RiverOak Strategic Partners

7.5 CAA Interface Document

TR020002/APP/7.5

Project Name:	Manston Airport Development Consent Order
Regulation:	Regulation 5(2)(q) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, as amended
Date:	July 2018

Aviation Regulation and the Development Consent Order Process

Document Details

Reference	Description
Document Title	Aviation Regulation and the Development Consent Order Process
Document Ref	70992 019
Issue	Version 1
Date	16 March 2018
Client Name	RSP

Approval Level	Authority	Name
Author	Osprey CSL	Director
Reviewer	Osprey CSL	Team Leader

Table of Contents

1 Executive Summary 1

2 Introduction 3

2.1 Project overview 3
2.2 The challenge 3
2.3 RSP's response 4
2.4 Structure of this document 5

3 Aviation Regulators 6

3.1 The CAA 6
3.2 EASA 6
3.3 The CAA/EASA relationship 7
3.4 The International Civil Aviation Organisation (ICAO) 7
3.5 The role of Aviation Regulators in relation to the Manston Project 8

4 Co-ordination Activities Undertaken 10

4.1 Introduction 10
4.2 Individual Co-ordination Activities 10
4.3 Joint Co-ordination Activities 10

5 Aviation Approvals and Regulations 12

5.1 Introduction 12
5.2 Approvals Required 12
5.3 Timescales 13

6 The Airspace Change Process 15

6.1 Introduction 15
6.2 Purpose of the Airspace Change Process 15
6.3 Application of the Airspace Change Process 15
6.4 CAA Role 16
6.5 Legislative Framework for Airspace Change 17
6.6 New Process 19
6.7 Change Categories 19
6.8 Process Steps 20
6.9 Summary 24

7 Aerodrome Certification 25

7.1 Legal Framework 25
7.2 EASA Certification 27
7.3 EASA Regulatory Process 27
7.4 The CAA 28
7.5 Aerodrome Manual Overview 30
7.6 The Aerodrome Manual and the Licensing Process 32
7.7 CAA Auditing 32
7.8 Performance Based Regulation 33
7.9 The Accountable Manager 34
7.10 Timescales 34

8 Conclusions 35

A1 CAA Initial Meeting Notes 1-1

A2 Meeting with CAA Airspace Section 15 May 2017 2-1

A3 PINS/RSP Airspace Meeting 3-1

A4 Slides from CAA/PINS/RSP Process Workshop 4-1

A5 Process workshop between CAA, PINS and RSP June 2017 5-1

A6 EASA Requirements 6-1

A7 Contents of the Aerodrome Manual 7-1

A8 Submission of the Aerodrome Manual and other documents 8-8

A9 Aerodrome Manual Component Parts 9-1

A10 Other Supporting Documents and Policies 10-1

A11 Example Aerodrome Manual Documents Hierarchy 11-1

Table of Figures

Figure 1 Example Aerodrome Manual Documents Hierarchy 14
Figure 2 Example Aerodrome Manual Documents Hierarchy 11-1

Table of Tables

Table 1 EASA Acceptable Means of Compliance (AMC) Documents 6-1
Table 2 EASA Certification Specifications (CS) Documents 6-3
Table 3 Aerodrome Manual Components 9-12
Table 4 Aerodrome Manual Supporting Documents 10-3

1 Executive Summary

Riveroak Strategic Partners' (RSP) are proposing to redevelop and reopen Manston Airport as an air freight hub (the Project). As a Nationally Significant Infrastructure Project (NSIP), it is being promoted in accordance with the Planning Act 2008 by means of a Development Consent Order (DCO). RSP have submitted an application for a DCO to the Planning Inspectorate (PINS) who will be deciding on behalf of the Secretary of State for Transport (SoS) whether or not to grant the approval for the proposed DCO.

In addition to the DCO, in order to operate the Manston Airport, RSP will need to secure additional aviation-related will require approvals from a number of regulatory bodies and compliance with an extensive suite of both inter-related, and unrelated, regulations. This document sets out information about the additional aviation-related approvals and explains how these dovetail with the DCO process.

From early meetings with PINS and the Civil Aviation Authority (CAA), it became apparent that their roles were similar but exercised at different levels. Both require stakeholder engagement, environmental impact assessments and public consultation but PINS would be considering the project as critical nationally significant infrastructure whereas the CAA would be considering it as a commercial airport. Equally, respective timescales differ, with the processes to gain approval for airspace, procedures and operations running parallel to, but separate from, the DCO process.

Having engaged with each organisation separately, RSP facilitated a Joint CAA/PINS/RSP Process Workshop which was held at CAA House, Kingsway on 12 June 2017. All agreed that the meeting was extremely valuable. It was recognised that CAA approvals would only be granted within the bounds of any DCO approval. Equally, it was accepted that scrutiny of such detailed proposals was the responsibility of the CAA to ensure compliance with national, international and global aviation regulations.

Importantly, the Joint Process Workshop recognised that, from an airport operations perspective, the DCO submission will be based on 'worst credible' scenarios (in terms of environmental impact) but that subsequent scrutiny of detailed proposals for airspace and procedures by the CAA would be seeking 'best possible' outcomes in terms of their own environmental impact assessments. In this way, both PINS and the SoS can not only be assured that any CAA approvals granted will be within the criteria laid down in a DCO approval, but equally that they will be the best possible outcome whilst maintaining safety and regulatory compliance.

The aviation sector is heavily regulated; at a global level by the International Civil Aviation Organisation (ICAO), at a regional level by the European Aviation Safety Agency (EASA) and at a national or domestic level by CAA regulations. Such

regulations apply to every aspect of aviation operations, from airport design and construction, through operations and management, to safety systems and safety culture. Unless compliance with such regulations can be proven, approval for commercial operations at the airport will not be granted. Importantly, this is not taken as a snapshot; Manston Airport would be subject to a comprehensive ongoing audit programme to ensure continued compliance with both current and emerging regulations.

This paper specifically focuses on the Airspace Change Process (ACP) and Aerodrome Certification Process used by the CAA as, due to their requirement to consider environmental factors; these have the greatest relevance to the DCO submission. However, there are a range of other processes and regulations which the Airport would need to also be compliant with prior to the commencement of operations.

By ensuring that the respective CAA and DCO processes are fully understood, RSP have sought to reduce the risk of duplication of effort and ensure that any approvals granted by the SoS and the CAA are complimentary. This activity has also allowed the respective roles and responsibilities of the two organisations to be understood. PINS will be considering 'worst credible' scenarios, whereas the CAA will be looking for 'best possible' outcomes; this should provide PINS with considerable assurance that the environmental impact of operations at Manston will be kept to the minimum level that can be safely achieved. Finally, the comprehensive suite of International, Regional and National aviation regulations provides a high level of confidence that operations at Manston will be assessed, and continue to be assessed, for their compliance with the latest safety and environmental standards.

2 Introduction

2.1 Project overview

There has been an operational airport at the Proposed Development site since 1916. Until 1998 it was operated by the Royal Air Force (RAF) as RAF Manston, and for a period in the 1950s was also a base for the United States Air Force (USAF).

From 1998 it was operated as a private commercial airport, known as Kent International Airport. The airport offered a range of services including scheduled passenger flights, charter flights, air freight and cargo, a flight training school, flight crew training and aircraft testing. In recent years it was operating as a specialist air freight and cargo hub servicing a range of operators. Although the airport was closed in May 2014, much of the airport infrastructure, including the runway, taxiways, aprons, cargo facilities and passenger terminal remain.

The Proposed Development shall consist of the following principal components:

- Runways and taxiways suitable for the take off and landing of a broad range of cargo aircraft
- An area for cargo freight operations able to handle at least 10,000 movements per year and associated infrastructure, including;
    - a new Air Traffic Control (ATC) tower;
    - a fire station;
    - a fuel farm; and
- Facilities for other aviation-related development, including:
    - a passenger terminal and associated facilities;
    - an aircraft teardown and recycling facility;
    - a flight training school;
    - a base for at least one passenger carrier;
    - a fixed base operation for executive travel; and
    - business facilities for aviation related organisations.

2.2 The challenge

Early in the development of the Project, RSP recognised that there was considerable overlap between responsibilities of PINS and the CAA in relation of their respective roles for authorisation of the Project. There was equally a risk of duplication of effort and inefficiency, both within their submissions to both PINS and the CAA, and for the organisations themselves.

RSP equally recognised the need to align their submissions with the relevant requirements of the DCO and CAA regimes; both are similar in nature but different in

terms of timescales and levels of responsibility. Therefore, there are distinct benefits in developing and applying the two processes in an iterative rather than sequential manner, as development in one process may inform and influence the other.

It should also be recognised that many of the CAA processes and regulations are subject to European Union (EU) Regulation including oversight by the European Aviation Safety Agency (EASA). It may therefore be necessary, within the broader bounds of any planning approval, for the CAA to exercise its responsibilities to ensure compliance with both national and international regulations.

2.3 RSP's response

RSPs response to the challenge has included the following public consultation activities:

- Non-statutory Consultation – 12 – 23 July 2016
- Statutory Consultation – 12 June to 23 July 2017
- Second Statutory Consultation - 12 January to 16 February 2018.

RSP has also maintained close dialogue with the relevant regulatory authorities including PINS and the CAA. As a result, and having recognised both the challenge and opportunity to RSP, PINS and the CAA presented by ensuring processes and submissions are aligned, thereby providing assurance to the SoS, RSP put a number of measures in place, namely:

- engaged Osprey Consultancy Services Limited (Osprey), a specialist aviation consultancy, to advise on the CAA processes and regulations. Osprey's contribution was led by a previous Assistant Director of Airspace Policy at the CAA supported by a previous CAA Principal Airspace Regulator and two ex-Airspace Regulators together with a team of staff with relevant operational expertise.
- conducted separate face to face meetings with the CAA and PINS to discuss the respective aviation and planning issues.
- facilitated a joint CAA/PINS Process Workshop to allow respective roles, responsibilities and processes to be discussed and aligned.

RSP's final contribution in this area is this report, which describes the co-ordination activities undertaken to date and highlights the areas where the CAA will subsequently scrutinise their detailed proposals contained in the DCO to reopen and operate Manston Airport. These proposals will be in line with, and developed from, the DCO submission.

The purpose of this document is to provide PINS and thereby the SoS with clarity and assurance, of the areas in which the CAA will provide detailed and specialist scrutiny

both in terms of RSP's initial application to reopen the airport but also their subsequent ongoing audit activities during its operation.

2.4 Structure of this document

This document will therefore comprise the following sections:

1. Executive Summary
2. Introduction (this Section)
3. Aviation Regulators
4. Co-ordination activities undertaken
5. Aviation Approvals and Regulations
6. The Airspace Change Process
7. The Aerodrome Certification Process
8. Conclusions

3 Aviation Regulators

3.1 The CAA

The CAA is a public corporation of the Department for Transport, established by Parliament in 1972 as an independent specialist aviation regulator. It is responsible for the regulation of aviation safety in the UK, determining policy for the use of airspace, the economic regulation of Heathrow, Gatwick and Stansted airports, the licensing and financial fitness of airlines and the management of the financial protection scheme for holidaymakers.

3.1.1 The CAA's Responsibilities

As the UKs specialist aviation regulator, the CAA is responsible to ensure that:

- The aviation industry meets the highest safety standards;
- Consumers have choice, value for money, are protected and treated fairly when they fly;
- Through efficient use of airspace, the environmental impact of aviation on local communities is effectively managed, minimised where possible and CO_2 emissions are reduced; and
- The aviation industry manages security risks effectively.

3.2 EASA

EASA is an agency of the EU with regulatory and executive tasks in the field of civilian aviation safety. Its mission is to promote the highest common standards of safety and environmental protection in civil aviation.

EASA monitors the implementation of standards through inspections in the Member States and provides the necessary technical expertise, training and research. It works hand in hand with the CAA which continues to carry out many operational tasks.

3.2.1 EASA's Responsibilities

The responsibilities of EASA include analysis and research into safety, authorising foreign operators, giving advice for the drafting of EU legislation, implementing and monitoring safety rules (including inspections in the Member States), giving type-certification of aircraft and components as well as the approval of organisations involved in the design, manufacture and maintenance of aeronautical products. The main tasks of EASA currently include:

- Rulemaking: drafting aviation safety legislation and providing technical advice to the European Community and to the Member States;

- Inspections, training and standardisation programmes to ensure uniform implementation of European aviation safety legislation in all Member States;
- Safety and environmental type-certification of aircraft, engines and parts;
- Approval of aircraft design organisations world-wide and of production and maintenance organisations outside the EU;
- Authorization of third-country (non-EU) operators;
- Coordination of the European Community SAFA (Safety Assessment of Foreign Aircraft) programme regarding the safety of foreign aircraft using EC airports; and
- Data collection, analysis and research to improve aviation safety.

3.3 The CAA/EASA relationship

The CAA both directly and indirectly regulates all aspects of aviation in the UK. In some aspects it is the primary regulator, in other areas, where the responsibility for regulation has passed to EASA, the CAA acts as EASA's local office, implementing EU regulations.

In this report we will identify those areas, such as approving the establishment of procedures and airspace, which are a national (CAA) responsibility and those areas, such as oversight of airport operations, which have EASA oversight (albeit exercised through the CAA).

3.4 The International Civil Aviation Organisation (ICAO)

ICAO is a UN specialised agency, established by States in 1944 to manage the administration and governance of the Convention on International Civil Aviation (Chicago Convention).

ICAO works with the Convention's 191 Member States and industry groups to reach consensus on international civil aviation Standards and Recommended Practices (SARPs) and policies in support of a safe, efficient, secure, economically sustainable and environmentally responsible civil aviation sector. These SARPs and policies are used by ICAO Member States to ensure that their local civil aviation operations and regulations conform to global norms.

3.4.1 ICAO's responsibilities

ICAO responsibilities include assisting and expediting the following:

- Action by States to implement regional plans and regional supplementary procedures;
- Implementation of ICAO Standards, Recommended Practices and procedures;

- Air Transport Functions, including encouraging States to file statistics;
- Close co-operation with the regional bodies (where established);
- Technical Co-operation Functions, including the Regional Scholarship Programme;
- Legal, obtaining current copies of air laws and regulations, as well as information on contemplated air legislation and regulations, from Contracting States;
- Aviation Security, encouraging, assisting, expediting, monitoring and following up all aspects of aviation security in accordance with ICAO policy, Standards, Recommended Practices and procedures; and
- General, reporting on implementation by States of Assembly and Council Resolutions.

3.5 The role of Aviation Regulators in relation to the Manston Project

Aviation regulation and policy is harmonised across the world to ensure consistent levels of safety and consumer protection. Either directly in its own right, or as an agent acting on behalf EASA, the CAA ensures that UK operations in the following areas remain compliant with International regulations:

- Airports
  - Regulate all UK airports to ensure they comply with relevant international and UK safety standards.
- Airspace
  - Consider and decide on airspace change proposals that are submitted, taking into account safety, efficiency and noise impact on local communities.
- Aviation capacity
  - Without additional aviation capacity in the UK, passengers will suffer from less choice, more disruption and higher airfares. The CAA is also clear that it is equally important for the industry to tackle the environmental impacts of aviation. Without reducing environmental impacts, the sector will not be able to grow.
- Aviation security
  - Regulate security arrangements at UK airports, of air carriers, cargo and in-flight suppliers to ensure that the relevant entities comply with UK and international security requirements.
- Environment
  - The CAA challenge industry to take greater action to reduce the environmental impact of its activity and have legal powers to provide information about the environmental impact of aviation where it would help passengers make more informed decisions. It also provides information and expert advice to Government and industry on noise matters.

