwards from the surface of the earth to a specified upper limit. (UK (EU) Reg No 923/2012 Article 2(61))
- (m) 'Flight information region (FIR)' means an airspace of defined dimensions within which flight information service and alerting service are provided. (UK (EU) Reg No 923/2012 Article 2(76))
- (n) 'Flight information service (FIS)' means a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. (UK (EU) Reg No 923/2012 Article 2(77))⁷
- (o) 'IFR' means the symbol used to designate the instrument flight rules. (UK (EU) Reg No 923/2012 Article 2(87))
- (p) 'IFR flight' means a flight conducted in accordance with the Instrument Flight Rules. (UK (EU) Reg No 923/2012 Article 2(88))
- (q) 'instrument meteorological conditions (IMC)' mean meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions. (UK (EU) Reg No 932/2012 Article 2(91))
- (r) 'Terminal control area (TMA)' is a control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes. (ICAO Annex 11)
- (s) 'VFR' means the symbol used to designate the visual flight rules. (UK (EU) Reg No 923/2012 Article 2(139))
- (t) 'VFR flight' means a flight conducted in accordance with the visual flight rules. (UK (EU) Reg No 923/2012 Article 2(140))
- (u) 'visual meteorological conditions (VMC)' mean meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima. (UK (EU) Reg No 923/2012 Article 2(142))

⁷ Within the UK, the scope of flight information service, as defined in ICAO Annex 11 and transposed into law through Reg (EU) No. 923/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018, is met through the application of any of the UK Flight Information Services (CAP 774).

4 Airspace Classification Policy

4.1 Pursuant to the CAA (Chicago Convention) Directions 2007 and in accordance with SERA.6001, the UK applies the ICAO airspace classification system, subject to such Differences that may be laid down herein and detailed within AIP GEN 1.7.

4.2 Airspace classifications which may be utilised within the UK FIRs are:

- A – IFR flights only are permitted. All flights are provided with ATC service and are separated from each other.
- B – IFR and VFR flights are permitted. All flights are provided with air traffic control service and are separated from each other.
- C – IFR and VFR flights are permitted. All flights are provided with ATC service⁸ and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights and traffic avoidance advice on request.
- D – IFR and VFR flights are permitted. All flights are provided with ATC service. IFR flights are separated from other IFR flights, receive traffic information in respect of VFR flights and traffic avoidance advice on request. VFR flights receive traffic information in respect of all other flights and traffic avoidance advice on request.
- E – IFR and VFR flights are permitted. IFR flights are provided with ATC service and are separated from other IFR flights. All flights receive traffic information, as far as is practical.
- F – IFR and VFR flights are permitted. All participating IFR flights receive an air traffic advisory service and all flights receive flight information service⁷ if requested.
- G – IFR and VFR flights are permitted and receive flight information service⁷ if requested.

Note. Airspace classes A to E are referred to as ‘controlled airspace’.

4.3 The classification to be applied to a particular volume of airspace will depend on the consideration of multiple factors, which may have interdependencies, being both quantitative and qualitative, including:

- the attributes of the airspace classifications as described in SERA.6001;
- the type and density of air traffic involved and, specifically, the presence of commercial air transport flights involving the movement of passengers on a scheduled journey;
- the number and frequency of IFR flights operating within the airspace;
- the complexity of the operational environment; and,
- such other factors as may be relevant.

4.4 The CAA’s statutory obligations include the need to “secure the most efficient use of airspace consistent with the safe operation of aircraft and expeditious flow of air traffic”⁹. This has led to the adoption of the principle that the least restrictive classifications of airspace should be the norm in UK airspace design, with more restrictive classifications being established to satisfy a demonstrable safety need.

⁸ It is UK airspace policy that the class C airspace requirements for the provision of ATS do not apply within an activated temporary reserved area (TRA) and that ATS will be provided in accordance with UK Flight Information Services (CAP 774 refers) by the appropriate military or civil ATS provider.

⁹ Section 70 of the Transport Act 2000.

