

UK Airspace Management Policy

CAP 740



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Revision history

Issue 7: December 2018

This amendment to the sixth issue of CAP 740 - UK Airspace Management Policy is a complete re-issue.

It includes minor textual changes and updated references to the CAA Air Navigation Directions 2017 and the Airspace Modernisation Strategy (AMS) which has superseded the Future Airspace Strategy (FAS).

It provides clearer guidance on the requirements of sponsors proposing large scale military exercises outside of existing SUA which impact oceanic traffic flows or traffic flows of neighbouring States.

It incorporates a new chapter on the Concept and Governance of the Joint & Integrated (J&I) Approach to Airspace Policy, Planning, Management and Provision of ATS.

It also incorporates a new Appendix A detailing the UK Flexible Use of Airspace Strategy

Issue 7, Amendment 1: November 2019

This amendment updates the document to ensure it is compliant with Commission Implementing Regulation (EU) 2017/373 of 01 March 2017 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018. (Common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight.)

It removes reference to Regulation (EU) No. 691/2010 which is no longer in force and includes textual changes and references to UK Reg (EU) 2017/373. It also updates Reference Period (RP) 2 to RP3.

Issue 7, Amendment 2: January 2021

This amendment updates the document post MABCC name change to MAMC. Amended and additional text has been underlined in red.

Issue 8: March 2023

This amendment to the seventh issue of CAP 740 is a complete re-issue.

The CAP has been updated to reflect extant UK Regulation and policies following the UK's withdrawal from the EU. The changes include new UK Flexible Use of Airspace (FUA) reporting and looks to set a framework to later incorporate new entrants such as Space and Uncrewed Aircraft System into Airspace Management.

Foreword

General

1. CAP 740 provides applicable guidance and clarification relating to UK Airspace Management and is to be read in conjunction with the regulatory material referenced below. Non-inclusion of source regulatory material within this CAP does not preclude the end user from either the need to be aware of, or the need to comply with, the requirements contained within the source regulatory materials unless otherwise exempted from those requirements.
2. It is the policy of the United Kingdom (UK) government that, unless a Difference (from an ICAO requirement) or Acceptable Means of Compliance has been established, compliance with relevant international (i.e. ICAO and applicable equivalents such as International Telecommunications Union) and UK regulatory material is required to the extent mandated in law. Additionally, compliance with national requirements that are not addressed by international or UK regulations is also required.
3. The words 'must', 'shall' and 'will' indicate that compliance with applicable regulatory requirements is necessary. In the case of Acceptable Means of Compliance the word 'should' indicates that compliance is required, unless complying with an approved Acceptable Means of Compliance.

Regulatory references

4. CAP 740 UK Airspace Management Policy sets out the regulatory framework and governance of UK Airspace Management (ASM) practice and the application of the Flexible Use of Airspace (FUA) concept. In doing so it provides a structure within which related guidance, processes and protocols can be shaped, providing detail of procedures and requirements for the implementation and application of the FUA concept at the strategic, pre-tactical and tactical levels of operation.
5. CAP 740 serves as a means of compliance to the essential requirements of both UK Reg (EC) No. 2150/2005 (Flexible Use of Airspace Regulation) as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and Reg (EU) 2017/373 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018.) CAP 740 also ensures alignment with supporting EUROCONTROL guidance.
6. This document should also be read in conjunction with:
 - a) ICAO:

ICAO Doc 10088 Manual on Civil-Military Cooperation in Air Traffic Management First Edition, 2021

b) EU:

EUROCONTROL Specification for the Application of the Flexible Use of Airspace
European Route Network Improvement Plan (ERNIP) - Part 3 Airspace Management Handbook

c) UK:

Transport Act 2000
The Civil Aviation Authority (Air Navigation) Directions 2017
UK Reg (EU) 2017/373 Air Traffic Management/Air Navigation Services Common Requirements
UK Reg (EC) No 2150/2005 (Flexible Use of Airspace Regulation)
UK Reg (EU) 2004/551 the airspace regulation
Flow Management Position (FMP) Manual of Air Traffic Services (MATS) Part 2
UK Air Traffic Management Vocabulary (CAP 1430)
Swanwick Air Traffic Control Centre (Military): 78 Sqn Swanwick Military Order Book–MAMC

7. In order to assist the reader, links to related documents have been included where possible; however, the Civil Aviation Authority (CAA) is not responsible for ensuring the integrity of such links to documentation external to the CAA.

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Abbreviations and Definitions

Abbreviations

See [CAP1430 UK Air Traffic Management Vocabulary](#)

Definitions

A common European explanation of ASM terms is detailed in [The European Route Network Improvement Plan \(ERNIP\) – Part 3, Airspace management Handbook](#).

See also [CAP1430 UK Air Traffic Management Vocabulary](#).

Chapter 1

Airspace Management Background

Introduction

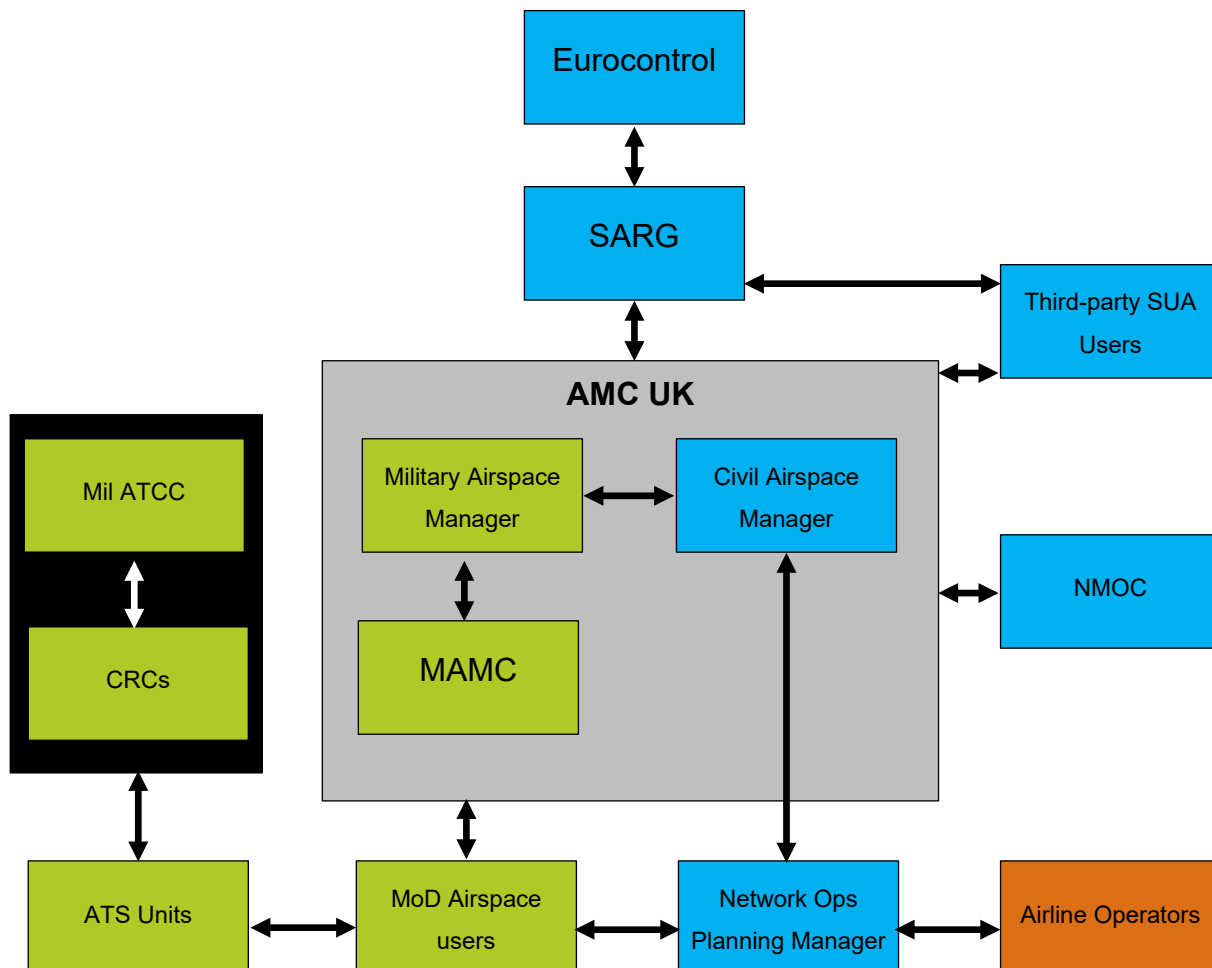
- 1.1 The principal objective of ASM is to achieve the most efficient use of the airspace through dynamic time-sharing and, at times, the segregation of airspace amongst various categories of airspace users on the basis of short-term needs.
- 1.2 The basis for the FUA concept is that airspace should be considered as a national asset and used flexibly on a day-to-day basis. Consequently, where possible any necessary airspace segregation should be temporary in nature whilst optimising network performance. The application of FUA principles aims to ensure that through the daily allocation of flexible airspace structures, any necessary segregation of airspace is based on real usage within a specific time period and defined airspace volume. The UK FUA Strategy is detailed in Appendix A.