Therefore, in considering the DCO submission, PINS and the SoS can be assured that RSP's detailed proposals relating to Airport Operations, Airspace Development, Capacity, Security and Environmental Impact will receive specialist and detailed scrutiny by the CAA in accordance with national and/or international aviation regulations. Importantly, they will also be subject to an ongoing audit regime where the CAA and EASA monitor continued performance and can either issue instructions for improvement or withdraw an approval if the required standards are not maintained. Such standards are in line with International, European and National regulations.

4 Co-ordination Activities Undertaken

4.1 Introduction

As stated above, RSP recognised from the outset that there was a need to ensure that PINS and the CAA, and the respective DCO and approval processes should, as far as possible, remain aligned and complimentary. They have therefore endeavored to remain in close contact with both organisations and, when the time was deemed appropriate, sought to bring them together in their first joint session.

4.2 Individual Co-ordination Activities

4.2.1 Meetings with the CAA

An initial meeting with the CAA was conducted in 2015 at CAA House, Kingsway to introduce the project and the project team to CAA staff but also to discuss the processes and regulations that would have to be fulfilled. A copy of the meeting notes produced by the CAA is at Annex A1.

A subsequent meeting with the CAA Aerodromes section on 3 November 2016 and again on 7 February 2017 allowed specific issues relating to the submission for the EASA Aerodrome Certificate to be discussed; this process is covered in Section 5 of this report.

On 15 May 2017, RSP met with the CAA Airspace section to discuss the submission of an Airspace Change Proposal (ACP) to establish both airspace and procedures associated with the airport. A copy of the meeting notes produced by Osprey is at Annex A2. In this meeting the CAA agreed to a joint CAA/PINS Process Workshop.

4.2.2 Meetings with PINS

RSP have met regularly with PINS on a range of topics relating to the project. However, a meeting specifically focused on airspace and airport operations, together with the role of the CAA and its respective processes, was conducted on 16 September 2016. A copy of the meeting notes produced by PINS is at Annex A3. It was in this meeting that the possibility of a joint session between the CAA and PNS was raised; this was well received.

4.3 Joint Co-ordination Activities

Recognising the value of ensuring that the CAA approval processes and the DCO remain complimentary and aligned, RSP proposed a joint workshop so that respective roles and responsibilities could be discussed. Both the CAA and PINS

welcomed this initiative although it was stressed that such a workshop should focus on process and roles and not specifics relating to the Manston project.

The workshop was conducted on 12 June 2017 at CAA House, Kingsway and facilitated by RSP representatives. The slides used for the workshop are shown at Annex A4.

All participants agreed that the workshop proved extremely valuable and a better understanding of respective roles, responsibilities and processes had been developed. Full notes drafted for RSP by Osprey are shown at Annex A5 but the key findings of the workshop were as follows:

- It was agreed that Acceptance of the DCO submission by PINS would be an appropriate trigger for the ACP.
- Without commitment, the CAA accepted in principle that elements of the DCO consultation could inform and/or contribute to the early stages of the ACP process, particularly to ensure consistency in Design Principles, Environmental Analysis and Consultation.
- The DCO submission would show a range of scenarios based on 'worst credible' examples within which a solution can be developed. The assumption is that the impact will not be worse than presented and which the CAA will consider under a separate independent process.
- PINS stated that amendments to the DCO submission may be possible particularly if the ACP allowed the landing and take-off swathes being considered to be refined and potential impact of the DCO reduced.
- As the CAA is a statutory consultee in the DCO process there was a view that a difference in approvals was unlikely; PINS will be looking for assurances from the CAA (without commitment) that there is a feasible solution within the RSP proposition.

5 Aviation Approvals and Regulations

5.1 Introduction

Prior to Manston Airport gaining authorisation to operate, there are a range of specialist aviation approvals and permissions that the operator must secure from the CAA. In addition, there will also be a need for the Airspace Change and Aerodrome Certification processes. These have clear parallels with the DCO and these will be covered in detail in the subsequent section.

5.2 Approvals Required

Operations at Manston Airport will have to be in accordance with the following regulations:

- Aerodrome Certificate - the grant of a EASA aerodrome certificate in accordance with ADR.AR.C.035 'Issuance of certificates' of Commission Regulation (EU) No 139/2014; and Article 212 of The Air Navigation Order 2016 (ANO) and Regulations
- Airspace Change - permission for a change of airspace in accordance with the CAA's CAP 1616 (Airspace Design: Guidance on the Regulatory Process for changing airspace design including community engagement requirements);
- Air Traffic Service approval – where a certificated Air Traffic Service Provider intends to provide services in accordance with Article 8(1) of the European Commission Regulations (EC) No. 550/2004, the Service Provision Regulation, and Regulation 4 of the Single European Sky (Functions of the National Supervisory Authority) Regulations 2006;
- Air Navigation Service Approval - a certificate for the provision of Air Navigation Services in the UK in accordance with Article 7 of Commission Regulation (EC) No. 550/2004, The Service Provision Regulation, and Article 8b(2) of Commission Regulation (EC) No. 216/2008, the EASA Basic Regulation; and Article 180 of The Air Navigation Order 2016 (ANO) and Regulations;
- Air Traffic Control training approval - certification as a Training Organisation by demonstrating compliance with Commission Regulation (EU) No. 2015/340 The ATCO licensing Regulation
- Provision of Aeronautical Information - provision of commercial aeronautical information service and meteorological information in accordance with Commission Implementing Regulation (EU) 1035/2011;
- Radio Spectrum approvals - aeronautical radio licences, fire licence, air traffic control / ground movement control, operations control licence, aeronautical navigation aid radio licence and an aeronautical radar licence in

accordance with the Wireless Telegraphy Act 2006 and Article 205 of The Air Navigation Order 2016 (ANO) and Regulations

In addition, operations will also have to be conducted in compliance with the following legislation:

- Aviation Security Act 1982, Aviation and Maritime Security Act 1990, Policing and Crime Act 2009, Regulation (EC) 300/2008 of the European Parliament and of the Council.
- Civil Aviation Act 1982
- Airports Act 1986
- Civil Contingencies Act 2004

5.3 Timescales

In terms of establishing the airspace and procedures associated with the airport, RSP have elected to apply the revised ACP process which is considerably longer, and more comprehensive, than the current process (estimated to be 108 weeks compared to the previous 57 weeks). It is aimed to be more transparent and understandable by the non-aviation community. The new process is more scalable than previously set and sign-off levels have been reviewed but the standards to be achieved were generally higher and the introduction of 'Gateways' ensured standards were assessed throughout the process. At the CAA/PINS/RSP Process Workshop it was agreed that acceptance of the DCO submission by PINS would be an appropriate threshold at which point to initiate the ACP.

Although the approval process for the Aerodrome Certificate is shorter (the CAA state 6 months), the significant amount of information and evidence required to support the application dictates that it too will commence shortly after acceptance of the DCO so as to be in place before initial operations.

Air Traffic Service provision and ATC training approvals will be sought once an Air Navigation Service Provider for the airport has been identified. This will likely be as a result of a competitive tendering process and will be a well-established service provider with experience of gaining such approvals. As it relies on controller training and validation, this will take place after any DCO approval.

Radio spectrum approvals will be sought as part of an equipment procurement and commissioning programme as different systems operate in different frequency bands. Once again, this will be after any DCO approval.

An illustration of these timescales is shown below (Figure 1):

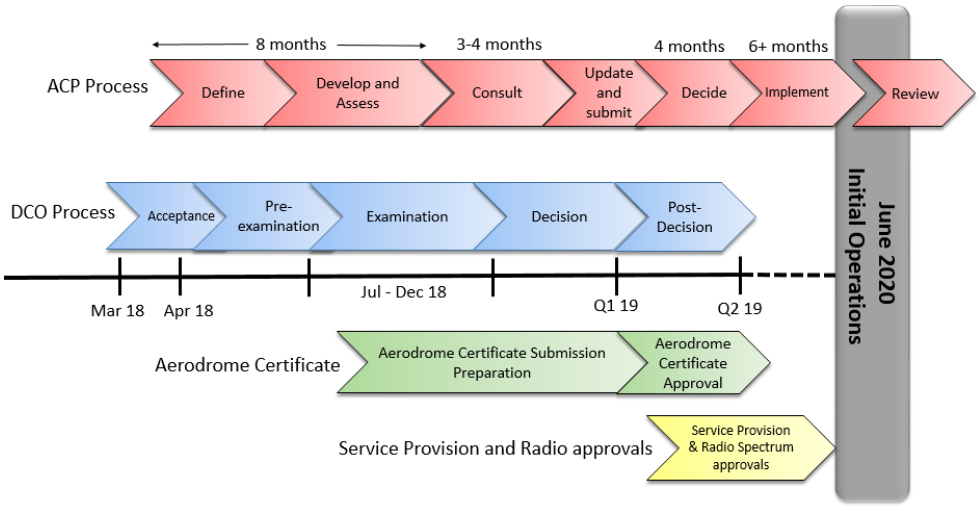


Figure 1 Example Aerodrome Manual Documents Hierarchy

6 The Airspace Change Process

6.1 Introduction

Changes to the design of UK airspace are proposed by an airspace change sponsor. This is typically an airport or a provider of air navigation services (including air traffic control). Other aviation organisations or representative bodies may also submit a proposal to the CAA. The CAA requires change sponsors of any permanent change to published airspace notifications to follow the CAA airspace change process.

The Manston Airport project will need to submit an application to the CAA to establish the airspace and procedures required to enable safe and efficient operations to and from the airport. Due to the time taken to complete this process, which includes environmental impact assessments and public consultation on the intended flightpaths, there is a need to commence the airspace change process before the DCO process is complete.

6.2 Purpose of the Airspace Change Process

The process will ensure that any airport operational changes are fully deliberated and that safety is considered and assessed at all stages of the process. Safety assessments will describe the scope of proposed changes, identify new and changing hazards and quantify associated risks. The safety assessment will determine how best to mitigate risk and at each stage in the process when an options appraisal is required a safety assessment will also be produced. The CAA will review the safety assessments as part of its decision making, in accordance with Government policy and legislation – noting that Section 70 of the Transport Act 2000 states that the CAA must "maintain a high standard of safety".

6.3 Application of the Airspace Change Process

ACPs vary greatly in terms of size, scale of impact and complexity. Some may have little noticeable operational or environmental impact. Others may require a complex restructuring of airspace with consequences both for airspace users and the environment, including people on the ground impacted by noise. In those cases where only a revision to air traffic control procedures is required and the design of airspace is unaffected, there may still be consequences for other airspace users, the environment and people on the ground.

Subject to operational constraints (including safety) the design of airspace, and the airspace change process, do not specify or limit future increases in the volume of air traffic using a piece of airspace at any given point in time. The volume of air traffic

using an airport may however be addressed by land-use planning conditions, where relevant.

Every airspace change proposal is different and each is considered on a case-by-case basis. Some trade-offs are the subject of over-arching government policy, such as the altitude-based priorities, which determine how competing environmental priorities should be handled. Within the framework of government policy and legislation, the CAA is open-minded about the outcome of any airspace change proposal and will fully consider any evidence in support of a proposal, including those where a case can be made for a deviation from current guidelines.

Although the Ministry of Defence (MoD) is part of the Government, it can also be a change sponsor in its own right. A civil airspace change sponsor should treat the MoD as an interested stakeholder for any airspace change proposal and the associated consultation. The CAA also has its own statutory obligations regarding national security that will always involve the MoD.

6.4 CAA Role

The CAA is the independent aviation regulator responsible for deciding whether to approve proposed airspace design changes and instrument flight procedures.

The term 'design of airspace' refers to new and established air traffic routes and the areas within which commercial aircraft fly into and out of airports. It also includes airspace allocated for use by military flights and General Aviation (i.e. private or recreational) flyers. Changes may also be necessary to improve the current capacity of UK airspace, to incorporate new technology, to allow aircraft to fly more direct routes or to keep them away from areas of a sensitive or dangerous nature.

CAA decisions are taken in accordance with its legal obligations to consider safety, the environment and the needs of other airspace users. The CAA will consider the objectives of the change alongside a range of factors published in section 70 of the Transport Act 2000 (see below). An assessment of these factors, including safety, security, operational and environmental impacts (aircraft noise and emissions), is necessary before a decision regarding the proposed change can be taken.

The CAA also undertakes regular stakeholder engagement with local communities, airports, air navigation services providers, General Aviation and the military. During these events national policy or process issues are discussed. The responsibility for engaging with and informing communities about specific airspace change proposals rests with the change sponsor and not the CAA. The CAA is only obliged to engage with stakeholders at defined points in the process, and then in a fair and transparent way.

6.5 Legislative Framework for Airspace Change

The CAA's statutory duties and functions are contained in the CAA (Air Navigation) Directions 2001 as varied in 2004 (the 2001 Directions), Section 70 of the Transport Act 2000 (the Transport Act) and the 2014 Guidance to the CAA on Environmental Objectives relating to the exercise of its air navigation functions (the 2014 Guidance).

The CAA's airspace change process must operate within the Government's policy framework. The CAA works closely with the Government to ensure clarity around policy and decision roles related to the airspace change process. However, the CAA cannot review government policy, nor can it make an airspace change decision that does not give effect to that policy.

6.5.1 Air Navigation Directions

The Secretary of State has given the CAA functions that relates to the design of airspace in the Civil Aviation Authority (Air Navigation) Directions dated 2001 (amended in 2004). In particular these Directions require the CAA to develop and enforce a policy for the sustainable use of UK airspace. One means by which the CAA discharges this direction is via its statutory air navigation function to consider proposals, usually from air navigation service providers and/or airports, to change the design of UK airspace (including instrument flight procedures) published in the UK Aeronautical Information Publication (AIP).

6.5.2 Section 70 of the Air Transport Act

Section 70 of the Transport Act 2000 places the CAA under a general duty in relation to its air navigation functions to exercise those functions so as to maintain a high standard of safety in the provision of Air Traffic Services (ATS). That duty is to have priority over the CAA's other duties in this area of work. Noting that priority, the CAA's duties in relation to air navigation is to exercise its functions in the manner it thinks best so that:

- It secures the most efficient use of airspace[1] consistent with the safe operation of aircraft and the expeditious flow of air traffic[2].
- It satisfies the requirements of operators and owners of all classes of aircraft.
- It takes account of the interests of any person[3] (other than an operator or owner) in relation to the use of any particular airspace or airspace generally.

[1] The CAA uses the following overall definition of "the most efficient use of airspace": The most aircraft movements through a given volume of airspace over a period of time in order to make the best use of the limited resource of UK airspace from a whole system perspective.
[2] The CAA uses the following definition of "expeditious flow": The shortest amount of time that an aircraft spends from gate to gate, from the perspective of an individual aircraft, rather than the wider air traffic system.
[3] The CAA considers the words 'any person (other than an operator or owner of an aircraft)' to include airport operators, air navigation service providers, members of the public on the ground, owners of cargo being transported by air, and anyone else potentially affected by an airspace change proposal

- It takes account of any guidance on environmental objectives given to the CAA by the Secretary of State.
- It facilitates the integrated operation of ATS provided by or on behalf of the armed forces and other ATS.
- It takes account of the interests of national security.
- It takes account of any international obligations of the UK notified to the CAA by the Secretary of State.

The CAA adopts the following approach when undertaking its regulatory assessment of airspace change proposals:

- An airspace change proposal that satisfies all the factors in section 70(2) should be approved by the CAA. In making this decision, the CAA should give the duty to secure something higher weight than the duty to satisfy or facilitate. For example, the CAA would give the duty to secure the most efficient use of airspace higher weight than the duty to satisfy owners and operators of aircraft. They would assess that the term to take something into account reflects that some factors may or may not be applicable in a particular case (for example, national security) and the range of impact on a decision outcome could be significant. Thus its weight will depend heavily on the circumstances of the individual case, giving the CAA discretion to apply the appropriate expert judgement when balancing all factors. It should be noted that not all of the factors will be relevant in all cases.
- Where a proposed change would satisfy some of the duties, but would not deliver others, the law refers to this situation as a conflict.

