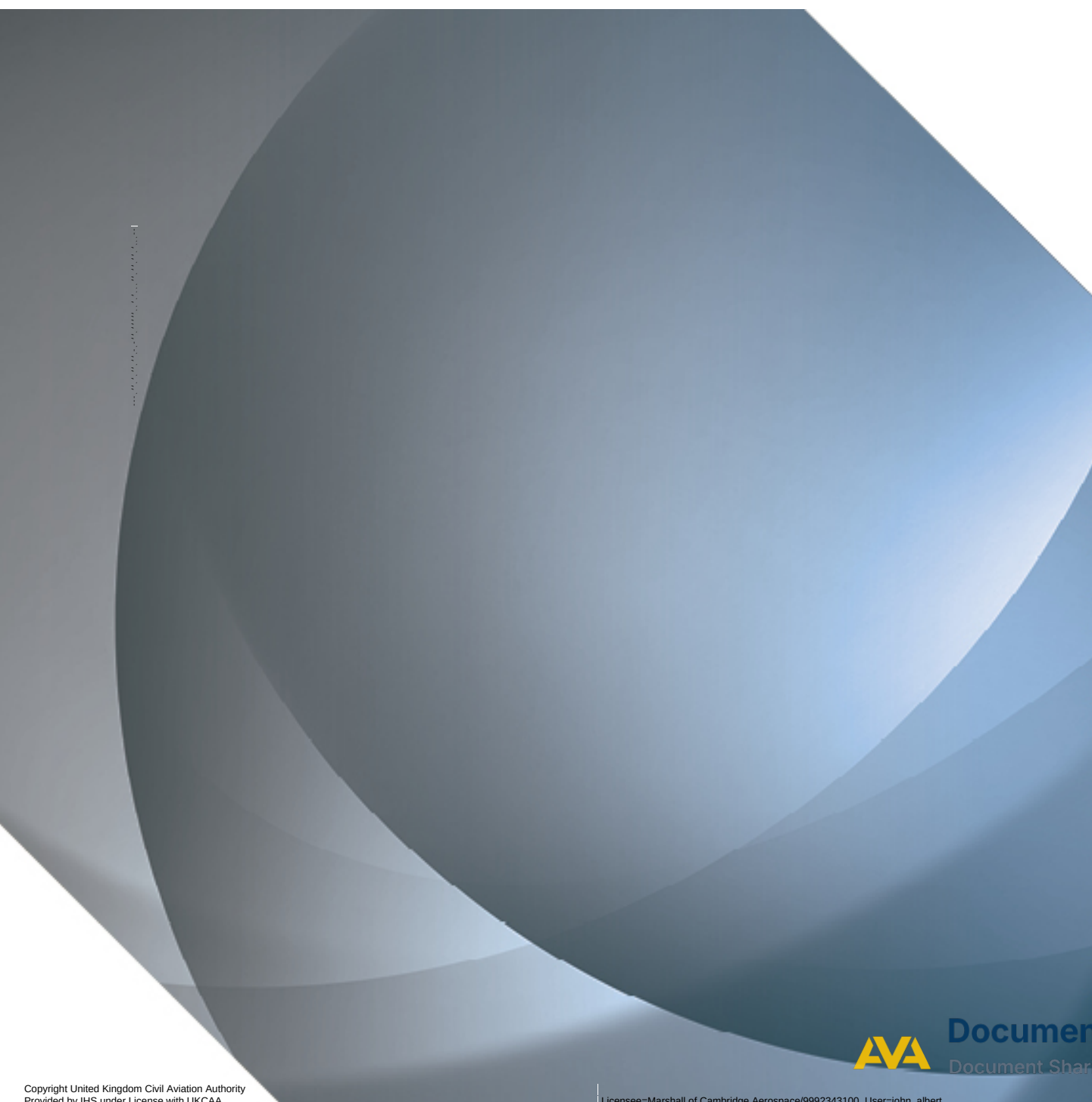


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Introduction

This CAP has been introduced to notify United Kingdom policy and provide guidance for the origination, management, transmission and distribution of aeronautical data and aeronautical information published in the Integrated Aeronautical Information Package (IAIP).

This CAP also specifies the applicable guidance and acceptable standards for complying with European Regulation (EU) No. 73/2010 & (EU) No. 1029/2014.

The terminology used throughout this CAP is such that State level requirements (non legislative) may be described as 'shall' where appropriate. This is necessary to ensure that aeronautical information and data is provided in a manner commensurate with the licensed obligations placed upon Aeronautical Information Service Providers (AISP) by the CAA.