Airspace Management Cell (AMC) UK

- 1.3 The practical application of the FUA concept and the efficient use of airspace by users is co-ordinated through the AMC, which ensures that there is effective sharing of airspace through joint and integrated civil/military/third-party planning and pre-tactical airspace allocation.
- 1.4 The AMC is an integrated operation, consisting of a Civil Airspace Manager (CAM), a Military Airspace Manager (MAM) and support staff. The responsibilities of the CAM and MAM are described in Appendix B.
- 1.5 Incorporated into the AMC is the Military Airspace Management Cell (MAMC). Divided into two elements, MAMC (Managed Airspace) coordinate and are responsible for the majority of military managed airspace bookings; whilst MAMC (Low Flying) are responsible for all military bookings in the UK Low Flying System (UKLFS).
- 1.6 The AMC UK is responsible for the administration of AMC managed areas, as defined in AIP ENR 5.1/5.2, in UK airspace. It also performs collaborative airspace planning with Ireland and other neighbouring States. AMC UK provides a Level 2 ASM service to Ireland as a Lead AMC arrangement as detailed in the UK/Irish Aviation Authority (IAA) AMC Letter of Agreement (LoA) and Chapter 4 of this document. This requires AMC UK to publish Irish Danger Area activity and changes to activity, in the UK/Ireland Airspace use Plan (AUP)/Updated Use Plan (UUP).

1.7 A diagram of AMC UK interactions is below.

Figure 1: AMC UK Interactions Diagram



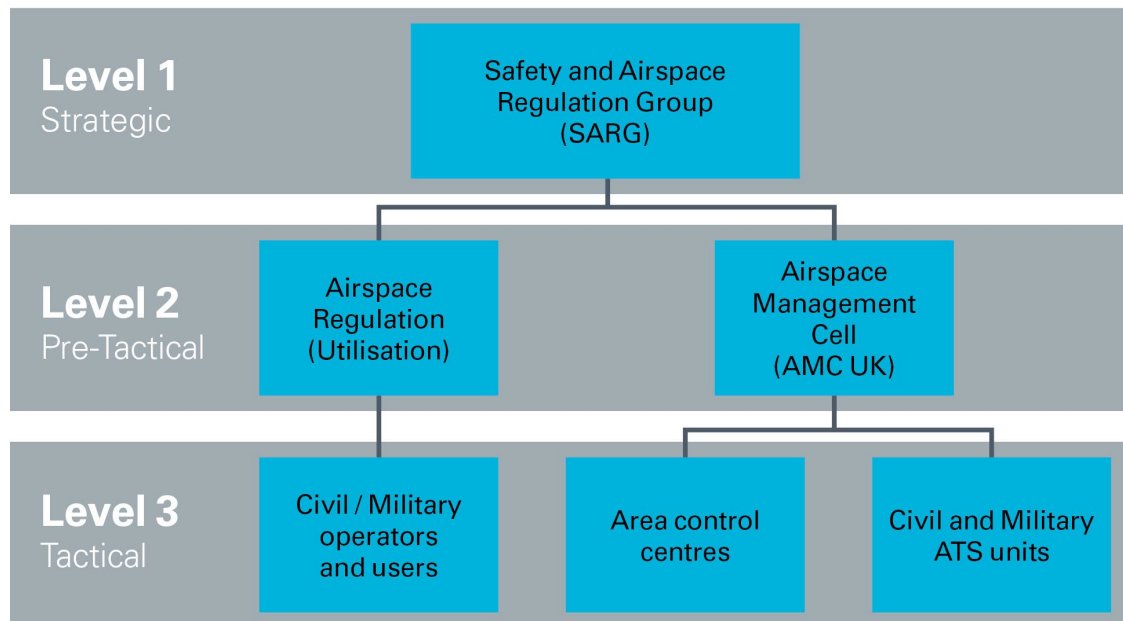
The Airspace Management Function (AMF) UK

1.8 The AMF combines the resources of the AMC, the Network Operations Planning Managers and the Network Operations Delivery specialists. This ensures H24 ASM cover (limited scope outside of AMC UK hours) using a common tool for ASM operations. ASM is aligned within Air Traffic Flow Capacity Management (ATFCM) in terms of training, process and communication.

The Three Levels of ASM

- 1.9 The FUA concept is based on three levels of ASM which are shown at Figure 2 and described below.

Figure 2: The Three Levels of Airspace Management



ASM Level 1 (Strategic)

- 1.10 Strategic ASM consists of a joint civil/military process within a national High-Level Airspace Policy Body (HLAPB). The HLAPB formulates national ASM policy and carries out the necessary strategic planning work, taking into account national and international airspace users and Air Traffic Service (ATS) providers' requirements.
- 1.11 Safety and Airspace Regulation Group (SARG) is the UK's HLAPB and in accordance with the general requirements of the FUA regulation, acts as the joint civil/military body performing a joint function.

ASM Level 2 (Pre-Tactical)

- 1.12 Pre-tactical ASM consists of the day-to-day management and temporary allocation of airspace. This is achieved through the two ASM functions, the airspace utilisation element of the CAA, and the joint AMC.
- 1.13 SARG Airspace Regulation (AR) through its airspace utilisation element (AR(U)) is responsible for providing deconfliction, co-ordination and notification of all known Unusual Aerial Activity (UAA) which takes place within the UK Flight Information Region (FIR)/Upper Information Regions (UIR). Oceanic Notices to

Aviation (NOTAMs) are normally the responsibility of NATS Operational Performance Specialists for reservations in Shanwick Centre FIR, Oceanic Control Area and the North Oceanic Transition Area and Shannon Oceanic Transition Area.

- 1.14 The AMC UK with the fully integrated MAMC are empowered with the authority to execute Level 2 ASM within the framework of the established airspace structures, priority rules and negotiation procedures as laid down by the CAA in this CAP. Temporary airspace structures and those structures wishing to be utilised by new entrants or commercial entities are dealt with on a case-by case basis whilst revised policy is drafted.

ASM Level 3 (Tactical)

- 1.15 Tactical ASM is the real-time activation, deactivation or reallocation of the airspace allocated at ASM Level 2. Level 3 ASM includes the resolution of specific airspace requirements and traffic situations, as well as real-time co-ordination. This permits the optimised use of airspace and can reduce the need to segregate airspace.