Where there is a conflict, Section 70(3) requires the CAA to apply the factors in the manner it thinks is reasonable having regard to them as a whole. The CAA has always done this, but there is no predetermined policy on how it weights the factors and balances them in a reasonable manner in the case of a conflict. There may be good reasons why the CAA may in some cases resolve "conflicts" other than in accordance with the relevant weight indicated by the statutory language, and they consider that the wording in Section 70(3) gives the CAA wide discretion. Consequently, there is a greater need to give clear reasons and evidence for deviating from relative weights set out in the statutory wording. Examples of cases where the CAA is likely to resolve a conflict other than in accordance with the relative weighting in section 70(2) are:

- Interdependencies – such as where the CAA might approve/decide in favour of an airspace change that reduces the efficient use of airspace or does not

meet requirements of owners and operators in order to meet an international obligation under the UK/Ireland Functional Airspace Block[4].

- Magnitude of the impact – such as when the impact on a higher weight factor is small, whereas the impact on a lower weight factor is large.
- Complexity of the airspace – such as when an airspace structure modified through the consultation process in an attempt to meet different user requirements may render it safe, but almost unusable by operators or owners of aircraft or unworkable by air traffic control.
- Airspace not at full capacity – such as when it is deemed that securing the efficient use of airspace is less important and it could be appropriate to increase the weight of other objectives.

6.6 New Process

The CAA is currently introducing a major change to the airspace change process. This change is necessary to ensure that the process meets modern standards for regulatory decision-making, and is fair, transparent, consistent and proportionate. This new change process to ensure impartiality is evidence-based and takes account of the needs and interests of all affected stakeholders.

On 31 March 2017 the CAA began consultation for the draft revised guidance material on the new process. That consultation is now complete and resulted in a new process and document (CAP 1616).

The consultation material included the draft guidance document itself, a draft environmental technical annex and a separate document about a new category of airspace change (known as 'Tier 2'). The consultation responses are now being considered and the revised guidance document is planned to be published at the start of 2018, subject to the Government announcing the outcome of its own policy consultation.

This new seven-stage process must be followed where permanent changes to published airspace designs are proposed. The CAA will assess the process at each stage through defined 'Gateways' and, provided the process has been followed as intended, approve progression to the next stage.

6.7 Change Categories

There are many ways that airspace design or the way airspace is used can change, and the impacts of these changes may vary considerably. A formal change to the airspace design could be just a change in the nomenclature used by the aviation

[4] The UK-Ireland FAB is Europe's North Atlantic gateway. Around 90% of North Atlantic traffic passes through Irish or UK airspace. One of the core functions of the FAB is to ensure the successful integration of traffic flows between the North Atlantic (NAT), domestic UK-Ireland, and core European area traffic

industry; such a change would have no effect on any identified stakeholder and would only involve an update of the relevant systems and manuals. In contrast, it is possible for the airspace design to remain unchanged but the noise impacts on the ground to be altered considerably if aircraft are directed by air traffic control in a different way than before.

As mentioned above, the new process categorizes the different types of airspace change. At the highest level there are 3 Tiers, subdivided as follows:

- Tier 1 - Changes to notified airspace design.
  - Tier 1a - Permanent change to notified airspace design.
  - Tier 1b - Temporary change to notified airspace design.
  - Tier 1c - Temporary operational trial of design or technology.

- Tier 2[5] – Changes to procedures resulting in permanent traffic redistribution.

- Tier 3 – Change in airline or ANSP operations resulting in a noticeable shift in traffic volumes over time.

It is important to note that the formal airspace change process set out for Tier 1a only applies where a change is proposed to the published (or 'notified') airspace design. It should be assumed that all airspace change proposals will follow the process laid down for Tier 1a changes. However, it may be possible to scale the process in a way that reflects the nature of the proposed change and its assessed impacts. For example, a shortened consultation period might be applicable for some changes. The Tier and Level appropriate for an airspace change proposal will be confirmed by the CAA during the initial assessment meeting at Stage 1, as described below.

6.8 Process Steps

6.8.1 Stage 1 - Define

This stage is sub-divided into Step 1A assess requirement and Step 1B design principles.

At Step 1A, the change sponsor will need to prepare a Statement of Need that clearly defines what airspace issue it is seeking to address. The CAA will review the Statement of Need and meet with the change sponsor to agree whether an airspace change is a relevant option to consider. This will involve the first discussion about the appropriate scale of the airspace change process that should be followed.

At Step 1B, design principles will be developed. These will encompass the safety, environmental and operational criteria and strategic policy objectives that the

[5] The final process for Tier 2 changes has not yet been finalised.

change sponsor aims for in developing the airspace change proposal. They are developed through engagement with stakeholders and form a qualitative structure against which design options can be evaluated. Early engagement with stakeholders, optionally facilitated by a third party, should help to avoid disagreement later in the process.

6.8.2 Stage 2 – Develop & Assess

This Stage is also subdivided into 2A 'options development' and 2B 'options appraisal'.

At Step 2A, the change sponsor develops one or more options that address the Statement of Need and align with the defined design principles.

During Step 2B each option, even if there is only one, is assessed to understand the impacts, both positive and negative. The change sponsor carries out the options appraisal against requirements set by the CAA in an iterative approach: the 'Initial' appraisal is the first of three option appraisals, and each subsequent appraisal will include more detail as related work during the process is included.

6.8.3 Stage 3 - Consult

This stage is subdivided into 3A 'consultation preparation', 3B 'consultation approval', 3C 'commence consultation' and 3D 'collate and review' responses. The process emphasizes the importance of engagement, an all-encompassing term that means developing relationships with stakeholders, covering a variety of activities. Within the context of airspace change, consultation is defined as a formal, notified period during which the views of aviation and non-aviation stakeholders regarding any change is sought. Engagement may also include information provision, regular and one-off meetings and fora, workshops, 'town hall' discussions and other contact with third parties. During the process, the CAA will take a prominent role approving the change sponsor's consultation plan and materials.

At Step 3A, the change sponsor plans its stakeholder consultation and engagement, and prepares consultation documents, including the second-phase 'Full' options appraisal including more rigorous evidence to support its chosen option.

During Step 3B the CAA will review and, where appropriate, approve the consultation strategy. This process is included to ensure the consultation strategy is comprehensive and the prepared materials are clear, appropriate and any questions unbiased.

At Step 3C the change sponsor implements its consultation strategy and launches the consultation. The sponsor will issue the consultation documents, and publishes them online alongside the earlier material published in support of this change. The change sponsor will be required to maintain records that demonstrate all reasonable actions

were taken to ensure stakeholders are informed of the consultation and have been offered the opportunity to respond.

During Step 3D the change sponsor will carry out a fair, transparent and comprehensive review and categorization of the consultation responses received through the online portal (when available). The categorization will split responses into those that present information that may lead to a change in the design and those that do not, including those raising issues which are outside the change sponsor's control (such as government policy). The CAA will review a sample of the categorised responses and take a view on whether the categorisation has been done fairly. If necessary, the CAA will ask the change sponsor to change a categorisation. The categorisation for each consultation response will be published online.

The intention is that the portal will maintain a transparent and complete record of online consultation responses, and of paper responses which the change sponsor has uploaded. It may be that some feedback is not provided through a formal consultation response but more informally, for example through feedback given at public events, or comments made in private or public meetings. The change sponsor will decide how to introduce this feedback into the process in a transparent way. It may be that the change sponsor requests that such feedback is repeated formally via the portal, as it may not be proportionate to record and upload every point arising.

The purpose of this transparent process is to determine what design changes might be made to mitigate the issues raised, ahead of the sponsor's formal submission to the CAA of its proposal that will include the preferred design option.

6.8.4 Stage 4 – Update & Submit

This stage is sub-divided into Step 4A 'update design' and Step 4B 'submit airspace change' proposal to the CAA.

At Step 4A the change sponsor considers the consultation responses, identifies any consequent design changes, and updates the options appraisal to the Final version, submitting these to the CAA for review. It should be noted, that where significant design changes are made, there may be a requirement to re-consult, as directed by the CAA.

At Step 4B the change sponsor prepares the formal airspace change proposal using a template and submits it to the CAA. This will inform the Public Evidence Session which, should one be held, will take place a minimum of four weeks later. The published version of the formal proposal may have some elements redacted to protect commercially (or national security) sensitive information.

6.8.5 Stage 5 - Decide

Stage 5 is sub-divided into Step 5A CAA 'assessment' and Step 5B 'CAA decision'.

At Step 5A the CAA will review and assesses the airspace change proposal, and for Level 1 changes offers a Public Evidence Session. The CAA may request minor changes to the proposal and will then prepare its assessment papers to inform and provide guidance to the airspace change decision-maker. The CAA will make its 'best endeavours' to make the decision within 16 weeks (for Level 1 changes) or 10 weeks (for Level 2 changes), subject to the change sponsor also meeting its time commitments.

At Step 5B the CAA will decide whether to grant or reject the airspace change proposal. For Level 1 changes, the CAA will normally seek views on a draft of the decision, or the Secretary of State may 'call-in' the proposal. In making its decision, the CAA will state whether it approves or rejects the proposed airspace change. It will publish clear assessments of individual factors and explanations of how a decision was reached, including the weightings applied to the different factors involved.

6.8.6 Stage 6 - Implement

The proposed implementation date will have formed part of the change sponsor's formal proposal and that would be subject to the CAA's approval at the earlier stages. In conjunction with the change sponsor, the CAA will instruct NATS to make the changes necessary in the UK AIP and other national regulatory documents.

The time taken to implement airspace changes is determined through established international aviation procedures. Implementation is time-sensitive, to allow for systems adaptation, testing and training. Modifications are required to both airborne and ground systems and these have to be coordinated on a series of internationally standardized implementation dates. These dates occur every 28 days and in some cases more than one cycle of notification is necessary (, depending on the type of change being proposed, or the Level of the change. Coding[6] and design has to take place before this phase is reached. Co-ordination is often required at the UK's international borders and with other civil and military authorities. This can mean that major changes to airspace are normally only implemented in the quieter traffic periods that occur over winter, which again means implementation is time-sensitive.

6.8.7 Stage 7 – Post-implementation Review

In Stage 7 the CAA commences a post-implementation review, usually 12 months after implementation. The purpose of the review is to ensure the change sponsor carries out a rigorous assessment and demonstrates compliance with any additional requirements that may have been directed by the CAA when a decision was made. The review also allows the CAA to evaluate whether the anticipated impacts and benefits are the same as those anticipated in the original proposal. If there are differences, the CAA will determine what further steps may then be necessary.

[6] A coding house programmes the software used within aircraft flight computers to define routes.

6.9 Summary

The process for establishing airspace and airport procedures is overseen by the CAA in accordance with UK legislation using a detailed multi-stage airspace change process. The CAA has recently introduced a revised process which will apply to the Manston Airport project. This will include comprehensive environmental impact assessments and public consultation on the flightpaths that are to be used by aircraft departing from, and arriving at, the airport.

The comprehensive nature of this process means that it will have to commence before the DCO process is complete. Both the CAA and PINS have been consulted on this issue and agreed that the DCO and airspace change process can run in parallel.

7 Aerodrome Certification

7.1 Legal Framework

The requirement for an Aerodrome Certificate or Licence for an airport such as Manston to operate is set within a hierarchy of legal requirements at International, European and Domestic level. When scrutinising the DCO submission PINS can be assured that, before being granted permission to operate, Manston Airport will have to be compliant with this comprehensive suite of regulations which covers every aspect of Airport Operations from design and construction, through airport operations to safety reporting and culture. Importantly, such assurance is not just achieved on initial approval but is subject to an ongoing and continuous programme of audit and reporting; failure to maintain the required standard could result in an approval being amended or revoked.

7.1.1 International Legislation

Aerodromes are regulated at international level by ICAO through the Convention on International Civil Aviation agreed in Chicago on 7 December 1944 ("the Chicago Convention"). In relation to Aerodromes this is documented in Annex 14 to the Convention Volumes I (Aerodrome Design and Operations) and II (Heliports). The introduction to Annex 14 Volume 1 states:

> *A distinction of Annex 14 is the broad range of subjects it contains. It extends from the planning of airports and heliports to such details as switch-over times for secondary power supply; from civil engineering to illumination engineering; from provision of sophisticated rescue and firefighting equipment to simple requirements for keeping airports clear of birds. The impact of these numerous subjects on the Annex is compounded by the rapidly changing industry which airports must support.*
>
> *New aircraft models, increased aircraft operations, operations in lower visibilities and technological advances in airport equipment combine to make Annex 14 one of the most rapidly changing Annexes.*
>
> *In 1990, after 39 amendments, the Annex was split into two volumes, Volume I dealing with aerodrome design and operations and Volume II dealing with heliport design.*
>
> *Annex 14, Volume I, is also unique: it is applicable to all airports open to public use in accordance with the requirements of Article 15 of the Convention. Historically, it came to life in 1951 with 61 pages of Standards and Recommended Practices and 13 additional pages on guidance for their implementation. Today over 180 pages*

of specifications and additional pages of guidance material set forth the requirements for international airports around the world.

The contents of Volume I reflect, to varying extents, the planning and design, as well as operation and maintenance of aerodromes.

Manston Airport will be developed in compliance with ICAO Annex 14 Volume 1.

7.1.2 European Legislation

Aerodromes are regulated at European level by the 'COMMISSION REGULATION (EU) No 139/2014 of 12 February 2014' which details the Implementing Rules (IRs). At Article 3 it states that:

Article 3 Oversight of aerodromes
1. Member States shall designate one or more entities as the Competent Authority(ies) within that Member State with the necessary powers and responsibilities for the certification and oversight of aerodromes, as well as personnel and organisations involved therein.

2. The Competent Authority shall be independent from aerodrome operators and providers of apron management services. This independence shall be achieved through separation, at functional level at least, between the Competent Authority and these aerodrome operators and providers of apron management services. Member States shall ensure that Competent Authorities exercise their powers impartially and transparently.

The oversight and management of European aviation regulation is undertaken through EASA.

7.1.3 UK Legislation

The UK Government, through the Department for Transport (DfT), has designated the Competent Authority in the UK as the CAA. The legislation that applies to aerodromes in the UK includes:

- Civil Aviation Act 1982
- The Civil Aviation Authority Regulations 1991
- Civil Aviation Act 2006
- The Civil Aviation Authority (Chicago Convention) Directions 2007

The Civil Aviation Authority (Chicago Convention) Directions 2007 state:

These Directions are given to the Civil Aviation Authority by the Secretary of State for Transport in exercise of the powers conferred on her by section 6(2) (b), (c) and (d) of the Civil Aviation Act 1982. These Directions are given in order to ensure that the United Kingdom discharges its obligations under the Convention on

International Civil Aviation done in Chicago on 7 December 1944 ("the Chicago Convention") and after consultation with the Civil Aviation Authority.

Thus, the management and operation of an aerodrome within the UK such as Manston, for the purposes of commercial flights, falls under the remit of International requirements (specified by ICAO), European requirements (through EASA), and National requirements through the DfT, who empower the CAA as the Competent Authority.

7.2 EASA Certification

UK Aerodromes that fall within the scope of EASA will be subject to regulations set by the EU/EASA following the award of an EASA Certificate. Aerodromes fall within the scope of EASA if they meet all of the following requirements:

- Open to public use and which serve commercial air transport and where operations using instrument approach or departure procedures are provided, and:
    - have a paved runway of 800 metres or above; or
    - exclusively serve helicopters.

Manston falls within this definition and will be subject to EASA regulatory requirements.