Glossary of terms and recognised acronyms

Accuracy	A degree of conformance between the estimated or measured value and the true value.
Aeronautical Data Quality Implementing Rule (ADQIR)	European Regulation (EU) No 73/2010 & 1029/2014 laying down the requirements for the Quality of Aeronautical Data and Aeronautical Information for the Single European Sky.
Area Navigation (RNAV)	A method of navigation which permits aircraft operation on any desired flight path within the coverage of ground- or space based navigation aids or within the limits of the capability of self-contained aids, or a combination of these.
Aerodrome (ADR)	A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure or surface movement of aircraft.
Aerodrome Elevation (Elev)	The elevation of the highest point of the landing area. This is the highest point of that part of the runway used for both landing and take-off. See also 'Landing Area'.
Aerodrome Reference Point (ARP)	The aerodrome reference point is the geographical location of the aerodrome and the centre of its traffic zone where an ATZ is established.
Aerodrome Mapping Data (AMD)	Information that represents standardised aerodrome features for a defined area, including geospatial data and metadata.
Aerodrome Traffic Zone (ATZ)	The airspace specified as being airspace in the vicinity of an aerodrome notified for the purposes of Rule 38 of the Rules of the Air Regulations.
Aeronautical Data	A representation of aeronautical facts, concepts or instructions in a formalised manner suitable for communication, interpretation or processing.
Aeronautical Information (AI)	Information resulting from the assembly, analysis and formatting of aeronautical data.
Aeronautical Information	A notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP, but which relates to flight safety, air

Circular (AIC)	navigation, technical, administrative or legislative matters.
Aeronautical Information Management (AIM)	The dynamic, integrated management of aeronautical information services – safely, economically and efficiently – through the provision and exchange of quality-assured digital aeronautical data collaboration with all parties.
Aeronautical Information Publication (AIP)	A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.
Aeronautical Information Service Provider (AISP/AIS)	The organisation responsible for the provision of an aeronautical information service, certified in accordance with European Commission Regulation No 2096/2005.
Aircraft Stand	A designated area on an aerodrome intended to be used for parking an aircraft.
Air Navigation Service Provider (ANSP)	Any public or private entity providing air navigation services for general air traffic.
Apron	A defined area on a land aerodrome provided for the stationing of aircraft for the embarkation and disembarkation of passengers, the loading and unloading of cargo, fuelling, and for parking.
Authorised Source	Person ultimately accountable for aeronautical information published in the IAIP.
Calculated Point	A point in space that need not be specified explicitly in latitude and longitude, but that has been derived, by mathematical manipulation, from a known surveyed point.
Clearway	An area at the end of the take-off run available and under the control of the aerodrome licence holder, selected or prepared as a suitable area over which an aircraft may make a portion of its initial climb to a specified height.
Constituents	Tangible objects such as hardware and intangible objects such as software upon which the interoperability of the EATMN depends. In context of the ADQIR, the constituents are those that specifically make up the systems for AIS.
Critical Data	ICAO integrity level equivalent to a Data Assurance Level of DAL 1.

Cyclic Redundancy Check (CRC)	A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.
Danger Area (DA)	An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.
Database (db)	One or more files of data so structured that appropriate applications may draw from the files and update them.
Data Chain	Describes all the elements of the Controlled and Harmonised Aeronautical Information Network from origination through to publication.
Data Item	A single attribute of a complete data set, which is allocated a value that defines its current status.
Data Origination (DO)	The creation of a new data item with its associated value, the modification of the value of an existing data item or the deletion of an existing data item.
Data Originator	Person or persons authorised to originate aeronautical information and data on behalf of the 'Authorised Source'.
Data Quality (DQ)	A degree or level of confidence that the data provided meets the requirements of the data user in terms of accuracy, resolution and integrity.
Data Validation	The process of ensuring that data meets the requirements for the specified application or intended use.
Data Verification	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.
Declared Distances	The distances declared by the aerodrome authority for the purpose of application of the requirement of the Air Navigation (General) Regulations in respect of airplanes flying for the purpose of public transport.
Declared Point	A point in space, defined by latitude and longitude, that is not dependent upon, nor formally related to, any known surveyed point.
Derived Point	A point in space not determined by survey but derived from source data that