5 Applying the Airspace Classification Policy

5.1 In applying the Airspace Classification Policy:

- (a) the CAA will “seek to ensure that the amount of controlled airspace is the minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users is reflected on an equitable basis”¹⁰.
 - (i) In considering the classification of airspace, the airspace change sponsor should consider whether alternative means exist to achieve their objective. For example, a radio mandatory zone (RMZ) and/or transponder mandatory zone (TMZ) may be established when the establishment of a more restrictive classification of airspace is not warranted but additional measures to enhance flight safety are required.
- (b) airspace change sponsors shall ensure that the requirements of the CAA’s Airspace Change Process (CAP 1616)¹¹ are met¹².
- (c) The airspace classification shall be selected to permit safe access to as many types of airspace user as practicable.
- (d) The ability to use the volume of airspace flexibly will be considered at every opportunity to allow the maximum practicable integrated usage of UK airspace by all users. Every effort will be made to ensure that airspace sharing arrangements are not overly complex and that such arrangements do not reduce flight safety or render the affected airspace (or sharing arrangements) unusable. Segregation of aerial activities by use of airspace classifications should only occur where no other viable alternatives exist, and safety cannot be assured by any other means.
- (e) Airspace classifications will normally be used as follows:
 - (i) **Class A.** Where the complexity of the air traffic management (ATM) task justifies a permanent IFR-only environment, and where no reliance can be placed upon the ability of VFR flights to see and avoid other airspace users. Within the UK FIRs, en-route CTAs and major terminal control areas (TMAs) are normally notified as class A airspace. In the case of TMAs and CTAs, their designation as class A airspace will be based upon the complexity of the route structure and the ATM arrangements necessary to manage the airspace; e.g. the interface procedures between ATS units in adjacent airspace sectors. Exceptionally, class A may be notified for certain CTR, based upon the type, density and complexity of air traffic¹³.
 - (ii) **Class B.** At the time of writing, class B airspace is not utilised within the UK FIRs and UIRs. It may be appropriate for CTRs and CTAs in the vicinity of major international aerodromes to be notified as class B airspace where a justified requirement exists to separate VFR flights from other VFR flights. Otherwise, a need for the notification of class B airspace outside the ‘terminal’ environment is not anticipated.

¹⁰ The Civil Aviation Authority (Air Navigation) Directions 2017 (as amended) Article 3(ba).

¹¹ [CAP 1616 Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements](#).

¹² In compliance with Direction 3(b) of the CAA (Air Navigation) Directions 2017 (as amended), the CAA has developed a procedure for reviewing and, where appropriate, amending the classification of airspace. This procedure is applied by the CAA and is distinct from the airspace change process described in CAP 1616.

¹³ Airspace change sponsors should note that a class A CTR would preclude VFR and special VFR flight and should consider this in the context of the CAA’s obligation to ensure that the needs of all airspace users are reflected on an equitable basis.

- (iii) **Class C.** The UK FIRs and UIRs between FL 195 and FL 660 are notified as airspace class C¹⁴. Within the UK FIRs below FL195, CTAs and TMAs (or portions thereof) may be notified as class C airspace. CTRs and CTAs in the vicinity of major international aerodromes may be notified as class C airspace – as determined by the type, density and complexity of air traffic (including a consideration of forecast air traffic volumes) and particularly the volume of IFR flights – where a justified requirement exists to separate VFR flights from IFR flights.
- (iv) **Class D.** Within the UK FIRs, CTRs and CTAs in the vicinity of those aerodromes where an ATC service is provided to aerodrome traffic are normally notified as class D airspace, except where the design principles identified by the airspace change sponsor identify the need for a more restrictive classification. Class D airspace is the minimum classification notified for locations where a known traffic environment is necessary in both visual meteorological conditions (VMC) and instrument meteorological conditions (IMC). Exceptionally, within the UK FIRs below FL195, class D may also be notified for TMAs (or portions thereof).
- (v) **Class E.** Within the UK FIRs, where a known traffic environment is necessary only for IFR flights, class E airspace is notified. CTA, including those in the vicinity of certain aerodromes where an ATC service is provided to aerodrome traffic but where airspace classes A to D cannot be justified, may be notified as class E airspace. Class E shall not be used for CTRs.
- (vi) **Class F.** At the time of writing, class F airspace is not utilised within the UK FIRs and UIRs. Class F airspace may be notified as a temporary measure¹⁵, for a period not exceeding 3-years¹⁶, to facilitate the provision of air traffic advisory service until such time as it can either:
- be replaced by airspace of an appropriate classification to support the provision of air traffic control service; or,
 - where the traffic situation changes such that advisory service is no longer required and is replaced by flight information service, class G airspace is re-instated.
- Class F airspace may be notified in both the ‘terminal’ and ‘en-route’ environments in order to establish a defined volume of airspace in which an air traffic advisory service may be provided.
- (vii) **Class G.** This airspace classification applies to the remainder of the UK FIRs.