7.3 EASA Regulatory Process

The European Commission published Commission Regulation (EU) No 139/2014 on 12 February 2014. The regulation contains the IRs that cover all EASA aerodromes.

To meet the requirements of the IRs, EASA has published the following:

- Acceptable Means of Compliance (AMC) and Guidance Material (GM) (as amended) to Authority, Organisation and Operations Requirements for Aerodromes.
- Certification Specifications (CS) and GM (as amended) for Aerodrome Design CS-ADR-DSN.

The AMC and GM requirements cover a wide range of topics across the three sections of:

- Aerodrome Authority Requirements (ADR-AR)
- Aerodrome Organisation Requirements (ADR-OR)
- Aerodrome Operations Requirements (ADR-OPS)

Due to the wide range of topics that are addressed within these documents, they are covered in more detail at Annex A6 in this document.

As identified above, EASA delegate the responsibilities for compliance to the national Competent Authority, which in the UK is the CAA. In order to ensure ongoing compliance, EASA employs standardisation visits to the Member States and their competent authorities covering the domain of aerodromes. In the context of such a standardisation visit, some aerodromes of the Member State in question may be visited to better understand the dealings between the authority and the aerodrome operator.

Manston Airport will be developed in accordance with EU 139/2014.

7.4 The CAA

The CAA details the relevant requirements within a range of Civil Aviation Publications (CAPs).

CAP 393 entitled 'The Air Navigation Order 2016 (ANO) and Regulations' is the overarching main document that provides the basis for CAA regulatory activity. In the Foreword, it states:

> *'This work sets out the provisions of the Air Navigation Order as amended together with Regulations made under the Order. These Regulations are The Rules of the Air Regulations, The Air Navigation (General) Regulations, the Air Navigation (Cosmic Radiation) (Keeping of Records) Regulations, the Air Navigation (Dangerous Goods) Regulations and a number of permanent Air Navigation (Restriction of Flying) Regulations. It also contains the provisions of the Civil Aviation Authority Regulations. As with the Air Navigation Order itself, the Regulations are in their currently amended form.'*

This forms the basis for further CAA documents covering a variety of aviation related activities, including aerodrome operations.

CAP 168 entitled 'Licensing of Aerodromes' states in the Foreword:

> *This document is published in support of the discretionary powers relating to the grant of an aerodrome licence contained in the Air Navigation Order (ANO). The Civil Aviation Authority (Chicago Convention) Directions 2007 require the Civil Aviation Authority (CAA) to ensure that it acts consistently with the obligations placed on the United Kingdom under the Convention on International Civil Aviation, enacted in Chicago on 7 December 1944 (the Chicago Convention). Not all ICAO (International Civil Aviation Organisation) Standards and Recommended Practices (SARPs) and procedures have been fully implemented directly in the ANO. Therefore, where the CAA has discretionary powers to grant a licence, certificate or approval provided it is satisfied as to the suitability of the applicant, the CAA is expected to implement such SARPs through its policy documents such as CAP 168. Where the UK has formally notified ICAO of differences to any of the SARPs in annex 14, these differences are also published in the UK Aeronautical Information Publication (AIP) at GEN 1.7.*

The ANO requires that, in the United Kingdom, most flights for the public transport of passengers take place at a licensed aerodrome, or at a Government aerodrome. The Order also makes provision for an applicant to be granted an aerodrome licence subject to such conditions as the CAA thinks fit.

The purpose of this document is to give guidance to applicants and licence holders on the procedure for the issue and continuation of or variation to an aerodrome licence issued under Article 211 of the ANO 2009, and to indicate the licensing requirements that are used for assessing a variation or an application. The document also describes the CAA's aerodrome licensing requirements relating to operational management and the planning of aerodrome development. This document represents the minimum standards necessary to meet the licensing requirement.

CAP 168 goes on to state at Chapter 2 (paragraphs 2.1. and 2.2), the requirement for an Aerodrome Licence and Aerodrome Manual as follows:

2.1 Article 211 of the Air Navigation Order (ANO) governs the grant of aerodrome licences by the Civil Aviation Authority. The Article, together with Schedule 12, sets out the requirements for the aerodrome manual within the licensing process. The CAA uses the manual to assess the suitability of aerodrome licence holders and their organisations against the safety-related requirements set out in Article 211(1)(a), (b) and (c) of the Order. The assessment is a continuous process; this is particularly relevant when changes likely to affect safety are proposed or made.

2.2 An application for an aerodrome licence should be accompanied by an aerodrome manual produced in accordance with CAP 168. Once granted a licence, the licence holder is required to maintain the manual in conformity with chapter 2 of CAP 168, and all aerodrome operating staff must have access to the relevant parts of the manual. The term 'operating staff' means all persons, whether or not the aerodrome licence holder and whether or not employed by the aerodrome licence holder, whose duties are concerned either with ensuring that the aerodrome and airspace within which its visual traffic pattern is normally contained are safe for use by aircraft, or whose duties require them to have access to the aerodrome manoeuvring area or apron. The manual will be regarded by the CAA as the primary indication of the standards likely to be achieved by the aerodrome operator. A copy is to be lodged with the CAA.

The component elements of an Aerodrome Manual are many and varied and are recognised by the CAA to be potentially too unwieldly to be contained within a single document therefore in CAP 168 at paragraph 2.16 it states:

2.16 At larger aerodromes the size and complexity of operations and related procedures may dictate that these procedures could not easily be included in a single document. In such circumstances it is acceptable to identify and reference within the manual the procedures which are not included within it. If this system is to be successful it is essential that any referenced information, documentation and procedures are subjected to exactly the same systems of consultation and promulgation as the manual itself.

The structure of an Aerodrome Manual and the range of supporting documents will vary to some degree between aerodromes, dependent upon the nature, scale and complexity of the operation.

Nevertheless, the basic requirement detailed by CAP 168 will not vary and the CAA will not issue a licence until an aerodrome has demonstrated the necessary management structure and organisational processes to deliver the level and complexity of operation that is to be supported.

Manston Airport will be developed in accordance with all relevant CAA regulations including, but not limited to CAP 393 and CAP 168.

7.5 Aerodrome Manual Overview

7.5.1 Context

The topics covered within the Aerodrome Manual are set against the context of the requirement detailed in CAP168 Chapter 2, paragraphs 2.1 and 2.2 which are stated above.

Beyond this context, the purpose and scope of the manual is addressed in paragraphs 2.3 to 2.5 inclusive as follows:

> *2.3 An efficient management structure and a systematic approach to aerodrome operation are essential. The manual should contain all the relevant information to describe this structure satisfactorily. It is the means by which all aerodrome operating staff are fully informed as to their duties and responsibilities with regard to safety. It should describe the aerodrome services and facilities, all operating procedures, and any restrictions on aerodrome availability.*
>
> *2.4 Accountability for safety must start at the very top of any organisation. One of the key elements in establishing safe working practices is for all staff to understand the safety aims of the organisation, the chain of command, and their own responsibilities and accountabilities. As safety management principles are applied, the manual should be expanded to describe clearly how the safety of operations is to be managed at all times. To a reader or user of the manual there should never be any doubt about who is responsible, who has the authority, who has the expertise and who actually carries out the tasks described in any section.*
>
> *2.5 The principal objective of an aerodrome manual should be to show how management will discharge its safety responsibilities. The manual will set out the policy and expected standards of performance and the procedures by which they will be achieved.*

From this, it can be seen how broad-ranging in content the Aerodrome Manual is and that clarity of how the aerodrome is managed, staffed, operated and equipped to meet the requirements of the CAA is contained within the Aerodrome Manual.

7.5.2 The Form of the Manual

The form of the Aerodrome Manual is addressed in CAP 168 paragraphs 2.14 – 2.17 inclusive. It is notable that paragraph 2.14 and 2.15 plainly state that:

> *2.14 The aerodrome manual is a key document both for the licence holder and the CAA.*
>
> *2.15 Supported by the Safety Report, it is the safety assurance document for the CAA's licensing process, and a management tool for industry. The manual is the source document describing how operational procedures and their safe management will be delivered. It should contain all such information and instructions as may be necessary to enable the aerodrome operating staff to perform their duties.*

This identifies the level of importance that the CAA places on the Aerodrome Manual within the overall management and operation of a licenced aerodrome in the UK.

7.5.3 The Contents of the Manual

The contents of the manual are addressed at CAP 168 paragraph 2.18 which preludes the overall contents list with the following statement:

> *2.18 As a general guide, the following paragraphs set out the items which should be included in the manual, although it is recognised that the need to include all items will vary between aerodromes depending on the nature and scale of operations. It is not necessary for all operational procedures to be included in the manual. However, when these are relevant to achievement of policy their location should be clearly referenced within the manual.*

The contents list details the elements to be included, this is lengthy, technical and complex and is stated in detail at Annex A7 to this document. The summarised contents list is as follows:

1. The Introduction to the Manual – purposes, legal position, distribution and amendments.
2. Technical Administration – details of the aerodrome, key staff, Safety Management System and Safety related committees.
3. Aerodrome Characteristics – physical characteristics, locations, runway distances, surfaces dimensions and strengths.
4. Operational Procedures – publication of details, inspections, aircraft related activities, weather related activities, access control, emergency procedures, control of works, fuel management, wildlife hazard management, safeguarding and procedures for change management.
5. Visual aids – Aeronautical ground Lighting (AGL), power supplies, obstacle lighting and inspection procedures.
6. Rescue and Fire Fighting Services (RFFS) – policy, procedures, equipment, vehicles, manpower, training, maintenance of competence.

7. Integrated Emergency Planning – appropriate to the complexity and size of the aircraft operations.
8. Air Traffic Services (ATS) – systems, procedures, runway selection, noise abatement, emergency alerting.
9. Communications and Navigation Aids (Navaids) – Instructions and operating procedures.
10. Bibliography – Cross referenced documentation

7.6 The Aerodrome Manual and the Licensing Process

The submission of the Aerodrome Manual, the procedure for which is detailed in CAP 168 Chapter 2 paragraphs 2.22-2.40 (see Annex A8), provides the CAA with a documentary baseline against which it undertakes its regulatory functions that form the licencing process. From the perspective of Manston Airport, it represents the body of evidence which proves compliance with the necessary ICAO, EASA and CAA Regulations.

The manual and its subsidiary documents also provide the regulator with a clear, unambiguous basis to audit against in relation to the CAA's minimum regulatory requirements. Where AMCs are detailed within the manual, the CAA applies ongoing scrutiny to ensure that such AMCs are applied correctly and consistently.

The contents of the Aerodrome Manual are designed to address all the necessary areas that contribute to the safe and regulatory compliant operation of an aerodrome. A breakdown of these areas, together with other associated and relevant regulatory documents, is provided at Annex A9.

In addition, supporting documents broaden the Aerodrome Manual applicability and this is covered at Annex A10.

An example Aerodrome Manual hierarchy of related documents is shown at Annex A11.

7.7 CAA Auditing

The process of audit scrutiny applied by the CAA covers not only the documentary evidence supplied by the aerodrome operator but also includes direct onsite audit visits to verify the infrastructure provision, operational processes and staff training that are in place to support the aerodrome operations.

It is normal practice for the CAA to undertake an audit visit to an aerodrome on an annual basis, however there is scope for such audits to be carried out at more frequent intervals should the CAA deem it necessary to do so.

Such audit visits cover a wide range of areas, as detailed within the Aerodrome Manual, the supporting hierarchy of documents and any other areas that the CAA sees fit to examine.

The CAA Aerodrome Audits are carried in depth, typically by 2-3 auditors over a period of 2-3 days. This audit seeks to establish that the correct documentary and procedural processes are in place, that the documented standards are applied across the aerodrome's operation and that staff fully understand their responsibilities, are correctly trained and their standards of competence are also satisfactory.

The Aerodrome Audit covers the areas of airfield operations, RFFS, emergency planning, survey data, runway condition and friction, infrastructure provision across the entire airfield manoeuvring area, airfield ground lighting (including appropriate flight checks), wildlife hazard management, winter operations, infrastructure and equipment maintenance regimes, aviation fuel management, training, appropriate staff medicals and risk management. The subject matter of these audits may be expanded as the CAA sees fit within the overall remit of the Aerodrome Licence and where current safety interest lies whether nationally or locally.

In addition to the Aerodrome Audits there are specialist CAA audits of the ATS provision and Air Traffic Engineering (ATE) provision. These audits include details of staff licencing, maintenance of staff competence, training, examinations, together with infrastructure and equipment audit, maintenance records and equipment operating licences where relevant.

7.8 Performance Based Regulation

The CAA is developing an enhanced method of regulatory oversight called Performance Based Regulation (PBR) which is outlined in CAP 1184 entitled 'The Transformation to Performance Based Regulation'. PBR is central to EASA's and ICAO's future plans and the CAA is working closely with both these international organisations to shape how PBR works in practice. The UK aviation industry has fed back to the CAA that it believes PBR should make the CAA more proportionate and targeted, have a greater degree of commercial awareness and be more transparent about how money is spent.

PBR entails developing a comprehensive risk picture across, and with, the organisations that are regulated and the CAA will build its knowledge and data to make sure that regulation targets the areas where it will make the biggest difference.

The CAA has stated on its website that its vision is *'To transform the CAA into a performance based regulator, working with industry to demonstrably reduce safety risk across the total aviation system'*.

7.9 The Accountable Manager

Every Licensed (certificated) aerodrome in the UK is required to have a named Accountable Manager (AM). This requirement focusses responsibility and accountability at a sufficiently senior level to ensure that all regulatory issues are properly addressed.

The role of AM is usually held at Director level (e.g. the Operations Director or CEO) as the individual has full responsibility for implementing the Safety Management System (SMS) which requires corporate authority for ensuring all activities can be financed and carried out to the required standard. This includes adequate staffing levels, direct responsibility for the conduct of the organisation's affairs, full authority over operational matters, and final responsibility for all safety issues. Direct access to the Board of Directors is an important part of delivering this effectively.

As part of the audit process, the CAA include targeted safety risk conversations between the AM and the CAA. These AM Meetings are a regular part of the oversight process to ensure that the CAA and the AM have a similar perspective on the major risks facing each entity. The CAA has published CAP 1508 entitled 'Getting the most out of the Accountable Manager Meeting' to promote positive meetings with a constructive dialogue about any actions and outcomes needed to further enhance safety to the required standard.

7.10 Timescales

RSP has already had discussions with the CAA regarding the production of the Aerodrome Manual and the subsequent application for an Aerodrome Certificate. The process for this is clearly defined and understood. The Aerodrome Manual will not feature as part of the DCO submission as it is heavily reliant on details of airport operations that are not yet available and service providers (such as Rescue and Fire Fighting Services, Air Traffic Control, Airport Support Services etc) that are not yet in place.

However, PINS can be satisfied that the extensive detail required by the Aerodrome Manual, and other elements of the Aerodrome Certification process, will be complete, and subject to extensive specialist scrutiny by the CAA, before any approval for the Airport to operate is granted.

8 Conclusions

At the outset of this project, there was a risk that the DCO process and CAA approvals processes could potential contradict or conflict with each other. RSP believes that, through consultation and engagement, this risk has been managed for the benefit of all and duplication of effort for RSP, PINS and the CAA has been minimised.

A common understanding of respective process will mean that PINS will consider 'worst credible' scenarios for aircraft flightpaths and environmental impact, whereas the CAA will consider more specific flightpaths that will take into account a range of specialists aviation factors (including aircraft performance, safety, airspace integration etc). Importantly however, it was recognised that the CAA will also be expecting the environmental impact of these more detailed proposals to be fully assessed and mitigated where possible. Equally, it will require a further round of consultation on the more detailed airspace proposals. PINS can therefore be confidence that, while the DCO will be based on 'worst credible' scenarios, an approval with the requirement that final procedures must be in accordance with CAA regulations recognises that subsequent scrutiny by the CAA will be looking for 'best possible' outcomes within the bounds of any DCO approval.