	has been defined in WGS-84.
Digital NOTAM	A data set that contains the information included in a NOTAM in a structured format which can be fully interpreted by an automated computer system without human interpretation.
Direct Electronic Connection	A digital connection between computer systems such that data may be transferred between them without manual interaction with the data itself (thus avoiding error prone copy/paste actions).
European Air Traffic Management Network (EATMN)	Network of constituents and systems that together form the interoperable functions of the Single European Sky.
Electronic Obstacle	A digital data-set representing the vertical and horizontal extent of the obstacle
Electronic Terrain	A digital data-set representing the terrain surface in the form of continuous elevation values at all intersections (points) of a defined grid, referenced to a common datum.
Essential Data	ICAO integrity level equivalent to a Data Assurance Level of DAL 2.
Extensible Mark-up Language (XML)	A version of SGML that allows design of a customized mark-up language, used to allow for easy interchange of documents and data on the World Wide Web or between software components.
Feature Catalogue	Catalogue containing definitions and descriptions of the feature types, feature attributes, and feature associations occurring in one or more sets of geographic data, together with any feature operations that may be applied.
Geoid	The equipotential surface in the gravity field of the Earth, which coincides with the undisturbed mean sea level extended continuously through the continents.
Geospatial	Information that identifies where particular features are in relation to the earth's surface.
Integrated Aeronautical Information Package (IAIP)	A package that consists of the following elements: Aeronautical Information publications (AIP) inc amendments.

	Supplements to the AIP. NOTAM and pre-flight bulletins. Aeronautical information circulars. Checklists and valid NOTAMs.
Integrity	A degree of assurance that a data item and its value have not been lost or altered since the data origination or authorised amendment.
Intermediate holding position	A designated position intended for traffic control at which taxiing aircraft and vehicles shall stop and hold until further cleared to proceed, when so instructed by the aerodrome control tower.
Landing Area	That part of a movement area intended for the landing and take-off of aircraft.
Landing Distance Available (LDA)	The distance from the point on the surface of the aerodrome above which the airplane can commence its landing, having regard to the obstructions in its approach path, to the nearest point in the direction of landing at which the surface of the aerodrome is incapable of bearing the weight of the airplane under normal operating conditions or at which there is an obstacle capable of affecting the safety of the airplane.
Mean Sea Level (MSL)	The Sea Level halfway between the mean levels of high and low water.
Metadata	A set of data that describes and gives information about other data.
Next Intended User	The entity that receives the aeronautical information from the aeronautical information service provider.
Notice to Airmen (NOTAM)	A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.
Notified Body	A body listed in the Official Journal of the European Union who has been appointed to carry out tasks pertaining to the assessment of conformity and declaration of suitability for use of constituents.
Obstacle data	All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in

	flight, or that stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.
Period of Validity	The period between the date and time on which aeronautical information is published and the date and time on which the information ceases to be effective.
Procedure Design	The combination of aeronautical data with specific flight instructions to define instrument arrival and/or departure procedures that ensures adequate standards of flight safety.
Quality Management System (QMS)	Coordinated activities to direct and control an organization with regard to quality
Resolution	A number of units or digits to which a measured or calculated value is expressed and used.
Routine Data	ICAO integrity level equivalent to a Data Assurance Level of DAL 3.
Runway (RWY)	A defined rectangular area, on a land aerodrome prepared for the landing and take-off run of aircraft along its length.
Runway End Safety Area (RESA)	An area symmetrical about the extended runway centre-line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.
Runway Holding Position	A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorised by the aerodrome control tower.
Runway Strip	An area of specified dimensions enclosing a runway intended to reduce the risk of damage to an aircraft running off the runway and to protect aircraft flying over it when taking-off or landing.
Runway Threshold	The beginning of that portion of the runway usable for landing.
Safety Management System (SMS)	A safety management system (SMS) is an organised approach to managing safety including the necessary organisational structure, accountabilities, policies and procedures.

Single European Sky (SES)	A legislative framework for European Aviation development.
Standard Generalised Mark-up Language (SGML)	A standardised mark-up language for describing the logical structure of a computer document.
Stand	See Aircraft Stand.
Stopway	A defined rectangular area beyond the end of the TORA suitably prepared and designated as an area in which an aeroplane can be safely brought to a stop in the event of an abandoned take-off.
Sub-Contractor	A firm or person that carries out work for a company as part of a larger project.
Survey Data	Geospatial data that is determined by measurement or survey.
Surveyed Point	A clearly defined physical point, specified by latitude and longitude, that has been determined by a survey in accordance with CAP 232.
Take-off Distance Available (TODA)	Either the distance from the point on the surface of the aerodrome at which the aeroplane can commence its take-off run to the nearest obstacle in the direction of take-off projecting above the surface of the aerodrome and capable of affecting the safety of the airplane, or one and one half times the take-off run available, whichever is less.
Take-off Run Available (TORA)	The distance from the point on the surface of the aerodrome at which the aeroplane can commence its take-off run to the nearest point in the direction of take-off at which the surface of the aerodrome is incapable of bearing the weight of the airplane under normal operating conditions.
Taxiway (TWY)	A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including: a) Aircraft stand taxi lane. A portion of an apron designated as a taxi route intended to provide access to aircraft stands only. b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron. c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing airplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimising runway occupancy