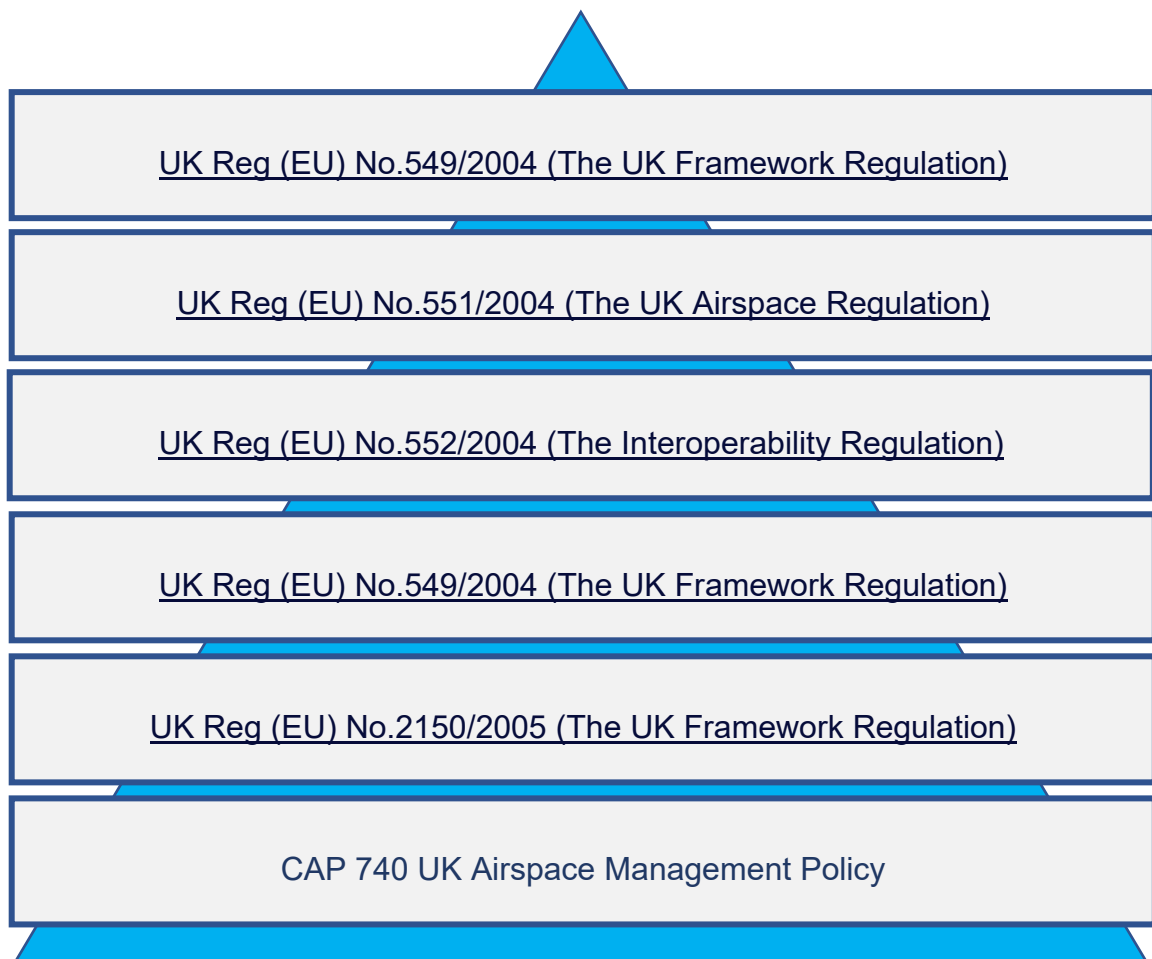
Chapter 2

ASM Policy and Regulatory Framework

Legislation

- 2.1 From 1 January 2021, appropriate EU Regulations have been retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018. These regulations are available [HERE](#) on the CAA web page. Military ASM Policy is at Appendix C to this document.
- 2.2 The FUA Specification serves as the means of compliance to the essential requirements listed in the Regulations and together with the EUROCONTROL ASM Handbook details the necessary ASM functions and ATM procedures to apply the FUA concept. Building upon that framework CAP 740 articulates the spectrum of responsibilities and ASM roles for the exploitation of FUA as part of the UK's ASM system.

Figure 3: Hierarchy of Regulatory Materials



- 2.3 The Transport Act 2000 sits as the over-arching legislation for air navigation and requires the CAA to exercise its main functions and duties with regard to the provision of air navigation services in the UK. The Secretary of State for Transport has nominated the CAA to perform air navigation functions as the Secretary of State may specify. More specifically, the CAA must secure the most efficient use of airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic whilst taking into consideration the requirements of operators and owners of all classes of aircraft. Environmental implications and national security issues must also be considered.
- 2.4 Under section 66(1) of the Act, the Secretary of State for Transport and Secretary of State for Defence issued the CAA (Air Navigation) Directions 2017, laying down the obligation to develop, promulgate, monitor and enforce policies for the sustainable use of UK airspace and for the provision of necessary supporting infrastructure for air navigation. The key functions include:
- a) Preparation and maintenance of a co-ordinated strategy and plan for the use of UK airspace and for air navigation.
 - b) Development of national policy for the classification of UK airspace, including design criteria, rules, guidelines and common procedures.
 - c) Co-ordination and promulgation of temporary changes in the utilisation of UK airspace to meet special air navigation requirements.
 - d) Provision of advice to the DfT and MoD as required.
 - e) To act as the focal point for international airspace policy, airspace design and regulatory matters.

Policy Framework

- 2.5 At ASM Level 2 a policy framework is established from which local orders and instructions issued by both civil and military units can be derived. This policy is based upon the principles outlined in the EUROCONTROL ASM Handbook, which shall be considered as guidance to how the AMC should interact with the Network Management Operations Centre (NMOC). The responsibilities for the execution of UK Level 2 ASM have been delegated to AR(U) and AMC.

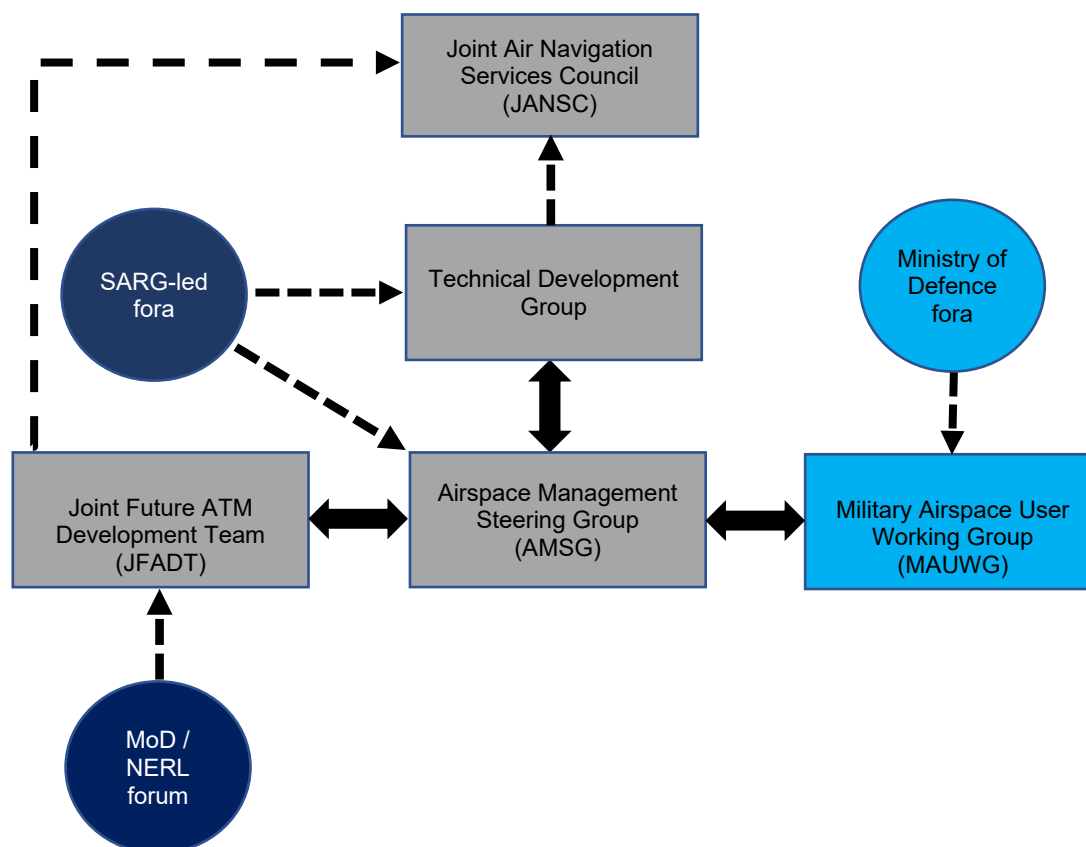
Governance

- 2.6 SARG formulates the national ASM policy and carries out the necessary strategic planning work, taking into account national and international airspace and space users' requirements. SARG is tasked with the continuous assessment of national airspace, the progressive establishment of new and more

flexible airspace structures, and the oversight and regulation of procedures for the allocation of these airspace structures.

- 2.7 The main function of SARG is to ensure safe efficient and seamless use of airspace, based on collaborative airspace planning both within the UK and with neighbouring States.
- 2.8 This is to be achieved through the development, approval and enforcement of common national policies for an effective airspace allocation and review process, taking into account the needs of all stakeholders, including national security and defence needs, environmental issues as well as any particular neighbouring States' requirements.
- 2.9 The CAA exercises oversight through UK Reg (EU) 2017/373 ATM/ANS.AR.C.010 and establishes stakeholder engagement and ensures consistency at the strategic level (Level 1) through the Airspace Management Steering Group (AMSG – see Chapter 4) and associated groups.
- 2.10 The AMSG and its associated groups (figure 4) comprise civil and military membership. This ensures that all parties share a common understanding of airspace requirements and plans. Wider military input is enabled at a tactical level through the Military Airspace User Working Group (MAUWG). For transparency and shared situational awareness a member of SARG is invited to attend the MAUWG as an observer.

Figure 4: Ensuring Military / Civil Coherence



Chapter 3

Concept and Governance of the Joint and Integrated (J&I) approach to Airspace Policy, Planning, Management and Provision of ATS

Introduction

- 3.1 The UK operates a J&I approach to airspace policy, planning and management, and the provision of ATS. Close cooperation is required between the CAA and the MoD in order that the UK's airspace is managed in a safe, orderly and efficient manner. J&I also requires close collaboration with the holder of the Government's en-route air traffic service provider 'Licence' NERL, economically regulated by the CAA, and third-party entities whose activities or utilisation of Special Use Airspace (SUA) could impact other airspace users.

Development of J&I

- 3.2 In 1996, the UK's main Air Navigation Service Provider (ANSP), NATS, and its regulator, the CAA, were functionally separated. NATS ceased to be a joint civilian/military organisation and began operating as a commercial entity, albeit continuing to be part of the CAA with the CAA being a statutory body and not formally part of the Government. SARG, previously part of NATS, along with its mixed civilian and military staff, continued to report to the Chair of the CAA and the Chief of the Air Staff (CAS). In July 2001, following the enactment of the Transport Act 2000, NATS was part privatised, thus further changing the status of J&I arrangements.
- 3.3 As part of establishing the privatisation framework, the Future Military Area Radar Service (FMARS) contract between NERL and MoD was signed, defining the relationship more clearly by identifying specific services and associated performance standards.

Definition of UK J&I Concept

- 3.4 The J&I concept is a collaborative approach between the CAA, MoD and NERL with regards to airspace policy, planning and management, and the provision of ATS in UK airspace. The guiding principles of J&I are:
- a) Airspace is a shared resource.
 - b) With the exception of airspace segregated for safety reasons, expeditious access to all airspace should be available to all users.