Turning to how the airport will be operated and be regulated, PINS can once again be assured that a comprehensive regulatory regime, originating in ICAO, managed by EASA and delivered by the CAA will be in place to consider every aspect of how the airport is designed, constructed and operated. Unless compliance can be proven, and continue to be demonstrated through subsequent audit activities, Manston Airport will not be granted the Aerodrome Certificate (Licence) it requires to operate. The comprehensive nature of the Aerodrome Manual is but one example of the breadth and depth of subjects covered. Once again, a DCO approval that mandates Manston Airport to operate in accordance with the relevant national and international aviation regulations would ensure that any DCO approval, and any subsequent CAA/EASA authorisations, would remain complimentary.

Operations at Manston Airport will have to be in accordance with the following regulations, provided and CAA approved prior to Airport Licensed operations:

- Aerodrome Certificate;
- Airspace Change (CAP 1616);
- Air Traffic Service approval;
- Air Navigation Service Approval;
- Air Traffic Control training approval;
- Provision of Aeronautical Information; and
- Radio Spectrum approvals.

A1 CAA Initial Meeting Notes

MANSTON - INITIAL MEETING RECORD 160309

PRESENT

- NAIL LAWLOR
- ANGUS WALKER (CHAIR)
- ALEX HALLET
- TONY FREEDMAN
- GEOFFDEWICK
- TONY GIBBS
- DAVIDCOWAN
- TOM WILSON

- ROB LEWIS
- TONY HEAP
- EMMA SIMPSON
- MARK WAKEMAN

BACKGROUND

- SOLD DEC 13, CLOSED MAR 14, LICENCE SURRENDERED MAY 14
- THANET STATED AIM TO RE-OPEN AIRFIELD
- DEC 15 NL MET AW TO DISCUSS PLANNING CONSENT AND COMPULSORY PURCHASE
    - -- BELIEVE THERE IS A STRONG CASE BASED ON DFT NATIONAL POLICY STATEMENT
- AIRPORT MAIN BUSINESS:
    - -- CARGO IMPORTS
    - -- SOME PAX FLIGHTS
    - -- EXPECT 10,000+ MOVEMENTS / YR
    - -- ACFT DISMANTLING FACILITY
    - -- SKILLS BASE
- NL WRITING A NATIONAL CARGO POLICY; CURRENTLY THERE IS NONE
- CURRENT DEVELOPER WANTS TO USE THE SITE FOR HOUSING

PLANNING ACT 08

- CAA STATUTORY CONSULTEE FOR NATIONALLY SIGNIFICANT INFRASTRUCTURE PROJECTS
- SEC 23 THRESHOLDS; 10M PAX OR 10K MOVEMENTS/YR (CAPACITY AVAILABLE, NOT PLANNED OPERATING LEVELS)
- CURRENTLY ALL FACILITIES INCLUDING RADAR HAVE BEEN REMOVED
- ALL HANDLED BY PLANNING INSPECTORATE IN BRISTOL
- TIMELINE:
    - -- FIRST STEP ENVIRONMENTAL IMPACT ASSESSMENT
    - -- EARLY SUMMER COMPULSORY PURCHASE
    - -- DEVELOP CONSENT ORDER AND STATUTORY INSTRUMENT
    - -- CONDUCT CONSULTATION
    - -- APPLICATION TOWARDS END 2016
    - -- 28 DAY EXAMINATION PERIOD

- 6 months including hearings
- 3 months for inspectors
- Prepare report for SofS
- 3 months for SofS to make decision

Further detail discussed

- CAP 168 (National) Licence or EASA Certificate
  - EASA scope aerodromes explained and whether they suit 2 certificate route.
  - Explained the benefits of either Licence or Certificate. They indicate they would prefer a Certificate
  - Indicated possible timelines and effort required to obtain certificate.
- Thanet and London Array TMZ
  - Effect on radar discussed and advised to get appropriate radar to mitigate issues
- Airspace Change Process explained as it stands today, with explanation of the current consultation regarding CAP 725 and how this process may evolve in the future
- Consultation requirements
  - Recency of consultation will determine requirements for ACP?
    1. --- Dependent on material changes in the intervening period, a further full consultation may be necessary at ACP stage
- Requirements for ATZ
  - 6 month process to get a CAA decision including NATMAC consultation
- Planning applications for tall structures south of airfield within 2.5nm ATZ
  - These will be addressed in due course

[redacted]

Mark Wakeman
Airspace Regulator (Technical)
Civil Aviation Authority

A2 Meeting with CAA Airspace Section 15 May 2017

Meeting between CAA and RiverOak Strategic Partners (RSP) on Manston Airport Airspace Development – 15 May 2017

Attendance:

Stuart Lindsay – CAA
James Walker – CAA
Seonaid Reed - CAA
Tony Freudmann – RSP
Niall Lawlor – RSP
George Yerrall – RSP
Tony Gibbs – AMEC FW
Angus Walker – BDB
Alex Hallatt – BDB
Richard Connelly - Osprey

Agenda Item 1 – Introductions

- Introductions and description of responsibilities were completed.

Agenda Item 2 – RSP Manston update

- Tony Freudmann provided the background and context for the decision to pursue a Development Consent Order (DCO) with regard to the Manston Airport Project and described the RSPs previous meeting with the CAA in March 2016.
- The timetable for the DCO was described; consultation will begin immediately after the election leading to a DCO submission in Q4 of 2017.

Agenda Item 3 – Airspace and Procedures

- Richard Connelly described the current plans for airspace and procedures for Manston. These included:
    - Re-establishment of the Air Traffic Zone (ATZ).
    - RNAV approaches to both runway ends.

- ILS approach procedures to both runway ends.
- Standard Instrument Departures for both runways.
- Establishing network connectivity.

- The status of the London Array and Thanet Transponder Mandatory Zones were discussed.
- The CAA stated that:
  - The re-establishment of the ATZ would likely require a proportionate airspace change process (ACP); this could be expected to be similar to the current CAP 724 process.
  - The approach and departure procedures would require the full ACP.
  - There may be value in submitting the ATZ and the approach and departure procedures as separate ACPs.
  - The issues regarding the TMZs was noted and would require further discussion.

Agenda Item 3 – Revision of the CAP 725 process

- Stuart Lindsey described the revised CAP 725 process; guidance on its application was currently under consultation.
- The revised process was considerably longer (estimated to be 108 weeks compared to the previous 57 weeks). It aimed to be more transparent and understandable by the non-aviation community. The new process was more scalable than previously and sign-off levels have been reviewed but the standards to be achieved were generally higher and the introduction of 'Gateways' ensured they were assessed throughout the process.
- While the timing for introduction of the revised process was uncertain, levels of confidence in their application was high and it would be reasonable to assume that they would be applied to the Manston Airport Project.
- In terms of phasing with the DCO, Richard Connelly suggested that RPS could not afford to wait for a DCO decision before initiating the ACP; the CAA agreed with this. It was also suggested that elements of the DCO process could be used to satisfy the early stages of the ACP; the CAA accepted this in principle but stressed that such activities must be clearly identified as both 'DCO Consultation' and 'ACP Engagement'.
- Decision:
  - RPS would ensure that any DCO activities that may be employed as part of the subsequent ACP would be clearly identified to the public.

Agenda Item 4 – Interaction with the Planning Inspectorate (PINS)

- The CAA agreed to a Process Workshop with PINS to discuss the respective roles and responsibilities of each organisation. The Workshop may also allow

delineation between the level of detail required in both the DCO and the ACP submission.

- The Workshop would allow propositions to be discussed on how the DCO and ACP processes may be co-ordinated and how duplication of effort may be minimised.
- Decisions:
    - CAA would participate in a Process Workshop with PINS at CAA House on 12 June 2017 (timing tbc).
    - Osprey (through RPS) would co-ordinate the development of an Agenda and would circulate proposition statements to be discussed at the Process Workshop.

Agenda Item 5 – next steps

- Timescales for submission of the ACP were discussed. CAA resources in this area are extremely tight. Therefore, while RPS could submit an application immediately, realistically CAA would not identify a case officer and commit resource until they considered it could be justified.
- It was agreed that submission of the DCO could be a suitable threshold, both in terms of timescale and project maturity, at which an ACP request would be submitted. This would also allow material prepared for the DCO to inform the initial stages of the ACP.
- Decision:
    - It was agreed that the respective timing of the DCO and the ACP processes would be subject for discussion at the CAA/PINs Process Workshop.

Agenda Item 6 - Any other business

- There was no other business.

A3 PINS/RSP Airspace Meeting

Meeting note

Status	**Final**
Author	**Kate Mignano**
Date	**16 September 2016**
Meeting with	**RiverOak Investment Corporation LLC**
Venue	**Temple Quay House**
Attendees	**RiverOak Investment Corporation LLC** **Tony Freudmann - RiverOak** **Niall Lawlor - RiverOak** **George Yerall - RiverOak** **Angus Walker - Bircham Dyson Bell** **Alex Hallatt - Bircham Dyson Bell** **Geoff Dewick - RPS** **Angela Schembri - RPS** **Richard Connelly - Osprey** **Planning Inspectorate** **Susannah Guest - Infrastructure Planning Lead** **Richard Hunt – Senior EIA and Lands Rights Advisor** **Kate Mignano – Case Officer**
Meeting objectives	**Manston Airport Project Update Meeting**
Circulation	**All attendees**

Summary of key points discussed and advice given:

The developer was reminded of the Planning Inspectorate's openness policy that any advice given would be recorded and published on its website under s51 of the Planning Act 2008 (as amended by the Localism Act 2011) (PA2008) and that any advice given does not constitute legal advice upon which developers (or others) can rely.

Introductions were made by everyone present, and individual roles were explained.

Project Update

A brief update on various aspects of the project programme was provided by the attendees.

S53 request – rights of entry

It was noted that on 1 July 2016 RiverOak had made an application under s53 of the Planning Act 2008 for rights of entry to carry out a range of surveys and site investigations, which the Planning Inspectorate is processing. The Planning Inspectorate considers such application requests in accordance with its Advice Note 5: 'Section 53 - Rights of Entry': https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/04/advice_note_5.pdf

It was noted that the Planning Inspectorate does not publish or provide information regarding a s53 authorisation request, until such a request has been determined.

Ongoing survey work

The developer confirmed work was continuing around the key issues of noise and air quality via means of a desk top study. However, site surveys were not possible as agreement on an access licence had not been reached with the land owner to date. Progress on ecological survey work will be made if an agreement with the landowner is in place or if the developer receives a favorable s.53 decision.

Consultation

Non-statutory consultation in the form of six public events has recently taken place. taken place. The developer gave a brief overview of the responses received. In response to queries from The Inspectorate raised from the consultation material, the developer explained its intention to produce a Press Release covering the outcomes of the recent non-statutory consultation events. This would confirm that responses would be taken into account in the future development of the developer's proposals.

The developer reflected on the recent events and noted that they hoped to hold future events in more local areas following feedback received. The Statement of Community Consultation has been drafted and the developer confirmed they will be sharing the draft with Thanet District Council and Kent County Council for comments.

The Inspectorate queried if RiverOak were aware of the concerns raised by some people in respect of the recent consultation, noting in particular the s51 advice issued via the Inspectorate's project website and a document prepared by No Night Flights. The Inspectorate suggested that referring to a subsequent 'formal'

round of consultation as 'statutory consultation' might offer reassurance to those participating in the process that statutory process and expectations would be governing this round of consultation.

Civil Aviation Authority - Consultation and Priority Activities

The airspace aspects of the project and the roles and responsibility of the Civil Aviation Authority (CAA) were discussed.

With regard to the CAA, the Secretary of State for Transport is answerable to Parliament for the performance of the CAA's functions. In relation to the Manston Airport project, the CAA's role would be in:

- Regulating civil aviation safety;
- Advising and assisting the Secretary of State on all civil aviation matters, including policy for the use of UK airspace so as to meet the needs of all users, having regard for national security, economic and environmental factors, while maintaining a high standard of safety.

The developer explained that, to achieve this, the CAA would provide regulatory oversight for all aviation activities associated with the project including, but not limited to, its planning, construction and operation. Such regulations are either in accordance with EU Law (overseen by the European Aviation Safety Agency (EASA)) or UK Law (in the form of the UK Air Navigation Order 2016). The rigour with which the CAA apply these regulations was discussed. The developer considered that, due to their legislative basis, there would inevitably be duplication and overlap between the Development Consent Order (DCO) process and the application of CAA Regulations. For example, both require public consultation and environmental impact assessments as part of their application; although the CAA process is specifically focused on aviation aspects of the proposal. The developer sought to assure The Inspectorate that it would fully meet its regulatory responsibilities to both processes.

The developer described two specific priorities for CAA engagement. The first was the submission of an application for an EASA Aerodrome Licence; this would be in accordance with the comprehensive process outlined in CAA Publication (CAP) 168 (Licensing of Aerodromes); as it covers every aspect of airport operations the developer anticipated it may take up to 2 years to complete this process. The second was the establishment of procedures and airspace to support airport operations; this would be in accordance with CAP 725 (Airspace Change Process) and may take 18 months to complete. The developer explained that the initial stages of these processes should be implemented now so as to inform the Airport Master Plan and DCO submission.

The developer explained that the statutory consultation for the DCO process was expected to be in Q1 2017; formal consultation with the CAA on the Aerodrome

Licensing and Airspace Change submissions was then expected to begin once the DCO application had been accepted to progress to examination. It was noted that careful correlation between CAAs processes, and those of the DCO, would be required.

Public Inquiry under the Town and Country Planning Act 1990

The current owners of the site have lodged four appeals with the Inspectorate, for change of use on the Manston Airport site for the 'Stone Hill Park' development. A public inquiry is due to take place in November 2016 to determine these appeals.

Other Planning Matters

A planning application has been submitted to Dover District Council for a 300m Telecommunications mast. If this application was granted it would have implications for the Manston Airport application. The developer will update the Inspectorate once the application has been decided by Dover District Council.

Environmental Impact Assessment (EIA)

The Inspectorate informed the developer that due to an administrative error three statutory consultees were inadvertently missed during Scoping Consultation. The Inspectorate has now consulted with those affected, namely; Natural England, the Health and Safety Executive and Thanet Clinical Commissioning Group. A response has since been received from Natural England and several late responses received

from other statutory consultees; all are now published on the Planning Inspectorate website. All relevant statutory consultees have been included in the EIA Regulation 9 list which has been supplied to the developer with the Secretary of State's Scoping Opinion.

The developer confirmed engagement with statutory consultees is continuing and work with Natural England on an evidence plan is ongoing. Preliminary Environmental Information will be dependent on the information available at the time of statutory consultation.

Draft Documents

The developer was considering the powers of the DCO and how certain aspects of the scheme could be delivered. The Inspectorate explained the level of detail required for the DCO requirements in relation to the Construction Management Plan and that all aspects to be secured through the DCO should be covered sufficiently in the requirements.

The Inspectorate queried which elements of the proposals outlined in the consultation material would be part of, or secured through, any subsequent

development consent order noting in particular elements related to future passenger flights and elements such a shuttle bus. The developer also noted the relevance of national and local policy.

A4 Slides from CAA/PINS/RSP Process Workshop

CAA/PINS Process Workshop

Agenda

• Introductions	- All
• Confirm Purpose of Workshop	- All
• Manston Project Update	- RSP
• DCO Process Overview	- PINS
• Airspace Change Proposal Process Overview	- CAA
• Timescale and Phasing Challenges	- RSP
• Combining Activities	- RSP
• Respective Levels of Detail	- RSP
• Resolving differences in approvals	- All
• Any other Business	- All

Workshop Purpose

In the context of the Manston Airport Project, and other projects which may be relevant, the purpose of the Workshop is to identify:

- How the Development Consent Order (DCO) and Airspace Change Proposal (ACP) processes can complement each other.
- How challenges associated with the timescales and phasing of the respective processes can be addressed.
- Specific areas of expertise and accountability between PINS and the CAA.
- How duplication of effort for PINS and the CAA can be minimised.
- How submissions to PINS and the CAA can be developed and prepared in the most efficient manner; minimising repetition of activities and ensuring they are developed in a complementary manner.