Note 1. The purpose of controlled airspace and the various structures referred to above are described in the CAA’s Policy for the Design of Controlled Airspace Structures.

Note 2. Enhancements to the characteristics of airspace classes D, E, F and G, such as the additional notification of the airspace as a transponder and/or radio mandatory zone¹⁷ (TMZ and RMZ respectively) should be considered in order to:

- meet safety criteria identified by the air navigation service provider in their safety assessment¹⁸;

¹⁴ Flight in class C airspace in VMC is conducted in accordance with Rules of the Air Regulations 2015 Rule 23.

¹⁵ SERA.6001(a)(8) and AMC1 SERA.6001(a)(8) refers.

¹⁶ GM1 SERA.6001(a)(8).

¹⁷ Note that a RMZ may only be notified in airspace classes E, F and G.

¹⁸ UK (EU) Reg No 2017/373 Annex IV Part-ATS ATS.OR.205 and associated AMC and GM refers.

- facilitate the provision of flight information, alerting and search and rescue services (applies to RMZ only)¹⁹; and,
- facilitate coordination with appropriate military units or with ATS units in adjacent States in order to avoid the possible need for interception for the purpose of identification (applies to RMZ only)²⁰.

5.2 In applying the airspace classification policy, in addition to the airspace change requirements detailed within [CAP 1616 'Airspace Change'](#), the airspace change sponsors and, where applicable, the CAA, shall demonstrate that their proposed airspace design meets the criteria laid out herein. Specifically, the criteria in paragraph 5.1 must be considered and the airspace change sponsors and, where applicable, the CAA, must demonstrate that the appropriate airspace classification/s have been considered within the airspace design.

5.3 The "Policy for the Design of Controlled Airspace Structures" highlights the requirement in CAP785B, Implementation and Safeguarding of Instrument Flight Procedures (IFPs) in the UK, for a full review of IFPs to be completed on a 5-yearly basis. The CAA considers that where controlled airspace is established to contain these IFPs, and where such a review identifies the need for changes to that IFP, it is axiomatic that there may be a subsequent and associated need to amend the airspace containing that IFP. The classification of controlled airspace is an integral aspect of the airspace design, and must therefore be considered within the context of that review.

6 **Communications, Navigation, Surveillance and ATS Requirements**

6.1 Airspace classifications applied to a particular volume of airspace are to be supported with the requisite communications and navigational infrastructure and air traffic services to provide for access by all types of flights appropriate to the airspace classification, noting that the needs of all airspace users must be reflected on an equitable basis. For example, the effective management of airspace in the vicinity of an aerodrome requires, as a minimum, primary surveillance radar-based ATS provision. Thus, the provision of such equipment is a prerequisite for the establishment of CTRs and CTAs in the vicinity of an aerodrome. The safety requirements detailed within [CAP 670 'Air Traffic Services Safety Requirements'](#) refer²¹.

6.2 It is important therefore that changes to airspace classifications are coordinated with the relevant areas within the CAA and, in particular, the Airspace, ATM and Aerodromes Department.

7 **Relation to Other CAA Airspace Policies**

7.1 This airspace policy statement should be read in conjunction with other supporting policy statements, such as:

- Policy for the Design of Controlled Airspace Structures; and,
- Policy for Radio Mandatory Zones and Transponder Mandatory Zones.

8 **Review of Policy**

8.1 The CAA shall review this policy statement and its associated annexes on a discretionary basis but not less than triennially from its publication date.

¹⁹ SERA.4001(b)(3) refers.

²⁰ SERA.4001(b)(4) refers.

²¹ CAP 670 Part C Section 3 SUR01.

9 **Enquiries**

9.1 Enquiries concerning airspace classification policy should be addressed to the CAA at:

Airspace & ATM Policy

Airspace, ATM & Aerodromes
CAA Safety and Airspace Regulation Group
Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

E-mail: ats.enquiries@caa.co.uk

9.2 Enquiries concerning the design, classification and notification of airspace should be addressed to the CAA at:

Airspace Regulation

Airspace, ATM & Aerodromes
CAA Safety and Airspace Regulation Group
Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

E-mail: airspaceregulation@caa.co.uk