- c) Subject to operational prioritisation, and unless agreed otherwise, ATS will be available upon request, from both MoD and NERL units.

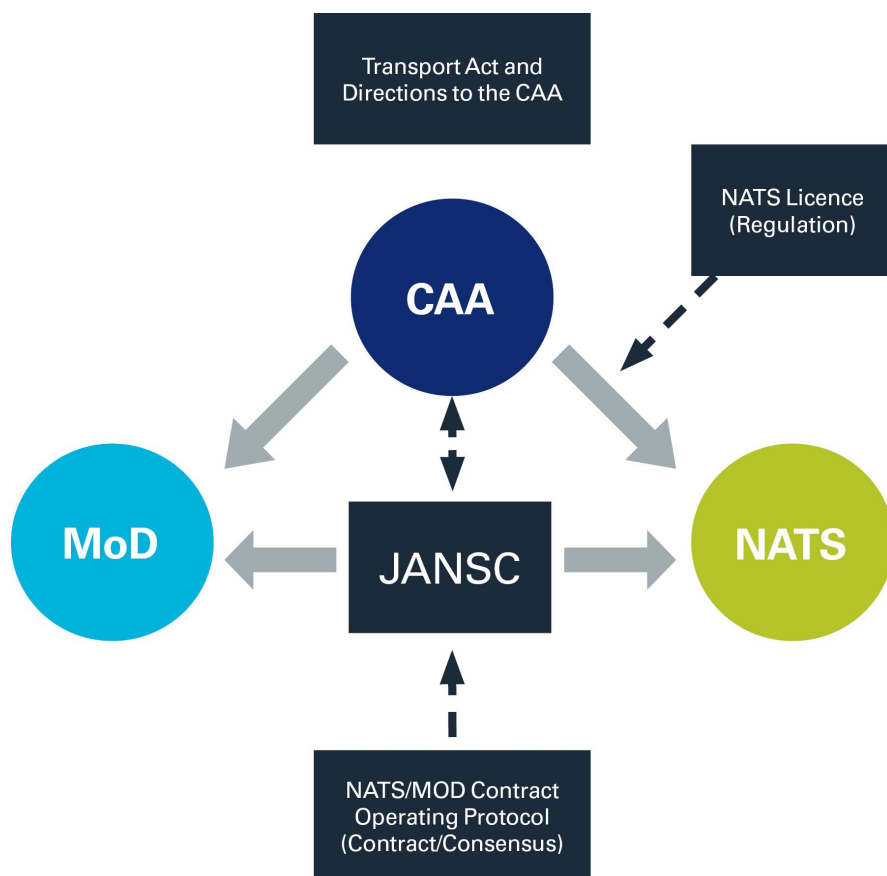
Obligations under the J&I Concept

- 3.5 **CAA.** Shall establish and operate such institutional arrangements with regards to air navigation as it sees necessary to promote safe, effective, efficient and integrated operation of air traffic service providers under Part I of the Transport Act 2000 and as detailed in the Directions Para 13(1).
- 3.6 **MoD.** When not required for operational reasons or training requirements, the MoD will accommodate NATS requirements on all aspects of airspace planning, design and management.
- 3.7 **NATS.** Will seek to accommodate MoD requirements on all aspects of airspace planning, design and management that impacts MoD Operations and Training.

Governance of the J&I Concept

- 3.8 The Transport Act 2000 sits as the over-arching primary legislation for air navigation. Under section 66(1) of the Act, the Secretary of State for Transport and Secretary of State for Defence issued the CAA (Air Navigation) Directions 2017. The Transport Acts.70(2)(e) requires CAA to exercise its air navigation functions in the manner best calculated to facilitate J&I.
- 3.9 The Directions require the CAA to make arrangements it considers appropriate for the role of the MoD in the joint and integrated provision of ATS and that those arrangements are documented in a MoU. Through the establishment of a Safety & Airspace Regulation Group, the CAA will make arrangements to second an appropriate number of MoD personnel as the MoD contribution to the functioning of the Group.
- 3.10 The Directions Para 12 outline, without prejudice to section 67 of the Transport Act, the CAA's obligations to consult and gain approvals of the Secretary of State for Defence regarding the need to increase the volume or alter the classification of controlled airspace, where either the CAA or MoD think this could have an adverse impact on the MoD's ability to maintain its operational capability.
- 3.11 The Directions require the CAA to ensure the continuation of the body known as the Joint Air Navigation Services Council (JANSC).

Figure 5: UK Joint and Integrated Approach to ATS Provision



JANSOC

- 3.12 The JANSOC is the principal mechanism for maintaining high-level oversight of arrangements between the CAA, NATS (En Route) plc and the MoD, for the continued provision of J&I ATS.
- 3.13 The Group Director, SARG is the Chairman of the JANSOC. The other members are Head Defence Airspace and Air Traffic Management (DAATM) and the NATS Chief Executive. Additional attendees and presenters attend at the JANSOC's request

CAA/ MoD MOU

- 3.14 The CAA/MoD MoU, dated 1 Apr 2021 between the Secretary of State for Defence and the CAA, details the MoD's contribution to the J&I provision of ATS within the UK, some of which are the responsibility of NERL under the Licence. It acknowledges that the MoD and CAA recognise the benefits to all airspace users, and with a view to the future continuation of the J&I provision of ATS, are minded that the MoD should continue to provide those services. This MOU will continue in force until 31st March 2031, or in the event of termination of the FMARS Contract (end date of 31st March 2030), or either party giving 12 months' notice to the other of its intention to cancel the MOU.

Operating Protocol

- 3.15 The operational relationship between NERL and the MoD ANSP is captured in an Operating Protocol. The Operating Protocol document is a high-level mechanism to draw together a listing of the subordinate operational agreements that exist.
- 3.16 The need for an Operating Protocol is a condition of the License granted to NERL. Condition 14(1)(b) of the Licence states that NATS shall at all times employ all reasonable efforts to consult and cooperate, in particular with the MoD, with the objective of developing, implementing and sustaining a joint and integrated approach to the provision of ATS to users by both NATS and the MoD.
- 3.17 Under Condition 14(3) of the Licence, NERL shall, in consultation with the MoD, draw up, implement and comply with an Operating Protocol approved by the CAA. The Protocol sets out the role of each of them in their capacity as ATS providers in relation to the achievement of the objectives set out under the aforementioned Condition.

Benefits of the J&I Concept

- 3.18 The main beneficiaries of the UK's J&I ATS are the airspace users. They gain a more flexible, cost efficient and environmentally friendly service than would otherwise be available.
- 3.19 The J&I concept facilitates the optimisation of UK airspace usage by sharing rather than segregating, allowing all parties to enhance operational effectiveness through FUA. The strength of the relationship enhances the UK's ability to speak with a single voice, this being vital in the evolving environment created by the deployment of the Single European Sky (SES).
- 3.20 The willingness of the military ANSP to provide a service to off-route Commercial Air Transport (CAT) ensures that the benefits of a surveillance service are available even to aircraft following low density routes that do not warrant the creation of Controlled Airspace.
- 3.21 The arrangement capitalises on the off-route skills of military controllers whilst allowing NERL controllers to concentrate upon en-route service provision. The co-location of civil and military staff at Swanwick Centre gives the MoD the benefit of ease of access by Operational Air Traffic (OAT) to all airspace, including the busy General Air Traffic (GAT) ATS routes and Free Route Airspace.

Summary

- 3.22 The UK's J&I approach brings quantifiable benefit to the nation. The relationship between the 2 ANSPs and the CAA is defined in the NERL Licence, the CAA/MoD MoU and the NERL/MoD Operating Protocol. The CAA Directions charge the Group Director, Safety & Airspace Regulation with oversight of J&I arrangements but confer no particular powers of enforcement. Any enforcement action, shall, where necessary, be conducted in accordance with the CAA's Regulatory Enforcement Policy.
- 3.23 The CAA, NATS and the MoD agree that a breakdown of J&I would significantly degrade the efficiency of service provision and airspace planning/management and would lessen the UK's impact in International fora. It therefore remains vital that all agencies remain committed to the J&I concept, addressing issues at a suitable level in order to ensure resolution to the satisfaction of all parties. The UK ASM Process is so heavily integrated between Civil and Military participants that it is considered inconceivable that a unilateral breakdown in the process can occur. For this reason, the UK does not have the specified temporary suspension process as described in UK Reg (EC) No. 551/2004 article 8, "Temporary Suspension".

Chapter 4

Application of UK Level 1 ASM (Strategic)

Introduction

- 4.1 Strategic ASM at Level 1 sees SARG (as UK HLAPB) formulating national ASM policy and protocols to ensure consistency with underpinning legislation and EUROCONTROL guidelines and undertaking necessary strategic planning work. It determines the working structures, implementation and application of the FUA concept for ASM Levels 2 and 3.
- 4.2 UK ASM policy establishes extensive co-operation and consultation processes between civil and military authorities and stakeholders. Day-to-day assurance of UK compliance with underpinning legislation and guidance is exercised through the Airspace Management Steering Group (AMSG).