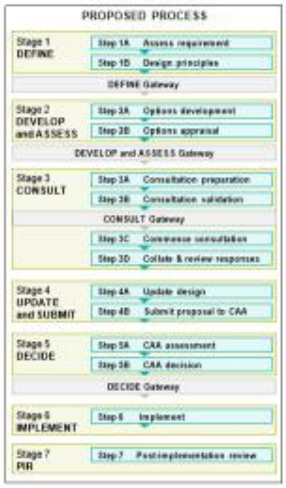
Manston Project Update

DCO Process Overview

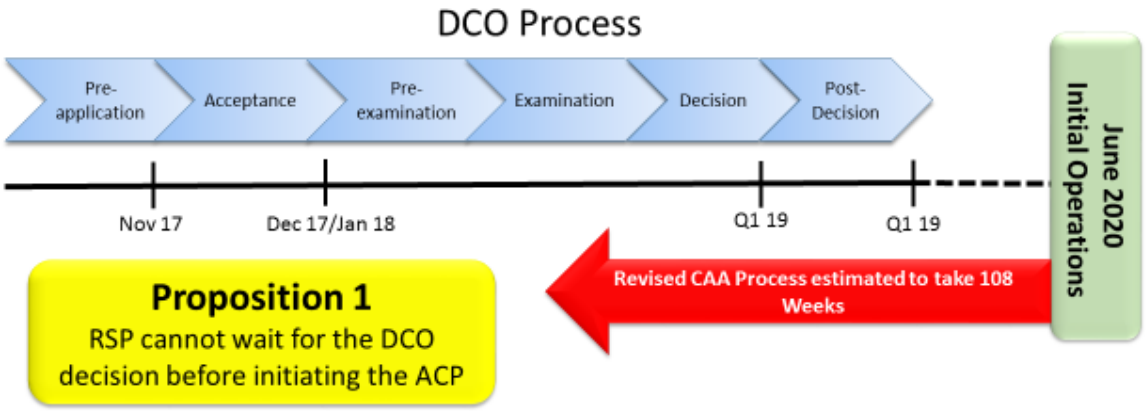
Planning Inspectorate

Airspace Change Proposal Process Overview

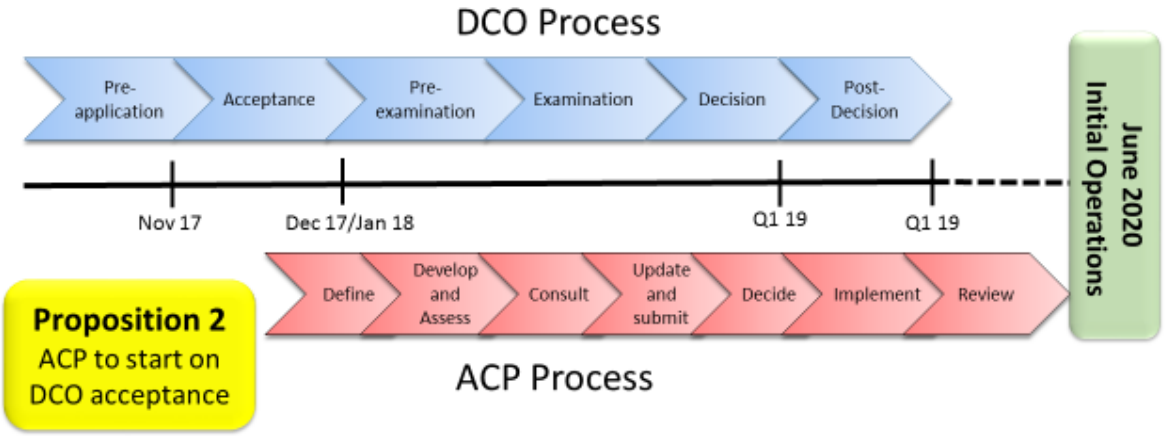
Civil Aviation Authority



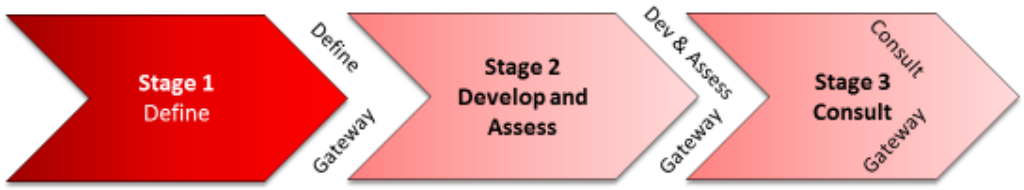
Timescales and Phasing Challenges



Timescales and Phasing Challenges



Combining Activities



Stage 1a - Assess Requirement

'Statement of need' setting out what airspace issue it is seeking to address. CAA meet with the Change Sponsor to agree whether the requirement is appropriate... and to conduct initial discussions about the appropriate scale of such a change and what parts of the process are applicable.

Stage 1b - Design Principles

Encompass the safety, environmental and operational criteria, as well as strategic policy objectives that the Change Sponsor aims for in developing the airspace change proposal. The design principles will then form the structure against which design options can be evaluated.

Proposition 3

If clearly identified as such, elements of the DCO Consultation could be used as engagement to inform the ACP Design Principles

Combining Activities

Stage 2a – Options Development Overview

The change sponsor develops one or more options that address the statement of need and align with the defined design principles.

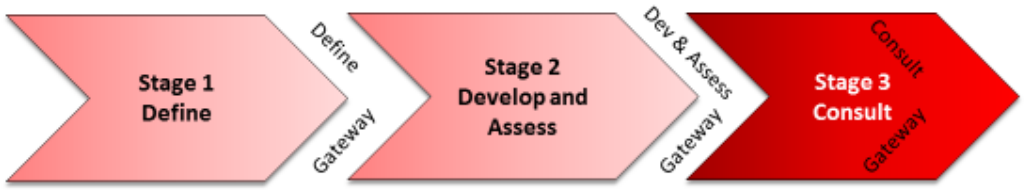
Stage 2b – Options appraisal overview

Each option, even if there is only one, is assessed to understand the impact, both positive and negative. The change sponsor carries out the options appraisal against requirements set by the CAA in an iterative approach: this is the first of three appraisal phases.

Proposition 4

Elements of the DCO Environmental Statement could contribute to the ACP Environmental Analysis

Combining Activities



Stage 3a - Consultation preparation Overview

The change sponsor plans its stakeholder consultation and engagement, and prepares consultation documents, including the 'Developed' options appraisal.

Stage 3b - Consultation validation Overview

The CAA reviews and validates the consultation and engagement plan and consultation documents. This is to ensure the plan is comprehensive, the materials clear and appropriate, and the questions unbiased..

Step 3c - Commence consultation Overview

Step 3d - Collate and review responses Overview

Proposition 5
Elements of the DCO Consultation feedback could support the ACP consultation submission

DCO versus ACP – the challenge

- DCO requires Environmental Statement on potential procedures

BUT

- Exact procedures will need to:
  - Consider engagement input from ACP Stage 1 (Design) and Stage 3 (Consult)
  - Be designed in Stage 2 (Develop and Assess) and revised in Stage 4 (Update and Submit)
  - Take into account:
    - Procedure Design Regulations (CAP 785)
    - Revised CAP 725 process (guidance currently under consultation)
    - Operator and aircraft requirements
    - 'Flyability' – ability for aircraft systems to follow procedures (possibly flight trials)
    - Simulations – integration into the air traffic network

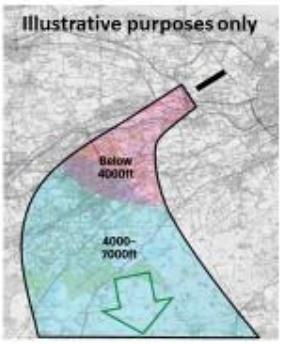
DCO Noise Assessment

- What it can do
  - Assess very early route design options which could seek to:
    - Minimise the total number of people overflown
    - Prefer overflying open space
    - Develop examples of balanced designs;
  - Consider the sensitivities of any mitigation within each route design;
  - Present a range of assessment outcomes and sensitivities in accordance with CAP 1520
  - Identify locations where likely significant effects would:
    - Occur in all instances and are nor affected by the airspace operational design
    - Be dependent upon the finalised airspace designs through the ACP
- What can't it do
  - Be precise about the magnitude and geography of all likely significant effects of aircraft noise
  - Be sufficiently confident about any restrictions in the form of noise contours size or population exposure requirements

Respective Levels of Detail

For the DCO

'Swathe' or 'Route Envelope' to represent a worst case scenario for the operational airspace effects of the Proposed Development; the final refined design, which will likely result in an improved environmental situation, will then be agreed with the CAA through the Airspace Change Process.



For the ACP

Engagement for Stage 1 (Define) will be based on the 'Swathes' or 'Route Envelopes'.

Final submission will be based on consultation and environmental impact assessment of precise routings (within the 'Swathe' or 'Route Envelope).

Proposition 6

Precise flightpaths will be developed, assessed, refined and approved by the CAA, within the bounds of the DCO approval, as part of the Airspace Change Process

Resolving differences in approvals

- RSP believe risk of this is very low.
  - Airspace and procedures are being developed in accordance with revised CAP 725 process
  - Design Envelopes:
    - Have been developed by CAA-approved Procedure Designer
    - Will cater for all potential aircraft types
    - Allows a margin for design changes (flyability, consultation feedback etc)
- There is, nevertheless, a *possibility* that an unanticipated factor may influence procedures beyond the Design Envelopes
  - Change in regulation
  - Changes to air traffic network

Proposition 7

If the ACP approval exceeds the DCO permission RSP will apply to amend the DCO permission

A5 Process workshop between CAA, PINS and RSP June 2017

Process workshop between CAA, PINS and RiverOak Strategic Partners (RSP) June 2017

Attendance:

Tony Freudmann – RSP	Seonaid Reed - CAA	Gareth Leigh - PINS
George Yerrall – RSP	James Walker – CAA	Pauline Lane - PINS
Tony Gibbs – AMEC FW	Stuart Lindsay – CAA	Richard Hunt - PINS
Richard Connelly - Osprey	Imogen Brooks - CAA	Richard Price - PINS
James Trow - AFW	Alex Hallatt – BDB	
Rob Grinnell - RPS	Angus Walker – BDB	

Agenda Item 1 – Purpose of the workshop

- CAA view – to understand the respective processes and identify where each are dependent on each other but stressed that both processes are independent. The workshop was not to discuss Manston specifics; CAA own the process not the proposal.
- PINS view – CAA will be statutory consultees in the DCO process so they will have opportunity to comment on the DCO. They want to ensure a degree of consistency between CAA and PINS so that any solution is implementable.
- RSP view - to identify how the DCO and ACP processes can complement each other. How challenges associated with the timescales and phasing of the respective processes can be addressed. Explore specific areas of expertise and accountability between PINS and the CAA. How duplication of effort for PINS and the CAA can be minimised? How submissions to PINS and the CAA can be developed and prepared in the most efficient manner; minimising repetition of activities and ensuring they are developed in a complementary manner.

Agenda Item 2 – RSP Manston update

- Public consultation was about to start later that week. Much work has been completed on masterplanning and environmental impact assessment. These will

inform formulation of the final DCO application with submission expected in late Autumn 17.

Agenda Item 3 – DCO process overview

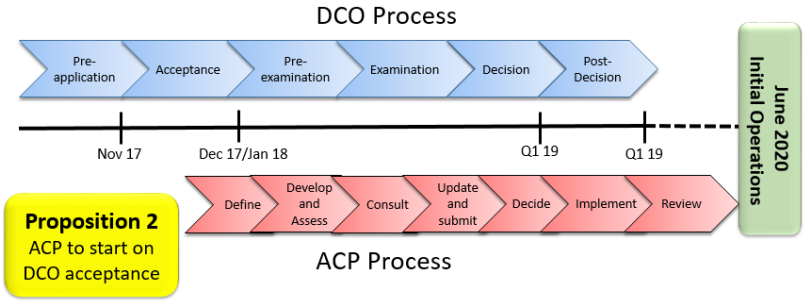
- PINS felt that all were sufficiently familiar with the DCO process (CAA and PINS had met earlier that day). CAA involvement in that process will be dependant on which policies are being tested.

Agenda Item 4 – ACP Overview

- The revised ACP process was considerably longer (estimated to be 108 weeks compared to the previous 57 weeks). It aimed to be more transparent and understandable by the non-aviation community. The new process was more scalable than previously and sign-off levels have been reviewed but the standards to be achieved were generally higher and the introduction of 'Gateways' ensured they were assessed throughout the process.
- While the timing for introduction of the revised process was uncertain, levels of confidence in their application was high and it would be reasonable to assume that they would be applied to the Manston Airport Project.

Agenda Item 5 – Timescale and Phasing Challenges

- The slide below was discussed and, in principle, the need to commence the ACP before the DCO decision was accepted. It was agreed that Acceptance of the DCO submission by PINS would indicate that it has been accepted as a Nationally Significant Infrastructure Project; this would be an appropriate trigger for the ACP. CAA Legal requested that RSP formally propose this to the CAA for consideration.

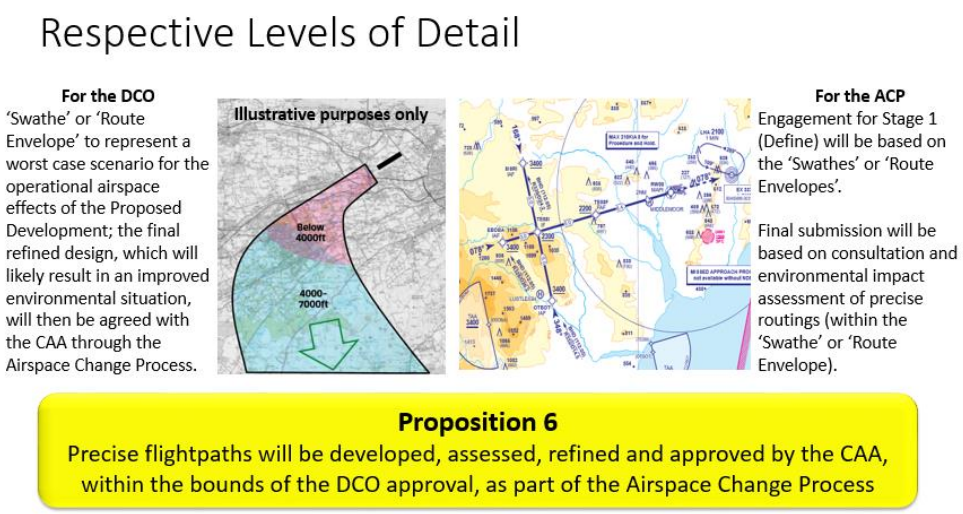


Agenda Item 6 – Combining Activities

- Without commitment, the CAA accepted in principle that elements of the DCO consultation could inform and/or contribute to the early stages of the ACP process, particularly Design Principles, Environmental Analysis and Consultation.
- The CAA stated that where DCO activities may be called upon, it must be made clear to the public that they are also contributing the ACP and the process itself explained.

Agenda Item 6 – Respective Levels of Detail

- The slide below was discussed at length:



Both PINS and the CAA accepted that the DCO submission would show a range of scenarios based on 'worst credible' examples within which a solution can be developed. The assumption is that the impact will not be worse than presented and which a Regulator will consider under a separate independent process.