	times.
Taxiway Strip	An area of specified dimension enclosing a taxiway and intended to protect aircraft operating on the taxiway and to reduce the risk of damage to an aircraft running off the taxiway.
Taxiway Holding Position	A designated position at which taxiing aircraft and vehicles may be required to hold in order to provide adequate clearance from a runway or another taxiway. 1. Runway Taxi Holding Position. A Taxi Holding Position intended to protect a runway. 2. Intermediate Taxi Holding Position.
Taxiway Intersection	A junction of two or more taxiways.
Terrain Data	Data about the surface of the earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow obstacles;
Unified Modelling Language (UML)	UML is an ISO Standard for modeling objects and a refinement of earlier Oriented Design and Object Oriented Analysis methodologies.

Policy and guidance documents referred to in this CAP

- Annex 15 to the Convention on International Civil Aviation – Aeronautical Information Services.
- Annex 4 to the Convention on International Civil Aviation – Aeronautical Charts.
- European Regulation (EU) No. 73/2010 & 1029/2014 – Aeronautical Data Quality Implementing Rule.
- European Regulation (EU) No. 139/2014 – EASA Aerodrome Certification
- European Regulation (EU) No. 1035/2011 – Common Requirements for the Provision of Air Navigation Services.
- European Regulation (EC) No. 552/2004 – Interoperability of the European Air Traffic Management Network.
- Eurocontrol Specification for the electronic Aeronautical Information Publication (eAIP).
- Eurocontrol Specification for the Origination of Aeronautical Data (DO) Vol I.
- Eurocontrol Specification for the Origination of Aeronautical Data (DO) Vol II.
- Eurocontrol Specification for Data Assurance Levels (DAL).
- Eurocontrol Specification for Data Quality Requirements (DQR).
- Eurocontrol Specification for Aeronautical Information Exchange (AIX).
- CAA Publication CAP 232 – Aerodrome Survey Requirements.

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Chapter 1

Aeronautical Information Management in the UK

Background to Aeronautical Information Provision

International Civil Aviation Organisation (ICAO)

- 1.1 The Civil Aviation Authority (CAA) is responsible, under the Civil Aviation Authority (Air Navigation) Directions 2001 given by the Secretary of State under Section 66(1) of the Transport Act 2000, ("the Directions"), for the form and content of the UK Aeronautical Information Publication (AIP) and to ensure that an Aeronautical Information Service (AIS) is provided in accordance with international obligations and any additional requirements the CAA may determine from time to time.
- 1.2 The Secretary of State for Transport has additionally given the CAA the Civil Aviation Authority (Chicago Convention) Directions 2007, in order to ensure that the CAA, when exercising its statutory functions, acts consistently with the obligations placed on the United Kingdom under the Chicago Convention (1944).
- 1.3 The CAA's Safety & Airspace Regulation Group (SARG) carries out the CAA's functions under the Directions, and the Infrastructure (INF) section of the Airspace ATM & Aerodromes (AAA) department undertakes this function in respect of AIS on behalf of the CAA.
- 1.4 The Secretary of State has granted a licence to NATS (En Route) Plc (NATS for the purposes of this document) under Section 6(1) of the Transport Act 2000 authorising NATS to provide Air Traffic Services (ATS) in the United Kingdom and certain other international airspace for which the UK is responsible, including the Shanwick Oceanic area.
- 1.5 Under this licence NATS is required to make available Specified Services which include the UK Aeronautical Information Service (AIS).
- 1.6 The objective of the AIS is to ensure the flow of accurate aeronautical information necessary for the safety, regularity and efficiency of international air navigation. This is achieved by the publication and distribution of the Integrated Aeronautical Information Package (IAIP), the elements of which originate from the requirements specified in:
 1. ICAO Annex 15 – Standards and Recommended Practices for Aeronautical Information Services, and:
 2. ICAO Annex 4 – Standards and Recommended practices for Aeronautical Charts.