Airspace Management Steering Group (AMSG)

- 4.3 The AMSG acts as the ASM oversight body and affects Level 1 ASM in the UK. A joint and integrated body, it determines the UK's approach to the implementation of airspace management requirements emanating from ICAO and UK policy in order to meet the needs of UK airspace users and air traffic service providers. The AMSG conducts a FUA Audit of the AMC in order to monitor compliance of the application of FUA in accordance with the Level 1 strategic aim. This is covered in further detail in chapter 9.
- 4.4 The regular assessment of airspace use is an important way of increasing confidence between civil and military service providers and all users that UK airspace is managed and controlled in an efficient and proportionate manner, and is an essential tool for improving airspace design and management. Progress of this plan along with updates on other FUA developments or significant activity performance indicators is covered by the FUA Annual Report, which is a key output of the AMSG. This is compiled in order to demonstrate the efficacy of FUA initiatives so that any inhibitors to FUA progress can be identified and managed appropriately. FUA reporting is detailed in Chapter 8.
- 4.5 In the conduct of its activity the AMSG must take into account safety, airspace structures, airspace capacity, airspace regulations and procedures, efficient and flexible use of airspace, the requirements of all airspace users, environmental obligations, equipment enhancements/future technology and cost efficiency. The requirements of the UK's Airspace Modernisation Strategy ([AMS](#)) are also taken into account. The output of the FUA Annual Report contributes to the Airspace

Modernisation Progress Report which fulfils the requirement to report on the application of FUA.

- 4.6 Initiatives regarding future developments and Advanced FUA solutions may fall outside of the scope of the AMSG. Where this is deemed to be the case, the Chair AMSG will remain independent from proposed developments in order to maintain independent regulatory oversight of any outcomes. Once agreed, such initiatives are subsumed into standard AMSG oversight.
- 4.7 AMSG takes account of other European ATM developments including the work of the Network Manager, develops regulatory policy in support of UK interests and directs and monitors the policy for, and implementation of, ASM in the UK.
- 4.8 Members of the AMSG including the AMC represent the UK at European level to ensure alignment with other European states, and to present the UK view to the Network Manager. Attendance is required at, but not limited to, the Airspace Management Sub-Group (ASMSG), Route Network Development Sub-Group (RNDSG) and Network Operations meetings (NETOPS).

Lead AMC and Cross-Border Arrangements

- 4.9 AMCs agree to provide the EUROCONTROL Central Airspace Data Function (CADF) with a single point of contact, by establishing responsibility for the co-ordination of the harmonised availability of SUA basis to a Lead AMC. The UK AMC is the Lead AMC as detailed in the CAA, IAA, UK AMC and Shannon and Dublin ACC LoA.
- 4.10 In the case of cross-border arrangements, AMCs agree to harmonise airspace availability by co-ordinating area status.
- 4.11 All cross-border arrangements and Lead AMC agreements are to be detailed in a formal Letter of Arrangement (LoA). The guidelines for the development of LoAs can be found in the [European Route Network Improvement Plan \(ERNIP\) - Part 3](#). All LoAs are to be signed by SARG as the UK National Supervisory Authority (NSA) on behalf of the CAA and the MoD. In addition, the agreements should be signed by the CAM and the MAM.

National Priorities

- 4.12 The priority for the allocation of airspace shall be determined by the CAM/MAM. National protocols for determining priorities for the allocation of Special Use Airspace (SUA) should be in accordance with the following principles:
 - a) The military is normally afforded priority for activities requiring the temporary segregation of SUA.
 - b) Civil requests for use of areas affected by segregated airspace may be put forward for consideration by the CAM/MAM.

- c) The following will determine the allocation of airspace:
 - i) Location of the core Oceanic Traffic Flows.
 - ii) Demand for North-South routes.
 - iii) Nature of the proposed activity.
 - iv) Cumulative impact of multiple SUA activation requests.
- d) Thirty-party requests for SUA which impact the network or other SUA, and are not resolved by an associated LoA, will be assessed on a case-by-case basis by SARG until they are fully integrated into the AMS governance structure.

4.13 In circumstances where significant weather events have been forecast, the following criteria may be used by the AMC as a guide for instigating a civil request for the use of SUA. If these values are expected to be met or exceeded over the sea area below the AMC Managed Areas (AMAs), the CAM may enter collaborative decision making with the MAM and request the variation, limitation or suppression of segregated military activity taking place over the sea.

- a) Surface wind: 45kts mean speed
- b) Gusts: > 50kts
- c) Sea State: 7

Flight Plan Buffer Zone (FBZ)

4.14 In the UK an FBZ will be applied if the HLAPB or an airspace change sponsor require their use. An FBZ is the associated airspace which may be applied around reserved/restricted airspace and may have associated FUA restrictions. FBZs define the lateral and vertical limits for the purpose of submitting a valid IFR Flight Plan (FPL) to safely route around such areas when they are active or planned to be active.

4.15 The FBZ will be published in either ENR 5.1 or ENR 5.2 of the UK AIP. Application of FBZs and any associated FUA restrictions is managed by the AMC and applied (where appropriate) through the UK AUP or UUP.

Chapter 5

Application of UK Level 2 ASM (Pre-tactical)

Introduction

- 5.1 Pre-tactical ASM at Level 2 consists of the day-to-day management and temporary allocation of airspace by the AMC in co-ordination with the NMOC. The AMC is delegated by SARG with the responsibility and authority to conduct Level 2 ASM.
- 5.2 The AMC operates within the working structures established at Level 1 ASM and applies the priority rules, protocols and negotiation procedures for the implementation and application of FUA laid down by the HLAPB. The AMC collects available information and requests for airspace usage, with civil requirements informed via NERL Network Operations, and military requirements directly via the MAM and MAMC. After a collaborative decision-making process, the airspace allocation is promulgated as an AUP and published daily on the [Network Operations Portal \(NOP\)](#) to provide information to Aircraft Operators for flight planning purposes. Any changes to this are notified on the NOP via an UUP.
- 5.3 In compiling the AUP, the AMC will consider input from airspace planners and users with responsibility for Level 2 pre-tactical ASM such as:
- a) NERL Pre-Tactical Planning Section: the conduit for civil airspace requests from UK Area Control Centres (ACC) and for co-ordination of an optimised civil ATM plan.
 - b) NATS Operational Performance Specialist (Oceanic): manage and promulgates the day-to-day requests for Oceanic airspace sharing.
 - c) Airspace managers of other SUA who have a responsibility to promulgate their activities.
- 5.4 The AMC methods of operation are detailed in NERL and MoD internal documentation maintained by the CAM and MAM respectively. The AMC is, in accordance with procedures and priorities agreed by the AMSG, responsible for the following:
- a) Approving temporary segregated use of nominated UK airspace.
 - b) Resolving conflicting airspace requirements, using national priorities to ensure the most efficient allocation of airspace while taking due account of the interests of all users.
 - c) Issue AUP/UUPs and relevant NOTAMs in a timely manner.
 - d) Liaison with the Military Liaison Officer and Aircraft Operator Liaison Officer at NMOC as appropriate for more immediate pre-tactical planning.

- 5.5 AMC UK will promulgate significant events, including large scale military exercises, which will impact the UK, including on occasion those located outside the Scottish and London FIR. This information is distributed to interested parties including AR(U) and DAATM. For a regional perspective, the Eurocontrol Network Operations Portal provides a comprehensive view of Network events.
- 5.6 Level 2 pre-tactical ASM in the UK is conducted by Airspace Regulation and the AMC as detailed below.

AMC UK Procedures

- 5.7 The AMC manages Level 2 ASM via three procedures:

Procedure 1

- 5.8 Procedure 1 (P1) is the publication of the national consolidated civil/military AUP on D-(minus)1 at 1500 UTC (1400 UTC in summer).

Procedure 2

- 5.9 Procedure 2 (P2) is the publication of an update that reflects a reduction or cancellation of a volume of segregated airspace to an associated AUP in the form of a UUP.

Procedure 3

- 5.10 Procedure 3 (P3) is used for short notice military airspace bookings and enables airspace to be booked no later than H-4 as part of a rolling UUP. P3 enhances FUA by responding to additional military tasks whilst minimising the impact on the network and maximising the accuracy of associated flight planning data.
- 5.11 P3 can only be applied to certain areas. Each application is agreed on a case-by-case basis taking into account the limitations and conditions necessary for the successful application of the procedure.
- 5.12 The AMC is responsible for the day-to-day operational application of P3. The requirement to issue a UUP for unplanned activations or to treat such activations tactically (subject to local conditions, limitations, internal and international agreements, and operational needs) is vested in the AMC.

SARG Airspace Regulation (Utilisation) (AR(U))

- 5.13 AR(U) is responsible for the processing of all requests for airspace in respect of activities, which because of their nature, cannot comply with ATC regulations and require exemption from the Air Navigation Order or need other special airspace arrangements and are looking to take place outside of established SUA structures. Consequently, airspace requirements processed through AR(U), usually in the form of an Airspace Co-ordination Notice (ACN), are normally given priority over airspace requests.