- PINS advised RSP to consider realistic worst case scenarios even though not all will materialise. The assessment can consider each; this in turn will inform any final design. PINS suggest RSP consider their risk appetite over the size of areas submitted; clearly they do not want to adversely impact the chance of DCO success nor should they constrain themselves by reducing areas too early. It was stated that RSP should not be too conservative in the submission – Ospreys interpretation was that a cautious approach (ie larger area) was being implied.
- PINS stated that amendments to the DCO submission may be possible particularly if the ACP allowed the swathes being considered to be refined and potential impact of the DCO reduced. All agreed this again supported the case to start the ACP before the DCO decision as it may allow the DCO submission to be improved.

Agenda Item 7 – Resolving differences in approvals

- As the CAA is a statutory consultee in the DCO process there was a view that difference in approvals was unlikely; PINS will be looking for assurances from the CAA (without commitment) that there is a feasible solution within the proposition.
- All accepted that there was a process in place should there need to be changes made to any DCO approval.

Agenda Item 8 – Any other business

- PINS wanted to stress that they accept that the 'worst credible' scenarios are unlikely to occur as the ACP will seek to minimise impact, mitigate any issues and improve the proposals. Therefore, there may be a wish to use the ACP to refine the DCO submission particularly if it results in a reduction in any environmental impacts.
- PINS asked to be kept informed of when the ACP is initiated.

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A6 EASA Requirements

EASA requirements to meet the EU Regulation (EC) No 216/2008 are contained within the following documents:

Main Document	Requirement	Annex	Sub-Parts
Acceptable Means of Compliance and Guidance Material (AMC and GM) (As amended)	Aerodrome Authority (ADR-AR)	II	General requirements (ADR.AR.A) Management (ADR.AD.B) Oversight, Certification and Enforcement (ADR.AD.C)
	Aerodrome Organisation (ADR-OR)	III	General requirements (ADR.OR.A) Certification (ADR.OR.B) Management (ADR.OR.D) Aerodrome Manual (ADR.OR.E)
	Aerodrome Operations (ADR-OPS)	IV	Aerodrome Data (ADR.OPS.A) Aerodrome Operational Services, Equipment and Installations (ADR.OPS.B) Aerodrome Maintenance (ADR.OPS.C)

Table 1 EASA Acceptable Means of Compliance (AMC) Documents

Main Document	Requirement	Book	Sub-Parts	Topics
Certification Specifications and Guidance Material (CS and GM) (As amended)	Aerodrome Design (CS-ADR-DSN)	1	Certification Specifications for Aerodromes	General Runways Runway Strip Runway End Safety Area Taxiways Aprons Isolated Aircraft Parking Position De-Icing/Anti-Icing Facilities Obstacle Limitation Surfaces Visual Aids for Navigation, Obstacles and Restricted Areas Electrical Systems Operational Services, Equipment and Installation Colours for Aeronautical Ground Lights, Markings, Signs and Panels
		2	Guidance Material for	General

			Aerodromes	Runways Runway End Safety Area Taxiways Aprons Isolated Aircraft Parking Position De-Icing/Anti-Icing Facilities Obstacle Limitation Surfaces and Requirements Visual Aids for Navigation, Obstacles and Restricted Areas Electrical Systems Operational Services, Equipment and Installation Colours for Aeronautical Ground Lights, Markings, Signs and Panels

Table 2 EASA Certification Specifications (CS) Documents

A7 Contents of the Aerodrome Manual

The following extract from CAP 168 Licensing of Aerodromes, Chapter 2, Paragraphs 2.18 to 2.21 details the contents expected within an Aerodrome Manual.

Introduction

1. *Purposes of the manual.*
2. *Legal position regarding aerodrome licensing as contained in the ANO.*
3. *Distribution of the manual.*
4. *Procedures for distributing and amending the manual and the circumstances in which amendments may be needed.*
5. *Checklist of Pages.*
6. *Preface by licence holder.*
7. *Content Page.*
8. *Glossary of Terms (other than those included in CAP 168).*

Technical administration

1. *Name and address of aerodrome.*
2. *Name and address of licence holder.*
3. *Name and status of the accountable manager.*
4. *Named Persons:*
    a. *the name, status and responsibilities of the official in charge of day-to-day operation;*
    b. *the name, status and responsibility of other senior operating staff;*
    c. *instructions as to the order and circumstances in which the above-named staff may be required to act as the official in charge;*
    d. *the name, status and responsibility of staff authorised by the CAA under Article 232 of the Air Navigation Order 2009;*
    e. *the name, status and responsibilities of the accountable manager.*
5. *Details of the Aerodrome Safety Management System (see appendix 2C).*

Note: *This should include an organisation chart supporting the commitment to the safe operation of the aerodrome as well as simply showing the hierarchy of responsibility for safety management.*

6. *Safety related committees*

Aerodrome characteristics

1. *Details of the following:*
    a. *latitude and longitude of the aerodrome reference point in WGS 84 format;*
    b. *elevations of:*
        - *aerodrome;*
        - *apron.*
2. *Plans to a scale of 1:2500 showing the position of the aerodrome reference point, layout of the runways, taxiways and aprons; the aerodrome markings and lighting (including PAPI, VASIS or LITAS and obstruction lighting); the siting of navigational aids within the runway strips, and their degree of frangibility. It will not be necessary for these plans or the information called for in the following sub-paragraphs 3. to 6. to accompany all copies of the manual, but they must be appended to the licence holder's master copy and to the copy lodged with the CAA. In the case of copies or extracts provided or made available to operating staff, plans of a scale reasonably appropriate to the relevant duties of the said staff should be provided.*
3. *Description, height and location of obstacles which infringe the standard protection surfaces, and whether they are lighted.*
4. *Location, reference number and date of the survey plans from which the data at sub-paragraphs 1. and 2. were derived, and details of the procedures for ensuring they are maintained and updated.*
5. *Data for, and the method of, calculation of declared distances and elevations at the beginning and end of each Declared Distance.*
6. *Method of calculating reduced declared distances when there are temporary objects infringing the runway strip, or the approach and take-off surfaces.*
7. *Details of the surfaces, dimensions, and classification or bearing strengths of runways, taxiways and aprons.*

Operational procedures

1. *The system of Aeronautical Information Service available and the system that the licence holder uses to promulgate Aeronautical Information Publication (AIP) requirements.*
2. *Routine aerodrome inspections, including lighting inspections, and reporting including the nature and frequency of these inspections (chapter 3, appendix 3F).*

3. *Inspecting the apron, the runways and taxiways following a report of debris on the movement area, an abandoned take-off due to engine, tyre or wheel failure, or any incident likely to result in debris being left in a hazardous position.*

4. *Sweeping runways, taxiways and aprons.*

5. *Obtaining and disseminating meteorological information, including Runway Visual Range (RVR) and meteorological visibility and local area forecasts (detailed specifications and procedures for RVR assessment in Category I weather conditions using human observers are given in appendix 2A).*

6. *Protection of runways during low visibility procedures (LVPs) if such operations are permitted (appendix 2B).*

7. *Measurement and promulgation of water and slush depths on runways and taxiways.*

8. *Measurement and/or assessment, and promulgation of runway surface friction conditions.*

9. *Promulgation of information on the aerodrome operational state, temporary withdrawals of facilities, runway closures etc.*

10. *The safe integration of other aviation activities such as gliding, parachuting and banner towing, operations from unlicensed runways on licensed aerodromes and unmanned aerial systems (UAS).*

11. *Recording aircraft movements.*

12. *The control of works, including trenching and agricultural activity, which may affect the safety of aircraft (appendix 2F).*

13. *The control of access to the aerodrome and its operational areas, including the location of notice boards, and the control of vehicles on the operational areas.*

14. *Maintaining apron control, including marshaller's instructions.*

15. *The availability of aviation fuel and its storage, handling and quality control (ANO Article 217 and CAP 748, Aircraft Fuelling and Fuel Installation Management).*

16. *Complying with regulatory requirements relating to accidents, incidents and Mandatory Occurrence Reporting (MOR). ANO Article 226 and Civil Aviation (Investigation of Accidents and Incidents) Regulations 1996.*

17. *The removal of disabled aircraft.*

18. *The aerodrome snow plan.*

19. *The wildlife hazard control plan.*

20. *Aerodrome Safeguarding (chapter 4).*

21. *Runway incursion prevention (appendix 2D).*

22. *Responsibility for monitoring the third parties operating on the aerodrome (appendix 2E).*

23. *Procedures for the management of on-aerodrome development and changes to physical characteristics.*

Visual aids (reference should be made to chapters 6 and 7)

1. *Responsibilities with respect to the aeronautical ground lighting (AGL) system.*

2. *A full description of all visual aids available on each approach, runway, taxiway and apron. This shall include AGL signs, markings and signals.*

3. *Procedures for operational use and brilliancy settings of the AGL system.*

4. *Standby and emergency power arrangements, including operating procedures both in LVPs and during mains failure.*

5. *Procedures for routine flight inspection of approach lights, runway lights and PAPIs.*

6. *The location of and responsibility for obstacle lighting on and off the aerodrome.*

7. *Procedures for recording inspection and maintenance of visual aids and actions to be taken in the event of failures.*

Rescue and Fire Fighting Services (RFFS)

1. *Policy statement of the RFF category or categories to be provided.*

2. *Where the Senior Airport Fire Officer (SAFO) or designated watch officers have specific safety accountabilities, these should be included in the relevant chapter of the manual.*

3. *Policy and procedures indicating how depletion of the RFFS is to be managed. This should include the extent to which operations are to be restricted, how pilots are to be notified and the maximum duration of any depletion.*

4. *At aerodromes where a higher category is available by prior arrangement, the manual should clearly state the actions necessary to upgrade the facility. Where necessary this should include actions to be taken by other departments.*

5. *The licence holders' objectives for each RFF category provided should be defined. This should include a brief description of: amounts of media provided;*

    - *Discharge rates;*
    - *Number of foam-producing appliances;*
    - *Manning levels;*
    - *Levels of supervision.*

- ***Note:*** *When the objectives are higher than those set out in CAP 168, chapters 8 and 9, licence holders may also wish to indicate the minimum levels acceptable under their safety policies.*

6. *Procedures for:*
    - *Monitoring the movement areas for the purpose of alerting RFF personnel;*
    - *Showing how RFF personnel are alerted throughout the range of functions (training, extraneous duties, etc.) and geographical locations from where they may be expected to respond;*
    - *Indicating how the adequacy of the response time capability throughout their functions and locations is monitored and maintained;*
    - *Indicating how RFF personnel engaged in extraneous duties are managed to ensure that response capability is not affected.*
7. *Where the aerodrome provides specialist equipment such as rescue craft, emergency tenders, hose layers, appliances with aerial capability, etc., details should be included in the manual. Procedures to be followed if these facilities are temporarily unavailable should also be included.*
8. *Where the aerodrome is reliant upon other organisations to provide equipment which is essential for ensuring safe operation of the aerodrome (perhaps water rescue), policies or letters of agreement should be included in the manual. Where necessary contingency plans in the event of non-availability should be described.*
9. *A statement describing the processes by which licence holders ensure the initial and continued competence of their RFF personnel. This should include the following:*
    - *realistic fuel fire training;*
    - *breathing apparatus training in heat and smoke;*
    - *First Aid;*
    - *LGV driving;*
    - *Low Visibility Procedures, CAP 168, chapter 8, appendix 8B;*
    - *Health and Safety policy with regard to training of personnel in RPE and PPE.*
10. *Additional guidance may be found in CAP 168, chapter 8, and CAP 699, Standards for Competence of Rescue and Fire Fighting Service Personnel Employed at UK Licensed Aerodromes;*

11. *Procedures indicating how accidents within 1000 m of the threshold of each runway are to be accessed. Where other difficult environs exist, the manual should indicate how these are to be accessed.*

12. *Where licence holders expect the RFF facility to respond to domestic fires or special services, procedures for managing the impact of this upon the normal aircraft RFF response should be included.*

13. *Where licence holders expect the RFF facility to respond to aircraft accidents landside, the policy should be clearly described. This should include procedures to manage the effects on continued aircraft operations.*

14. *The availability of additional water supplies following an aircraft accident should be described. Details of the policy to be followed in the event of contractual work which requires isolation or depletion of supplies should be included (work in progress).*

15. *Where an aerodrome accepts freight aircraft, ambulance flights or movements not required to use a licensed facility, company objectives regarding RFF category should be included.*

16. *The licence holder's arrangements for ensuring the adequacy of responses in abnormal conditions i.e. low visibility procedures.*

17. *A policy statement indicating how the licence holder ensures the training and competence of first aid personnel.*

18. *An indication of the scale of the medical equipment carried. Where medical equipment is held other than on the RFF vehicles a statement indicating its location and how it is to be transported to an incident should be included.*

Integrated emergency planning

2.19 The licence holder's arrangements for determining and implementing plans that ensure the integrated management of response to an aircraft incident/accident. These arrangements should take account of the complexity and size of the aircraft operations.

Air traffic services

2.20 Details of the following:

1. The system for the safe management of air traffic operating on the aerodrome or in the airspace associated with it;

2. Procedures for the selection of the runway in use and the circuit direction;

3. Procedures for noise abatement;

4. Procedures for evaluating the suitability for use and availability of the runway(s);

5. *Procedures for alerting emergency services;*

6. *Except where these are included in documentation associated with an ATSU established at the aerodrome and approved by the CAA.*

Communications and navaids

1. *Description of and instructions for the use of air/ground and operational ground radio communications where these are not covered in ATC or AFIS manuals.*

2. *Description of and operating procedures for navigation aids.*

Bibliography

2.21 Cross-referenced documentation.

A8 Submission of the Aerodrome Manual and other documents

The following extract from CAP 168 Licensing of Aerodromes, Chapter 2, and Paragraphs 2.22 to 2.40 details the submission process for an Aerodrome Manual.

Introduction

2.22 The development, transmission, storage, dissemination and change control of documents is far more efficient and easier by electronic means than with paper copies.

2.23 The aerodrome manual, emergency orders and details of the safety management system, if contained in a separate document(s), should be submitted in electronic form. In order to facilitate assessments of aerodrome developments and the treatment of obstacles, the aerodrome plan may be provided in paper form.

Procedures

2.24 The aerodrome manual and other documents should be submitted in either portable document format1 (.pdf) or a format that can be viewed using an application within the Microsoft Office software suite (e.g. Microsoft Word).

2.25 Documents must be saved to allow opening, printing, extracting (copy) and commenting without the need to enter a password. Documents received in an unsuitable format may not be accepted.

2.26 The number of pictures and graphics within a document should be kept to a minimum. Every effort should be made to provide large graphics and maps in electronic form; however, if they cannot be viewed clearly on a computer display with a resolution of 800x600 pixels the graphic or map only should be submitted in paper copy form to the address in paragraph 2.33. Electronic signatures are acceptable.

2.27 Submitted documentation must be complete and, if an amendment, not just the amended pages. An amendment should be clearly indicated, for example, using a line in the margin adjacent to the line containing the amendment, underlining new text, and strikethrough of deleted text. Substantial amounts of amended text, e.g. complete new paragraphs or chapters, may be annotated just using a margin line.

2.28 Every document should be controlled according to the version and date of issue/ applicability. All files should be named according to the following convention:

2.29 (Date as YYYYMMDD)(Aerodrome name)(Document name)(Version number)

2.30 For example: 20070122ManpoolAeroManPart1V1.0.p

2.31 Do not insert spaces or symbols but intuitive abbreviations may be used. An amendment record and list of effective pages should be included in the document and, where applicable, the saved filename of a previously submitted document that is to be replaced should be notified.