European Commission Regulation

Article 1

- *The Regulation lays down the requirements on the quality of aeronautical data and aeronautical information in terms of accuracy, resolution and integrity.*

- 1.7 European Commission Regulation (EU) No 73/2010 lays down the requirements on the quality of aeronautical data and information for the Single European Sky (SES). The regulation first entered into force on 27th January 2010, and was subsequently updated on 26 September 2014 as (EU) No. 1029/2014 to reflect updated document references and minor administrative changes. Together they supplement and strengthen the requirements of ICAO Annex 15. The regulation is commonly referred to as the 'ADQIR' and will be referred to as such throughout this CAP. It also supplements the 'Common Requirements' Regulation (EU) No 1035/2011 which provides for the certification of ANSPs including providers of AIS. This is currently applicable only to NATS as the UK's national AISP.
- 1.8 The ADQIR was introduced to achieve aeronautical data and information of sufficient quality as a key enabler of the European Air Traffic Management Network (EATMN) and takes into account the provisions of the Single European Sky (SES) Regulations and in particular the Interoperability Regulation (EC) No 552/2004.
- 1.9 The scope of the ADQIR extends from the point of origination of the data, through to the publication of the data in the IAIP, including printing and distribution, to the point of delivery to the next intended user, with the intent of maintaining assigned integrity levels throughout.
- 1.10 This CAA Publication (CAP) identifies those parties responsible for the origination, management, and publication of aeronautical information and data required to meet the ADQIR requirements.
- 1.11 This CAP also states the preferred means of compliance to be adopted in meeting the ADQIR requirements.

Applicability

- 1.12 This CAP applies to those parties involved in data origination, processing and IAIP publication processes as defined in the ADQIR. This CAP also describes the specific responsibilities and relevant standards for aeronautical data quality that is required of each party.
- 1.13 This CAP applies up to the moment when the aeronautical data and/or information are made available by the provider of the aeronautical information service (AISP) to the next intended user.
1. In the case of provision via the AISP web-site, this CAP applies up to the moment the information has been made available for download to a user's web browsing device.
 2. In the case of distribution by physical means, this CAP applies up to the moment when the aeronautical data and/or information has been published and made available to the organisation responsible for providing the physical distribution service.
 3. In the case of automatic distribution through the use of a direct electronic connection between the aeronautical information service provider and the entity receiving the data, this CAP applies up to the moment when the aeronautical data and/or information is made available by the aeronautical information service provider.
- 1.14 This CAP describes the ADQIR requirements for Quality Management, Safety, Security and Data protection arrangements with which data originators and NATS as the AISP shall comply in meeting their respective obligations under EU law and/or CAA licence.
- 1.15 This CAP also describes the ADQIR requirement for the establishment of formal arrangements between all parties exchanging aeronautical data or information between themselves.
- 1.16 The CAA has included guidance in this CAP for data originators, providers and managers to enable them to comply with the ADQIR requirements, and also included reference to this CAP in associated CAA policy documents, such as aerodrome licences, Letters of Agreement (LoA) or by inclusion in other CAA policy documentation where aeronautical information is mentioned.
- 1.17 As well as providing guidance in meeting the ADQIR legal requirements, this CAP also includes CAA requirements for the provision of aeronautical information that are not included in the ADQIR. This ensures that all aspects of aeronautical information management have been considered by CAA.

Chapter 2

Authorised Sources of Aeronautical Information

Authorised Sources

- 2.1 The UK AIP is the product of an amalgamation of Aeronautical Information and Data derived from various sources which are submitted to the AISP for publication.
- 2.2 Throughout this CAP the term 'Authorised Source' refers to the regulated party ultimately accountable for providing specific aeronautical information and data for publication in the UK AIP, including permanent data as part of NOTAM and AIP Supplements. The Authorised Source and aeronautical information for which they are responsible for are shown in the table at Annex A.
- 2.3 The responsibilities for the provision of aeronautical information and data for the UK AIP are identified in various European regulations and CAA licensing, guidance and policy documents. Where aeronautical information is identified in the following documents, it shall be provided in accordance with this CAP.
- (EU) No. 139/2014 – EASA Aerodrome Certification
 - Licensing of Aerodromes (EASA) – CAP 1168
 - Air Navigation: The Order and the Regulations – CAP 393
 - Aerodrome Survey Information – CAP 232
 - CAA Guidance on the Application of the Airspace Change Process – CAP 725
 - Approval Requirements for Instrument Flight Procedures – CAP 785
 - Application for Instrument Approach Procedures to Aerodromes without an Instrument Runway and/or Approach Control – CAP 1122

Registration of Authorised Sources

- 2.4 Authorised Sources are required to register with the AISP. Once registered, the Authorised Source will be ultimately accountable for the content, currency and completeness of the aeronautical information and data they are registered for.
- 2.5 A request to add, amend or withdraw published AIP information by a party, other than the registered Authorised Source, will be denied by the AISP.
- 2.6 The registered Authorised Source will also be responsible for notifying the AISP of any change to their registered details.

- 2.7 The Authorised Source shall notify the AISP of any changes to their contact details or the transfer of Authorised Source responsibilities to another party.

Further information on the Authorised Source registration process can be found on the NATS/AIS web-site.