- 5.14 AR(U) is responsible for providing deconfliction, co-ordination and notification, through the promulgation of ACNs, Aeronautical Information Circulars, AIP Supplements and NOTAMs, of all known civil and military UAA which take place within the UK FIR/UIRs and specified Oceanic airspace but outside of SUA structures established in the AIP. In particular there is a responsibility for the notification of additional airspace volumes for military exercises and, where High Seas firing takes place outside an established area designed for that activity. Where large exercises are proposed outside of existing SUA which will impact oceanic traffic flows or impact traffic flows of neighbouring States, additional factors and engagement requirements will need to be considered. Sponsors of large-scale military exercises should contact AR(U) at least 18 months before the planned exercise start date and request civil/ military coordination guidance material.
- 5.15 AR(U) is also responsible for:
- a) The establishment of CAS(T) for Royal Flight.
 - b) Co-ordination and notify Royal Low-level Corridor for Royal Helicopter Flights.
 - c) The allocation of Cat D Status for VIP flights and State Visits.
 - d) The allocation of Cat E Status for certain UAA.
 - e) The establishment of Restrictions of Flying Regulations.
 - f) The issuing of Permissions or Exemptions for captive Balloon or Kite flying activities and Winch Launching against relevant articles of the Air Navigation Order.
 - g) The authorisation of, and co-ordination of, non-Deviating Status flights.
 - h) The management of the Open Skies ATC and Airspace Co-ordination Team (OSAACT).

Resolution of Problems and Disputes

- 5.16 In exceptional circumstances, or for airspace reservation requests that are not captured within the J&I concept, the CAM, MAM and NATS Operational Performance Specialists (within Oceanic Airspace) may require further guidance on the priority for airspace allocation. In such circumstances guidance will be provided by SARG.
- 5.17 Prior to providing guidance, SARG may discuss the issue with appropriate representatives from MoD and NERL, maintaining a record of any advice sought. Any resolutions are to be brought to the attention of AMSG.

Chapter 6

Application of UK Level 3 ASM (Tactical)

Introduction

- 6.1 Tactical ASM at Level 3 consists of the real time activation, deactivation or reallocation of airspace allocated at Level 2.
- 6.2 If airspace is no longer required, it should be 'handed back' to the appropriate Level 3 Manager who will then take action to reallocate or 'release' the airspace.
- 6.3 The AMC may choose to amend the AUP by producing a UUP if there are benefits to the management of the ATS network.

Tactical Airspace Activations

- 6.4 Notwithstanding the application of P3, certain airspace volumes may be activated by tactical negotiation between those parties who have been authorised in local orders, instructions and standing agreements.
- 6.5 When airspace is activated tactically, it is accepted that a re-route to remain clear of the affected airspace volume may be required by OAT or GAT.

Tactical Deactivation of SUA

- 6.6 The nominated Level 3 airspace managers for the SUA will ensure that no other operators require use of the SUA before notifying changes in SUA status to the MAMC.
- 6.7 The appropriate manager (Level 3 airspace manager, Range Authority etc) shall take the appropriate NOTAM action and MAMC shall inform the relevant ACCs, Air Navigation Service Providers (ANSPs) and Mil ATCC regarding the SUA status.

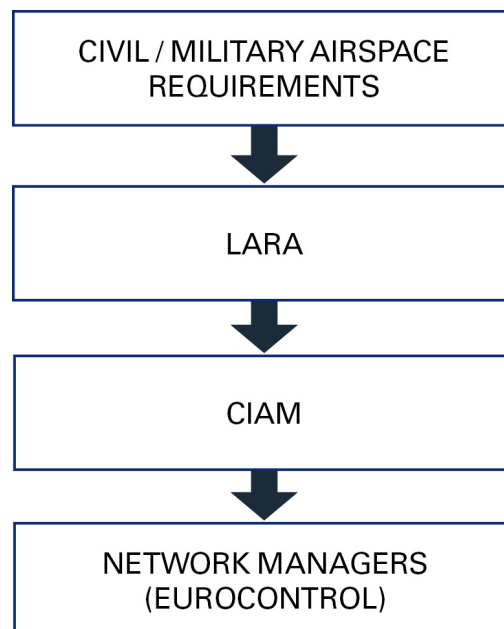
Chapter 7

ASM Tools

Introduction

- 7.1 UK Reg (EC) No. 2150/2005, Article 5 requires adequate supporting systems to be put in place to enable the AMC to manage airspace allocation and to communicate in good time the airspace availability to all affected users, ANSPs and relevant organisations¹.
- 7.2 ASM tools support the activation, deactivation, short-term cancellation of, and amendments to, reservations and reallocation of airspace structures. ASM tools can provide data that could be exploited and used across ATM platforms to provide airspace status information.
- 7.3 Supporting tools ease the transfer of data, assist planning, automate the booking of airspace and make possible the assessment of the likely impact of decisions. Adequate system support is essential to ensure the accuracy of the data used by the partners in ASM, and data consistency. A basic flow diagram of the use of current ASM tools in the AMC is in figure 6 below.

Figure 6: AMC Use of ASM Tools



¹ UK Reg (EC) No. 2150/2005 Article 5.

Local and sub-Regional Airspace Management Support System (LARA)

- 7.4 LARA is a EUROCONTROL software package provided to support and enhance the ASM process. It provides mutual visibility on airspace requirements and real-time exchange of ASM data, enabling a more efficient collaborative decision-making process and enhanced situational awareness for all stakeholders throughout the ASM process.
- 7.5 LARA's functionality encompasses all phases of ASM from long-term event planning to Level 2 and Level 3 ASM, including real-time co-ordination of airspace activations. A variety of interfaces to other systems, nominated Level 3 airspace managers, and the Network Manager enable greater situational awareness enhancing FUA and safety. Due to its network-based information sharing, all relevant users are instantly informed of current real-time status and changes to airspace allocations and availability.
- 7.6 LARA provides a user-friendly interface to create and manage airspace reservations. Shared data on bookings allows for early deconfliction of requests. The AMC remains the Level 2 ASM coordinator who finalises requests in accordance with national procedures and priorities.
- 7.7 Once ratified by the AMC, the information from LARA is transferred to the Network Manager as an AUP/UUP either via B2B or Collaboration Interface for Airspace Managers (CIAM).

CIAM

- 7.8 CIAM is a collaborative human machine interface service with customised features which gives AMCs the Centralised Airspace Data Function (CADF) as well as Flow Management positions access to airspace management functionalities.
- 7.9 The CIAM interface allows AMCs to import restricted airspace reservations from military planning tools, such as LARA.
- 7.10 CIAM enables the AMC to create, maintain and promote detailed AUP content. It has remote access to the [NOP Portal](#) allowing retrieval and synchronising of Network Operations environment data. Once sent by the AMC, the consolidation by CADF of all AUPs results in the publication or update of the European AUP.

Chapter 8

FUA Reporting

UK FUA Annual Report

- 8.1 The AMSG shall contribute to the production of the annual Airspace Modernisation Strategy (AMS) Progress Report, which fulfils the requirement to report on the application of the flexible use of airspace detailed in Article 7 of Regulation (EC) No 551/2004. In accordance with UK Reg (EC) No. 2150/2005, the following specific elements are to be incorporated into the report:
- a) General description of the national organisation and responsibilities at Level 1, Level 2 and Level 3 of the FUA concept.
 - b) Evaluation of the functioning of agreements, procedures and supporting systems established at the strategic, pre-tactical and tactical levels of airspace management. This evaluation of FUA shall be conducted with regard to safety, airspace capacity, efficiency and flexibility of aircraft operations of all users.
 - c) Problems encountered in the implementation of this Regulation, actions taken and need for changes.
 - d) Outcome of national inspections, surveys and safety audits.
 - e) Cooperation between the United Kingdom and EU Member States on airspace management and especially on the creation and management of cross-border areas and cross-border activities.
- 8.2 In addition to the legislated requirements, the report should also contain relevant supporting statistics and a narrative including any FUA developments, significant activity or issues at the AMC, causes for delay in FUA improvements, significant stakeholder engagement during the period and plans for the next period.
- 8.3 In addition to the Airspace Modernisation Progress Report, ASM statistics and activity will be presented and discussed at each AMSG. This will assist in the production of the Airspace Modernisation Progress Report.

Chapter 9

ASM Audit

UK AMC ASM Audit

- 9.1 It is a requirement for the UK to monitor compliance with the common rules for FUA², and this is conducted through periodic inspections, surveys and safety audits of the UK AMC.
- 9.2 The UK AMC provides a Lead AMC function some ASM for Ireland and as such, the aforementioned compliance checks will be considered from this perspective.
- 9.3 Audits and inspections are conducted on site at the UK AMC in Swanwick and will be assessed against the requirements of UK Reg (EU) No. 2017/373, UK Reg (EC) No. 2150/2005 and CAP 740.
- 9.4 The CAA will invite the MOD to assist in the preparation of audits and to witness the audit to provide regulatory oversight from the Joint and Integrated perspective.
- 9.5 The UK Regulation (EU) No. 2017/373 compliance matrix will be provided to the AMC prior to an audit.
- 9.6 To ensure consistent and transparent FUA performance reporting, the audit response will be used to fulfil the regulatory audit requirements, will form part of the subsequent year's AMS Progress Report.

² Eurocontrol FUA Specification

APPENDIX A

UK Flexible Use of Airspace Strategy

Introduction

- A1 This strategy aligns extant Airspace Management (ASM) policy (CAP 740), which is the primary method of applying FUA, to the implementation of the Advanced Flexible Use of Airspace (AFUA) concept being developed through the Airspace Modernisation Strategy (AMS) (which superseded the Future Airspace Strategy (FAS)) State Programme. It is a live document that will inform decisions taken at the Airspace Management Steering Group (AMSG).

Application of FUA

- A2 Routinely FUA is applied through the 3 levels of ASM as defined in CAP 740. The CAA is responsible for strategic ASM, the Joint and Integrated Airspace Management Cell (AMC) facilitates pre-tactical ASM³ and Level 3 Airspace Managers administer the tactical phase of the ASM process. The interface between the pre-tactical and tactical phases can broadly be defined as the stage at which it is possible to influence Instrument Flight Rules (IFR) flight plans. Post operational analysis is achieved by monitoring how efficiently Special Use Airspace (SUA) is used, and the flight planning and uptake rates of airspace made available for flight planning. The UK ASM process is depicted at Figure 7. The dashed line between Post Ops Analysis and Pre-tactical ASM highlights the AMCs remit to utilise post operational data to inform decisions taken at ASM Level 2.

³ This strategy only considers the application of FUA in the established airspace structure, therefore the temporary application of ASM level 2 provided by AR(U) is not considered.

Figure 7: UK ASM Process

- A3 In the UK strategic ASM (Level 1) is divided into 2 functions; strategic planning and strategic governance. The former considers significant events that impact the routine operation of UK airspace, for example large military exercises, or the impact of large sporting events. The governance element monitors compliance of FUA application against regulation, specifically UK Reg (EC) No. 2150/2005 and CAP 740.

Strategic Priorities

- A4 The composition of UK airspace is complex, and it would be impracticable to assess and introduce FUA improvement measures to all airspace volumes simultaneously. Therefore, it is necessary to prioritise those airspace structures that will deliver the most effective benefit in terms of FUA⁴.
- A5 The primary consideration when taking into account FUA improvement initiatives will always be safety. Due to environmental, financial and operational benefits to both civil and military airspace users, priority will be given to improvement

⁴ The prioritisation of airspace structures to improve FUA does not detract from the SUA booking priorities specified in CAP 740.

initiatives within airspace where routine access is required by both the military and GAT, and/or third-party operators.

Strategic Aims

- A6 The following strategic aims have been established to guide decisions taken at ASM Level 1 and to ensure that technical, process and operational developments evolve in line with extant policy and the AFUA concept.
- A7 Optimisation of Airspace Management processes to achieve greater flexibility and enable the introduction of efficiency measures as follows:
- a) Pursue methods to optimise the interface between pre-tactical and tactical ASM. The aim of which is to afford users of SUA optimum time when booking segregated airspace, and update the IFPS to reduce tactical ATC intervention⁵. Key considerations are:
 - i. Establishing a direct connection between UK ASM tools and the Network Manager systems.
 - ii. Consider Procedure 3⁶ booking on the day of operations for all volumes of SUA to reduce the need for tactical activation; enabling the flight plan system to react to late notice airspace requirements.
 - iii. Optimise the interface between the Level 2 and Level 3 ASM phases. This is required to ensure that the flight plan system has time to safely react to Updated Airspace Use Plans (UUP) while affording maximum flexibility when booking SUA.
 - iv. Support initiatives to enable IFR flight plans to be updated prior to getting airborne and whilst aircraft are airborne.
 - b) Minimise airspace segregation by activating airspace volumes based on need rather than routine activation through set times defined in the AIP⁷. Where possible the routine activation should be by NOTAM to facilitate strategic ASM.
 - c) Influence the development of the Dependent Applicability⁸ function to optimise the use of available airspace.

⁵ This is a key consideration within a systemised ATM environment.

⁶ Procedure 3 is the ability to book SUA after the AUP has been submitted to the NM.

⁷ It is acknowledged that the requirement to maintain routine activation of certain volumes of SUA will endure due to the nature of the activity.

⁸ Dependent Applicability is a flight plan management function that provides control over flow on defined routes through the Route Availability Document (RAD). In its current form the function is limited resulting in flight planning inefficiencies.

d) Optimise airspace booking procedures to permit the most efficient AUP/UUP.

A8 Strengthen cross border activities and relationships to achieve more practical and equitable airspace solutions across the Network. Establish Lead AMC agreements with neighbouring states to improve consistency of airspace availability for all cross border flows.

A9 Utilise interoperable ASM tools and systems that facilitate:

- a) Strategic ASM planning.
- b) Pre-AUP assessment of the impact of various airspace configurations on the UK network including the configurations of neighbouring States.
- c) Access to Airspace Reservation (ARES) data to relevant stakeholders and the ability for airspace users to directly input their SUA requirements.
- d) The AMC to pre-tactically manage all SUA within the UK, create the AUP/UUP and transmit the data directly to the NM to achieve the most flexible and efficient ASM process at both ASM Level 1 and 2.
- e) Maintenance of the real-time airspace picture to provide a single source of truth for the actual configuration of UK airspace at any given time. This information should be available to all aviation stakeholders.
- f) Collaborative Decision Making.
- g) Cross Border activities.

Establish a tool which better enables the CAA to assess the ASM process and protocols for each airspace volume, and the cumulative impact of multiple segregations, against the FUA regulation and UK policy.

A10 Continually review and formalise the ASM post operations analysis capability to ensure that the statistical data used to monitor FUA performance is accurate and complete. In addition to meeting the FUA regulatory requirement for performance reporting, this data will inform decisions taken at ASM Level 1, enabling the CAA to prioritise changes that enhance FUA.

A11 Establish strategic ASM planning protocols to provide formal guidance on the factors to be considered for large scale events that impact the UK ATM network.

APPENDIX B

Responsibilities of the CAM and MAM

- B1 The priority for the allocation of airspace shall be determined jointly by the CAM and MAM. National protocols for determining priorities for the allocation of SUA should be in accordance with the principles detailed in chapter 4.
- B2 All international LoAs are to be signed by SARG as the UK NSA on behalf of the CAA and the MoD. The agreements should additionally be signed by the CAM and the MAM unless a suitable alternative has been identified and approved by SARG.
- B3 A Temporary Segregated Area (TSA) or Managed Danger Area (MDA) should only be activated for airspace activity that requires segregation from other operations. Planning should be conducted for the 24-hour period between 0600 UTC the next day (D) to 0600 UTC the day after (D+1). Planning may also take place in advance of the following 24-hour period, to take into consideration weekends, public holidays and/or other periods of AMC closure. In these cases, the AUP for the period of closure should be published during the day before the closure commences. Such closures shall be notified to all interested parties.
- B4 Airspace should be allocated in line with area specific protocols. The AMC will ensure that airspace allocation is optimised, which may require deviation from the agreed protocols in order to accommodate unusual or exceptional circumstances. The CAM/MAM have been delegated the authority to make decisions in respect of pre- tactical allocation of flexible airspace structures.
- B5 The MAM is vested with the executive authority to temporarily segregate AMC managed SUA. The routine management of military activity areas is delegated to OC MAMC and their staff for the prioritisation, deconfliction and allocation of bids and the notification of activity in other airspace volumes.
- B6 Civil airspace requests from approved agencies may be submitted to the UK strategic and pre-tactical Network Managers for onward dissemination to civil and military AMC staff. The CAM, MAM and/or their deputies shall consider such requests, together with supporting data and the impact upon other airspace users in order to achieve a collaborative decision.
- B7 The AMC shall liaise with adjacent AMCs and ACCs with whom the UK has cross-border arrangements and assess the impact on cross-border flow prior to issuing the UK AUP and any subsequent updates to NMOC.

- B8 When a TSA is no longer required during ASM Level 2, MAMC shall advise (release) the previously segregated airspace as available. AMC (in conjunction with UK FMP) shall determine whether a UUP should be issued.
- B9 As detailed in Chapter 8, for the UK FUA Annual Report the MAM will provide the following usage data for AMAs. The total number of hours allocated at D-1 based on the AUP, the number of hours still allocated at H-3 and the total number of initially allocated hours used. Additionally, if applying Procedure 3, ad-hoc hours allocated and used are to be provided. The CAM is to provide en-route airspace efficiency data as requested by the CAA.
- B10 The CAM function can be performed by those civil staff working within the AMC authorised and approved to do so.

APPENDIX C

Military ASM Policy

Introduction

- C1 The strategic aim for Defence ASM is to enable all arms of Defence to 'train as they would fight' by safeguarding long term access to appropriately sized and sited airspace, which can be reserved for hazardous activities, while minimising the impact on other airspace users. This aim is underpinned by the UK Joint and Integrated approach to ASM and the MoD's adherence to national ASM Policy set out in this document. Within this policy, the application of the FUA concept is a key aim of military ASM Policy, to ensure that through the daily allocation of flexible airspace structures any segregation of airspace for military activities is based on a 'need-to-operate' basis within a specific time period and airspace volume.