Delegation of Authorised Source responsibility

- 2.8 An Authorised Source may wish to delegate responsibility for maintaining the content, currency and completeness of their information published in the AIP to a third party. This is permissible on the condition that this type of arrangement is reflected in the formal arrangements required between the Authorised Source and the third party concerned. In turn the third party shall also register their details with the AISP. Irrespectively, the Authorised Source remains ultimately accountable for their aeronautical information listed at Annex A. Formal Arrangements are described in greater detail at Chapter 5

Chapter 3

Regulatory Approval of Aeronautical Information & Data

Aeronautical Information and Data Requiring CAA Regulatory Approval

- 3.1 Certain aeronautical information and data submitted to the AISP will require regulatory approval by the CAA before submission can be accepted by the AISP for publication in the AIP.
- 3.2 Aeronautical information and data requiring approval by the CAA is identified in the table at Annex A. This data includes but is not limited to;
- Controlled/Regulated Airspace
 - Ground/Satellite based Navigation Systems
 - Instrument Flight Procedures
 - VHF/UHF frequencies
 - Danger/Restricted Areas
 - Civil/Military Aerodrome Traffic Zones
 - Aerodrome Runway Declared Distances
 - Aerodrome Rescue & Fire Fighting categories
- 3.3 The table at Annex A also identifies the CAA regulatory department responsible for providing regulatory approval. A decode of the CAA department abbreviations and contact details is provided at Annex B.

Regulatory Approval Process

- 3.4 Upon submission of the Aeronautical Data to the AISP, an automated system will alert the appropriate CAA department if CAA regulatory approval is required. The CAA departments will then either:
- Approve the aeronautical data for publication by AISP; or
 - Engage with the Authorised Source if approval is denied.
- 3.5 For aeronautical data that requires regulatory approval, Authorised Sources shall take account of the additional time required by the CAA for the approvals process. Authorised Sources' shall therefore submit their AIP change requests to the AISP at least three working days earlier than the latest date for AIP Change Requests specified on the AISP publication schedules available on the NATS/AIS web-site.

Chapter 4

European Regulation (EU) No 73/2010 & 1029/2014 - Aeronautical Data Quality Implementing Rule (ADQIR)

Data required to meet ADQIR requirements

- 4.1 This chapter describes the applicability of the ADQIR to specific data types, their constituents and associated procedures involved in the origination, production, storage, handling, processing, transfer and distribution of aeronautical information and data.
- 4.2 All the requirements laid down in this chapter and all subsequent chapters up to chapter 8 are required under EU law. This CAP can therefore be used as a definitive source of requirements for meeting the EU law, and additional State requirements.
- 4.3 Requirements from the ADQIR are transposed into this CAP together with explanatory text to aid interpretation and understanding. Selected ADQIR transpositions are indicated in *italic text* within a grey bound text box.
- 4.4 This ADQIR applies to aeronautical information and data included in the following products made available by or through the UK AISP:

ADQIR - Article 2.1

- The Integrated Aeronautical Information Package IAIP including:
 - AIP and amendments
 - Supplements to the AIP
 - NOTAM and pre-flight information bulletins
 - Check lists and lists of valid NOTAM
 - Electronic obstacle data, or elements thereof, where made available:
-
- Data concerning all fixed and mobile obstructions (whether temporary or permanent) or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above an ICAO Annex 14 defined surface intended to protect aircraft in-flight.
-
- *Electronic terrain data, or elements thereof specified in ICAO Annex 15, Chapter 10, where made available:*

- Data about the surface of the earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow, and excluding obstacles;

- *Aerodrome mapping data specified in ICAO Annex 15, Chapter 11, where made available:*

- Information that represents standardised aerodrome features for a defined area, including geospatial data and metadata.

4.5 Aeronautical Information Circulars (AIC) are exempt from the regulation.

4.6 The aeronautical Information and data required to meet ADQIR requirements is listed at Annex A.

Applicability of the ADQIR

4.7 Certain Authorised Sources are required to originate, manage and distribute specific aeronautical data in accordance with the ADQIR. The Authorised Sources responsible for this information and data are identified at Annex A. Any party originating, managing or publishing this information and data, are subject to the provisions of the ADQIR.

4.8 The parties as defined by the ADQIR are:

ADQIR - Article 2.2

- *Air Navigation Service Providers, i.e. providers of:-*
 - *Aeronautical Information Services*
 - *Air Traffic Services (ATS)*
 - *Communication Services*
 - *Navigation Services*
 - *Surveillance Services*
- *Operators of those aerodromes and heliports, for which Instrument Flight Rules (IFR) or Special-Visual Flight Rules (SVFR) procedures have been published in the IAIP;*
- *Services for the origination and provision of survey data:*
 - *Private or publicly owned organisations providing CAP 232 surveying services to IFR/SVFR aerodromes and heliports;*
- *Procedure Design services:*
 - *Private or publicly owned organisations, approved by the CAA and in accordance with CAP 785, providing Instrument Flight Procedure Design services;*
- *Airspace and En-Route Design services:*

- *Private or publicly owned organisations providing services for the design of Terminal and En-Route Airspace in accordance with CAP 725;*
- *Electronic terrain data*
 - *National Geodetic Agencies*
 - *Commercial survey companies;*
- *Electronic obstacle data:*
 - *National Geodetic Agencies*
 - *Commercial survey companies;*

4.9 Without prejudice to the provisions of Article 6.5 of the regulation, the ADQIR does not apply to the operators of those aerodromes and heliports for which no IFR (or SVFR) procedure is published in the AIP, even if those aerodromes/heliports are referenced in any part of the AIP.

ADQIR - Article 6.5

- *AISP shall ensure that aeronautical data and aeronautical information provided by data originators not referred to in Article 2.2 are made available to the next intended user with sufficient quality to meet the intended use*

Means of Compliance

4.10 Five Eurocontrol Specifications, (DAL, DQR, DO, AIX and eAIP) have been produced under the Eurocontrol Regulatory and Advisory Framework as “possible means of compliance” with the relevant articles and annexes of the ADQIR. They are not technically “Community Specifications” under Article 4 of the SES Interoperability Regulation ((EC) No 552/2004), compliance with which would have resulted in a legal presumption of compliance with the ADQ Regulation itself. However, the CAA has adopted these specifications as the “UK preferred means of compliance”, and their use will presume conformity with the relevant ADQIR articles and annexes. This does not exclude the possibility of stakeholders submitting alternative means of compliance to the CAA, but these would need to be evaluated for compliance on a case by case basis by CAA.

4.11 The ‘preferred means of compliance’ are;

- Data Assurance Levels (DAL) - Specifies all applicable data assurance objectives
- Data Quality Requirements (DQR) – Specifies the Data Assurance Level for aeronautical data in-scope of the ADQIR. (refer to chapter 6 ‘Data Assurance for the applicability of this document in the UK)

- Data Origination Vol 1 & 2 – Specifies the data origination standards applicable to originators such as surveyors, instrument flight procedure designers, airspace designers. Volume 1 contains the objectives necessary to meet the ADQIR obligations. Volume 2 contains recommended objectives that may be adopted.
- Aeronautical Information Exchange (AIX) – Includes common data-set and data exchange methods to meet the ADQIR.
- Electronic Aeronautical Information Publication (eAIP) – Specifies the common standard for the representation of aeronautical information in the AIP, and is applicable only to the AISP.

These Eurocontrol Specifications are available to download from the Media & Info Centre area of the Eurocontrol web site www.eurocontrol.int

NOTAM

- 4.12 ADQIR Data set and Data exchange requirements assumes that all aeronautical information and data in-scope of the ADQIR is of a digital nature. However, in the UK the NOTAM function is provided by AIS via the Aeronautical Fixed Telecommunications Network (AFTN). Consequently, until NOTAM, Pre-flight Information Bulletins, and Check lists of NOTAM, are able to be provided digitally, the Data set and Data exchange requirements are not applicable to NOTAM, SNOWTAM, NOTAM checklists and Pre-flight Information Bulletins. .
- 4.13 In accordance with Article 1(1) (a), the remaining provisions (other than the data-set and data exchange) of the ADQIR are applicable to NOTAM. However, the implementation of the ADQIR should not inhibit the publication of aeronautical information, the timely distribution of which is essential to personnel concerned with flight operations.

Therefore, in consideration of 4.13 above;

- Any AIP data item listed at Annex A, and identified as being in scope of the ADQIR, shall also be subject to the same ADQIR requirements stated in this CAP if included as part of a temporary NOTAM, except when to do so would inhibit the distribution of aeronautical information necessary to ensure the safety of flight.
- Any AIP data item listed at Annex A, and identified as being in scope of the ADQIR, shall also be subject to the same ADQIR requirements stated in this CAP if included as part of a permanent NOTAM.
- Only registered Authorised Sources of the permanent aeronautical Information published in the AIP, and in scope of the ADQIR, as referred to in Chapter 2.2, are permitted to change or withdraw that same permanent information published in the AIP via NOTAM. Any request from a party other than the Authorised Source will be denied by AIS.

Supplements to the AIP

- 4.14 Any AIP data item listed at Annex A, and identified as being in scope of the ADQIR, shall also be subject to the same ADQIR requirements stated in this CAP if included as part of a Supplement to the AIP.