Aim

- C2 The military aim is to ensure that airspace is safely and efficiently utilised and that due consideration is given to other airspace users. Every portion of airspace within which military Air Systems operate also has a network of CDRs that may be utilised by civil traffic. In order to minimise the impact of airspace segregation, the application of FUA principles is therefore a fundamental requirement, noting the need to maintain Operational Capability.

Airspace Policy

- C3 The CAA is responsible for developing, promulgating, monitoring and enforcing a policy for the sustainable use of UK airspace. In support of that, under the UK's Joint and Integrated approach to airspace management, and in response to the overarching policy set by the CAA the DAATM is responsible for developing and addressing all MoD airspace requirements. The DAATM is the MoD focal point for all Defence Airspace policy, including airspace related to the UK Low Flying System (UKLFS).
- C4 In order to coordinate airspace change proposals put forward by Defence organisations, DAATM is to be advised of all proposals for airspace change within the UK generated by military stakeholders, prior to engagement with the CAA.
- C5 DAATM is responsible for developing and coordinating a common Defence position in response to domestic airspace change proposals within the UK,

acting on behalf of the Operating Duty Holders (ODH) to ensure that the impact on operations and training is kept to a minimum.

- C6 While DAATM is not a risk owner, as an Aviation Duty Holder Facing organisation it has a responsibility to the ODHs for ensuring that the impact of any airspace policy and airspace change proposals are fully assessed by the appropriate Duty Holder (DH) organisation and that the levels of operating risk are assessed and ruled upon accordingly. To manage this process, consultation is undertaken by the DAATM, through the ODH representatives on the Military Airspace User Working Group (MAUWG), on all policy and airspace change proposals. This allows the ODH organisation to put forward an objection, suggest a change or to take suitable action to mitigate any associated hazards that are identified.

Military Danger Area Airspace Management

- C7 Military Danger Area Airspace Management Policy is focused on the activities required to comply with CAA Airspace Policy Directives.
- C8 It is essential that all activities undertaken within the Danger Areas (DA) are carried out safely in accordance with relevant civil legislation and military regulations⁹. In order to comply with this Military Danger Area Authorities (DAA) are to:
- a) Ensure that an appropriate management structure is in place to oversee all aspects of DA use.
 - b) Task an individual within their Command structure as Danger Area Airspace Manager (DAAM), to discharge the duties and responsibilities for DA oversight and Second Line assurance. Any such personnel are to be appropriately trained and assessed as competent to undertake their duties.
 - c) Ensure that third party safety assurance and regulatory oversight is conducted by personnel outside the service delivery/management chain. Any such personnel are to be appropriately trained and assessed as competent to undertake their duties.
 - d) Ensure that the promulgated vertical and lateral dimensions of the DA are the minimum required to meet the task for which the DA has been established.
- C9 Compliance with the Military Danger Area Airspace Management Policy will ensure the safe and efficient use of the DA airspace. The objectives are:

⁹ DSA 03.OME Part 3 (Defence Code of Practice for Ranges)

- a) To ensure that all DA activities are conducted safely within a robust safety management framework.
- b) To ensure that the principles of FUA are applied.

C10 The following points are to be addressed:

1. **Safety Management.** DA safety management activities are applied and reviewed regularly.
2. **Activity Approvals.** Processes are in place to validate and approve all DA activities.
3. **Hours of Operation.**
 - a) The promulgated hours of operation for a DA are the minimum required to carry out the task for which the DA has been established.
 - b) The hours of operation shall be subject to regular audit by the DAAM to ensure they continue to meet the requirement.
 - c) A process is in place to provide notification, by NOTAM, for any extensions to those DA hours notified within the UK Aeronautical Information Publication (AIP).
4. **Airspace Requirements.** Airspace dimensions and use are to be subject to a regular audit to confirm continued requirement. Any required changes are to be actioned in a timely manner and, where necessary, coordinated through the Military Airspace User Working Group (MAUWG).
5. **Local Airspace Liaison / Letters of Agreement (LoA).** DAAs are to ensure that effective liaison takes place with all local airspace users and Air Traffic Service (ATS) providers and, where needed, establish LoAs to make best use of DA airspace for the benefit of all.
6. **Safeguarding.** DAAs are to ensure that processes are in place for the purpose of safeguarding the airspace within and in the vicinity of the DA by ensuring that activities can be wholly contained within the DA.
7. **Documentation.** DAAs are to ensure that:
 - a) **Aeronautical Information Publications.** The information detailed within AIPs is accurate and that any changes are promulgated in a timely manner.
 - b) **Joint/Single Service Documents.** Documentation is in place outlining the roles, responsibilities and procedures for the full range of DA activities taking place within their allocated areas and that changes are promulgated in a timely manner.

8. **Usage Statistics.** DAAs are to ensure that a mechanism is in place for gathering, analysing and archiving detailed statistical DA usage data in accordance with the requirements at Chapter 8. Statistics shall be measured against promulgated hours of operation, and when requested are to be made available for CAA scrutiny.
9. **Infringement Procedures.** Procedures are to be implemented to:
 - a) Cease DA operations should an airspace infringement threaten the maintenance of Flight Safety.
 - b) Notify CAA Safety Data Department (SDD) via Air Safety Information Management System (ASIMS).
 - c) Notify DAATM Airspace SO1 of any DA infringement that compromised flight safety via ASIMS.
10. **Danger Area Crossing Service (DACS).** DAAs are to ensure that, where DACS is provided, that the service is provided in accordance with defined civil or military regulations and that an appropriate assurance process is in place. Any surveillance equipment used to monitor activity, provide DACS or detect incursions, must be designed, installed, operated and maintained in accordance with civil and/or military regulations.

ASM Procedures and Booking Process

- | | |
|-----|---|
| C11 | Bids to segregate airspace are to be based on the minimum volume of airspace required to accommodate the sortie profile for the duration of the activity. Consideration should be given to “level sensitive bookings” allow over or under flight of the portion of segregated airspace. |
| C12 | The MAM, via MAMC has executive authority for allocating airspace in accordance with the ASM priorities listed herein. |
| C13 | The military is normally afforded priority for activities requiring the temporary segregation of SUA (Ch3, Section 3.13); however, airspace reservations may be denied in the event that CAA SARG AR(U) has directed that another activity takes priority, regardless of whether that other activity is segregated or not. |
| C14 | For Exercises and other events that require segregated airspace outside the confines of the current DA construct, sponsors are to notify the MAM, DAATM and MAMC and expect to follow the CAP 1616 process unless otherwise advised. The notification procedure and planning timetable for a large-scale activity and/or military exercise/activity is detailed in ERNIP Pt.3 Annex 12 and can be up to 24 months in advance. |

- C15 Post-Flight Closedown. MAMC is required to conduct a daily post-flight review of airspace use, comparing actual use against the associated Mil Plan to account for military use of MAMC managed DAs.

CAA Buffer Policy

- C16 The user is responsible for containing any segregated activity within the vertical and lateral boundaries of the allocated DA airspace to ensure the safety of other users in adjacent areas. The CAA safety buffer policy gives reference¹⁰.

ASM Tools

- C17 The MoD has a remit to make the most efficient use of airspace and to reduce the impact of military airspace activities on other airspace users, particularly from CAT operating within the ATM Network. To do so there is a requirement to manage the activation and deactivation of segregated airspace in a dynamic manner where practicable, and to disseminate such information on a European-wide basis both to commercial and military operators.
- C18 To effectively manage the airspace booking process and to notify all civil and military airspace operators of current airspace status and future requirements for segregated airspace, the MoD should adopt the use of ASM tools to coordinate airspace requirements at the pre-tactical and tactical levels.

Low Flying Airspace Policy

- C19 Low Flying Training is part of essential preparation for operational duties. To achieve an appropriate balance between military training requirements while minimising the risk to aviation safety and the potential disturbance to the public, the United Kingdom Low Flying System (UKLFS) utilises all Class G airspace below 2000' agl within the UK FIR except for certain specifically designated areas.
- C20 The UKLFS is regulated by the MAA and governed by Assistant Chief of Air Staff. Responsibility for low flying policy, governance and management is delegated to DAATM (Low Flying).
- a) Where necessary, prohibition, restrictions or conditions may be imposed on military flights for safety or public amenity purposes.
 - b) Regulations, restrictions and procedures for the conduct of military low flying are contained within the UK Military Low Flying Handbook (UKMLFH) and at RA 2330.

¹⁰ Special Use Airspace – Safety Buffer Policy for Airspace Design purposes 22 Aug 2014.

UK Military LF Handbook

- C21 Aircrew are to refer to the UKMLFH when planning Military exercises and sorties in the UKLFS and to adhere to the procedures contained therein.

LF Booking

- C22 The MAMC has executive authority for managing airspace within the UKLFS. All flights within the low flying system are to be booked through the MAMC, in accordance with the UKMLFH