Applicable Compliance Dates

- 4.15 The ADQIR specifies three applicable compliance dates to be met by all parties in-scope of the regulation;

ADQIR - Article 14

- *Aeronautical information & data published after the 1st July 2013 shall meet the requirements of the ADQIR.**
- *From 1st July 2014 aeronautical information & data shall comply with the Data-Set and Data exchange requirements detailed in Chapter 7 & 8.**
- *Aeronautical information & data published before 1 July 2013 and not amended shall be brought into line with the ADQIR by 30 June 2017 at the latest.*

*As this CAP has entered into force after the first two ADQIR compliance dates, the CAA recognises that compliance to the 1st July 2013 and 1st July 2014 deadlines cannot be achieved. However, CAA requires that all new or revised aeronautical information shall be compliant to the ADQIR eighteen months after publication of this CAP.

Chapter 5

ADQIR - Generic Requirements

Quality Management System

- 5.1 The Authorised Source responsible for data in scope of the ADQIR referred to in Annex A and any party originating or handling this data and information shall implement and maintain a Quality Management System (QMS) which takes account of their aeronautical information and data provision activities.

ADQIR - Article 10, Annex VII, Part A.

- *A QMS supporting the origination, production, storage, handling, processing, transfer and distribution of aeronautical information and data shall;*
 - a) *define the quality policy in such a way as to meet the needs of different users as closely as possible.*
 - b) *set-up a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with applicable requirements, standards and procedures, including the relevant requirements of the ADQIR.*
 - c) *provide evidence of the functioning of the quality system by means of manuals and monitoring documents.*
 - d) *appoint management representatives to monitor compliance with, and adequacy of, procedures to ensure safe and efficient practices.*
 - e) *perform reviews of the quality system in place and take remedial actions, as appropriate.*
- *An EN ISO 9001 certificate, issued by an appropriately accredited organisation, is considered as sufficient means of compliance to the requirements of point 1.2. The parties referred to in Article 2(2) of the ADQIR shall accept the disclosure of the documentation related to the certification to the national supervisory authority upon the latter's request.*

- 5.2 Without prejudice to Article 10 requirements, a suitable equivalent QMS would be an acceptable alternative means of compliance.

Personnel Security

- 5.3 In meeting ADQIR Article 13 'Additional requirements', the Authorised Source responsible for data in-scope of the ADQIR referred to in Annex A and any party originating, exchanging, processing or publishing this data and information shall:

ADQIR - Article 13

- *ensure the security clearance of their personnel responsible for tasks in the origination, production, storage, handling, processing, transfer and distribution of aeronautical data and/or aeronautical information.*

- 5.4 A Disclosure & Barring Service (DBS) Check is considered as the minimum acceptable level of security clearance. Further information regarding these checks can be found on the Disclosure & Barring Service web page of the GOV.UK website.

- *ensure that personnel responsible for tasks in the provision of aeronautical information are made duly aware of the requirements laid down in the ADQIR.*
- *develop and maintain operations manuals containing the necessary instructions and information to enable their personnel responsible for tasks in the provision of aeronautical data and/or information to apply the ADQIR.*
- *ensure that manuals referred to in point d are accessible and kept up to date and that their update and distribution are subject to appropriate quality and documentation configuration management;*
- *ensure that their working methods and procedures comply with the ADQIR.*

Error Reporting and Rectification

- 5.5 In meeting Article 6 ADQIR requirements for Error Reporting and Rectification, the parties responsible for data in scope of the ADQIR and any party handling this information and data shall ensure that error reporting, feedback and rectification mechanisms are established and included in the QMS, and operated in accordance with the following:
- 5.6 The error reporting, measurement and corrective action mechanisms shall ensure that:

ADQIR - Article 6, Annex IV, part F.

- *problems identified during aeronautical information and data origination, production, storage, handling and processing, or those identified by users after publication, are recorded and reported to the Aeronautical Information Service Provider.*

1. problems identified by users and reported to the AISP as mentioned in point a, should also be referred to the Authorised Source identified at Annex A.
2. all errors, inconsistencies and anomalies detected in published critical and essential aeronautical information and data (DAL 1 and DAL 2) are notified immediately by the Authorised Source to all users via the promulgation of a temporary NOTAM, and resolved permanently as soon as possible thereafter.

- *error feedback from the data users and other aeronautical information and data providers is facilitated and encouraged;*
- *error rates for aeronautical information and data are recorded on each occasion that it is transferred between parties;*
- *error rates for those errors detected prior to transfer and those reported after transfer can be identified separately.*