2.32 Documents must not contain hyperlinks to other documents or internet/intranet addresses. Large documents may, however, be split into different parts and individual files. The part number should also be indicated in the saved filename, for example:

2.33 20070122ManpoolAeroManPart1V1.0.pdf

2.34 If a required document is split into parts, a list of the parts and, where appropriate, their relationship to each other, should be provided.

2.35 Documentation should be submitted, with suitable notification of the nature of the submission, by email only to the following address: asddocs@caa.co.uk

2.36 The size of individual emails, including file attachments, must not exceed 10Mb. A series of emails may be sent to submit multiple attachments less than this limit. However, where the size of an individual file exceeds 10Mb, the document should be submitted on a CD by post. DVD format is not acceptable. Notification of the content of the CD and any information specified in paragraph 2.30 should be provided in a separate document. A CD should be posted only to the following address:

Airspace, ATM and Aerodromes, Safety and Airspace Regulation Group,
Civil Aviation Authority, Aviation House, Gatwick Airport South, West Sussex
RH6 0YR

2.37 Electronic versions or paper copies of required documents should not be submitted directly to an Aerodrome Inspector or CAA Regional Office. The identity of the aerodrome, the sender and his/her position and contact details should be clearly stated in each submission.

2.38 Attachment A provides an example checklist for the submission process, which could be used to accompany each email/CD submission.

2.39 Notification of receipt of a submitted document, its acceptance by the CAA or any deficiencies in the document, will be provided.

2.40 Exemption from this requirement will be considered by the CAA on request.

A9 Aerodrome Manual Component Parts

The CAA regulatory requirements detail that the following items must be included within the Aerodrome Manual.

Section	Components	Purpose	References and Subsidiary Documents
Introduction	Purpose of the Manual Legal position regarding aerodrome licensing as detailed in the Air Navigation Order (ANO) Distribution of the manual Administrative and amendment procedures	The Aerodrome Manual is used by the CAA to assess the suitability of aerodrome licence holders and organisation against the safety-related requirements set out in the ANO. This is a continuous and ongoing process.	Air Navigation Order (ANO)
Technical Administration	Sets out the details for the technical management of the aerodrome including accountable management and staff.	Details day-to-day operational management; senior operating staff (e.g. Rescue and Firefighting Services (RFFS) and Air Traffic Control (ATC) management); the name, status and responsibilities of the accountable manager.	
	Details of the Aerodrome Safety	Details the SMS Structure, Organisation, Responsibilities and	CAP 760 Guidance on the Conduct of Hazard

Section	Components	Purpose	References and Subsidiary Documents
	Management System (SMS). Safety related committees.	Accountabilities	Identification, Risk Assessment and the Production of Safety Cases CAP 795 Safety Management Systems (SMS) Guidance for Organisations
Aerodrome Characteristics	Details of surveyed location, elevations, layout plans, runways, taxiways, aprons, Aeronautical Ground Lighting (AGL), navigation aids, obstacles, declared distances and elevations (for each runway) and the method of calculation. Aircraft operating surfaces (runways, taxiways, aprons) dimensions, types (e.g. concrete, asphalt etc.) and bearing strengths. Survey plan references and dates	To deliver a full survey, and thereafter an annual check survey, by CAA approved survey company. This includes: • Aerodrome plan 1:2500 • 7 specified surveys for aircraft operations • Survey data presented in CAA approved format	CAP 232 Aerodrome Survey Information CAP 168: Chapter 3 Aerodrome Physical Characteristics; Chapter 4 The Assessment and Treatment of Obstacles
Operational Procedures	The system used by the licence holder to promulgate aeronautical data in the Aeronautical Information Publication (AIP)	To meet specific accuracy and quality requirements that relate to Aeronautical Information Data Quality and all necessary information is made available to users of the aerodrome.	CAP 168 Chapter 10

Section	Components	Purpose	References and Subsidiary Documents
	Routine aerodrome inspections – including AGL Inspections of the aerodrome aircraft manoeuvring area surfaces and sweeping of such areas.	To deliver safe operations both routinely and after any incidents	Airport Operational Instructions (AOIs) or similar Operational Procedures for each specific operational task CAP 168 Appendix 3F
	Meteorological data – observations, dissemination	To provide accurate and detailed observations to aerodrome users and the Met Office	CAP 746 Meteorological Observations at Aerodromes
	Low visibility procedures (LVPs) – protection of runways	To provide details of how the runways and aircraft manoeuvring areas will be manged safely during low visibility	Manual of Air Traffic Services (MATS) Part 2 RFFS Operating Procedures Airfield Operations Manual
	Measurements of water and slush on runways and taxiways Measurement and promulgation of runway friction conditions	To provide details of how to manage any periods of when surfaces are not dry and to measure and monitor runway surface friction conditions	CAP 683 The Assessment of Runway Surface Friction Characteristics
	Promulgation of aerodrome operational state or temporary changes	To provide accurate and timely information to aerodrome users of any temporary changes to the	Aeronautical Information Service (AIS) requirements,

Section	Components	Purpose	References and Subsidiary Documents
		aerodrome published state.	Notices To Airmen (NOTAMS)
	Recording aircraft movements	To provide accurate and timely data to the CAA on movement statistics for freight, mail and passengers.	Regulation (EC) No 437/2003 of 27 February 2003 on statistical returns
	The control of works, which may affect the safety of aircraft. The control of access to the aerodrome and its operational areas, including the location of notice boards, and the control of vehicles on the operational areas.	To provide a safe system of work to minimise risk to aircraft operations. To ensure access to the airfield is properly controlled in accordance with relevant regulatory requirements.	MATS Part 2 Airfield Operations Manual Airfield Operating Instructions (AIO) Control of Contractors Procedures SMS Security Management System (SeMS) Regulation (EC) 300/2008 Common Rules in the field of Civil Aviation Security National Aviation Security Programme (NASP) and associated directions

Section	Components	Purpose	References and Subsidiary Documents
			CAP 790 Requirement for an Airside Driving Permit Scheme
	Maintaining apron control	To ensure that apron operations are safe and expeditious.	MATS Pt 2 Airfield Operations Manual AOIs
	The availability of aviation fuel and its storage, handling and quality control	To ensure the safe provision and storage of fuel that meets aviation quality standards, monitoring, testing and control.	ANO and CAP 748 Aircraft Fuelling and Fuel Installation Management Oil & Fuel storage regulations Environmental standards for storage Spillage procedures (MATS Part 2, Airfield Operations Manual, RFFS Operating Procedures, OSIs)
	Complying with regulatory requirements relating to accidents, incidents and Mandatory Occurrence Reporting (MOR)	To ensure that all safety related incidents are reported in accordance with EC regulations. Includes aircraft, air navigation services, aerodrome operations, wildlife hazards, and	European Regulation 376/2014 Commission Implementing Regulation (EU) 2015/1018

Section	Components	Purpose	References and Subsidiary Documents
		general aviation activities.	
	The removal of disabled aircraft	To enable incidents to be managed effectively whilst minimising risks	Emergency Orders RFFS Operating Procedures Airfield Operations Manual AOIs
	The Aerodrome Snow Plan	To enable winter operations to take place with the minimum of disruption. The utilisation of aviation compatible and safe products that do not represent a threat to aviation safety.	CAP 168: Appendix 3D National Snow Plan; Appendix 3G Care of pavements during winter conditions Environment Agency requirements in relation to de-icing / anti-icing products, their use and any discharge limitations from site.
	The Wildlife Hazard Control Plan	To minimise the risk to aviation form wildlife activities on and/or around the airfield and its environs. This will include bird dispersal activities, management of airfield grass areas, and other management techniques for	CAP 168 Chapter 5 Wildlife Strike Risk Hazard Management for Aerodromes CAP 772 Wildlife Hazard Management at Aerodromes

Section	Components	Purpose	References and Subsidiary Documents
		site specific wildlife risks.	Wildlife Hazard Control Management Plan Coordination with waste recycling / landfill sites (or other bird attractant sites) within 13km radius.
	Aerodrome Safeguarding	To safeguard the aerodrome's operations from other potential developments or activities.	CAP 168 Chapter 4 The Assessment and Treatment of Obstacles CAP 738 Safeguarding of Aerodromes
	Runway Incursion Prevention	To minimise the risk of an unplanned entry onto a runway that may pose a risk to the safe operation of aircraft.	European Action Plan for the Prevention of Runway Incursions (EAPPRI)
	Responsibility for monitoring the third parties operating on the aerodrome	To monitor leased areas and tenant / service provider activities to ensure that they do not pose a risk to aviation safety or other regulatory requirements	CAP 168 Appendix 2E Audits and monitoring procedures by the aerodrome licence holder
	Procedures for the management of on-aerodrome development and changes	To ensure that any changes to aerodrome infrastructure meet	Commission Regulation (EU)

Section	Components	Purpose	References and Subsidiary Documents
	to physical characteristics.	relevant regulatory requirements	139/2014 (Aerodromes) CAP 791 Procedures for Changes to Aerodrome Infrastructure
Visual aids	Responsibilities with respect to the AGL system. A full description of all visual aids. Procedures for operational use of the AGL system. Standby and emergency power arrangements. Procedures for routine flight inspections. The location of and responsibility for obstacle lighting on and off the aerodrome. Procedures for recording inspection and maintenance of visual aids and actions to be taken in the event of failures.	To ensure that all AGL is delivered in a regulatory compliant and safe manner, including the provision of suitable secondary power supplies, maintenance/checking of infrastructure, and operational control by ATC.	CAP 168 Chapters 6 and 7 CAP 637 Visual Aids Handbook MATS Part 2 Electrical Safety Procedures Flight inspection checking procedures
Rescue and Fire Fighting Services (RFFS)	Policy statement of the level of RFFS to be provided for operations. Senior staff safety accountabilities and	To ensure the compliant and comprehensive delivery of RFFS activities, equipment, resources, manpower and training to meet the	Commission Regulation (EU) 139/2014 (EASA Rules) CAP 168 Chapter 8

Section	Components	Purpose	References and Subsidiary Documents
	responsibilities. Policy and procedures indicating how depletion of the RFFS is to be managed. The licence holders' objectives for RFFS provision should be defined, including • amounts of extinguishing media and discharge rates; • number of foam-producing appliances; • manning levels and levels of supervision • Procedures for: o monitoring the movement areas and RFFS alerting procedures; o monitoring and maintaining response time capability; o management of RFFS	requirements of the aviation operation.	CAP 699 Standards for the Competence of Rescue and Fire Fighting Service (RFFS) Personnel RFFS Task and Resource Analysis by Licence Holder RFFS Operational Procedures RFFS Training Manual Emergency Orders Equipment and vehicle maintenance and testing procedures

Section	Components	Purpose	References and Subsidiary Documents
	extraneous duties.		
	Where the aerodrome is supported by other organisations to provide equipment, which contributes to ensuring safe operation of the aerodrome, policies or letters of agreement should be included in the manual.	To ensure that where a supporting role is played by local emergency services, often after the initial incident response has been made by the aerodrome RFFS, such support is documented and agreed in advance.	CAP 168 Chapter 8 RFFS Task and Resource Analysis by Licence Holder RFFS Operational Procedures RFFS Training Manual Emergency Orders Local Emergency Services Pre-Planned Response Agreement
	The processes to ensure the initial and continued competence of the RFFS personnel. Including realistic fuel fire training; breathing apparatus training in heat and smoke; First Aid; Light Goods Vehicle (LGV) driving and Low Visibility Procedures.	To ensure that RFFS personnel are fully trained and maintain competence at all times.	CAP 699 RFFS Training Manual Health and Safety policy with regard to training of personnel in Personal Protective Equipment (PPE)
	Procedures detailing accident response within 1000m of the threshold of each runway are to be accessed.	To ensure that RFFS provision can readily access the 1000m immediately prior to and after the runway	RFFS Task and Resource Analysis by Licence Holder

Section	Components	Purpose	References and Subsidiary Documents
		thresholds for the purposes of firefighting and lifesaving.	RFFS Operational Procedures Emergency Orders
	The availability of additional water supplies should be described	To ensure that there is a clear understanding of how additional water supplies can be brought to bear should an aircraft accident occur.	RFFS Task and Resource Analysis by Licence Holder RFFS Operational Procedures Emergency Orders
	The scale of the medical equipment carried.	To ensure the adequate provision of medical supplies should an aircraft accident occur.	RFFS Operational Procedures Emergency Orders
Integrated Emergency Planning	The arrangements for determining and implementing plans that ensures the integrated management of response to an aircraft incident/accident taking account of the complexity and size of the aircraft operations.	To coordinate a joint service plan that delivers an effective response to any emergency situation that takes place.	CAP 168 Chapter 9 RFFS Operational Procedures RFFS Task and Resource Analysis by Licence Holder Emergency Orders Local Emergency Services Pre-Planned Response Agreement
Air Traffic Services	Details of the system for the safe	To deliver a comprehensive and safe	CAP 413 Radio Telephony

Section	Components	Purpose	References and Subsidiary Documents
(ATS)	management of air traffic operating on the aerodrome or within its airspace;	CAA approved ATC service.	Manual CAP 493 Manual of Air Traffic Services (MATS) Part 1 CAP 670 Air Traffic Safety Requirements MATS Part 2 – Local Procedures Air Traffic Engineering Exposition Document
Communications and Navaids	Description of and instructions for the use of air/ground and operational ground radio communications and navigation aids.		CAP 670 Air Traffic Safety Requirements Air Traffic Engineering Exposition Document
Aerodrome Emergency Plan & Orders	Emergency Response Plan detailing how different scenarios will be responded too. This is not just aircraft accidents, but a range of potential emergency scenarios.	To ensure a swift, effective and coordinated approach to emergency situation response.	Civil Contingencies Act 2004 CAP 168 Chapter 9 Local Emergency Services Pre-Planned Response Agreement Control Authority requirements (Police and UK Border Force)

Table 3 Aerodrome Manual Components

A10 Other Supporting Documents and Policies

In addition to the Aerodrome Manual suite of documents there will be a further set of documents demonstrating regulatory compliance, including:

Document	Purpose	Regulatory Compliance & Other Parties	Topics
Environmental Management Policy & System	To provide a compliant and managed delivery of environmental regulatory requirements / standards. Deliver industry best practice as far as practicable.	Environment Agency Southern Water	Drainage and control of discharges from site. Air quality management Noise management Utility management Waste management
Control of Contractors Policy and Procedures	To ensure the safe management of contractors on the airport site	Health and Safety Executive (HSE) CAA (both safety & security)	All management of contractor related issues
Airport Operational Instructions (AOIs) or similar	To provide individual topics with a detailed and managed process for undertaking the specified task	Various depending on the topic and depending on the operational airport activities	Examples are: Airside Driving Requirements Airside Access Control

Document	Purpose	Regulatory Compliance & Other Parties	Topics
			Use of PPE Management of airside walkways Management of temporary obstructions (e.g. cranes) Aircraft ground engine running Smoking in Airside Areas Aircraft Marshalling Spillages Use of mobile telephones LVPs Work Permits Other AOIs as appropriate
Engineering Instructions		HSE	Electrical Engineering Instructions / Duty Holder requirements Electrical Safety Management Procedures Lone Working Procedures Confined Areas working

Document	Purpose	Regulatory Compliance & Other Parties	Topics
Health & Safety Policy and Procedures	To ensure compliance with Health and Safety regulatory requirements and deliver a safe operation	HSE CAA	Health and Safety at Work Act The Management of Health and Safety at Work Regulations Risk Assessments Control of Substances Hazardous to Health Regulations (COSHH) Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) Aircraft Turnaround Provision and Use of Work Equipment Regulations (PUWER) Manual Handling Operations Regulations Other relevant HSE regulatory documents

Table 4 Aerodrome Manual Supporting Documents

A11 Example Aerodrome Manual Documents Hierarchy

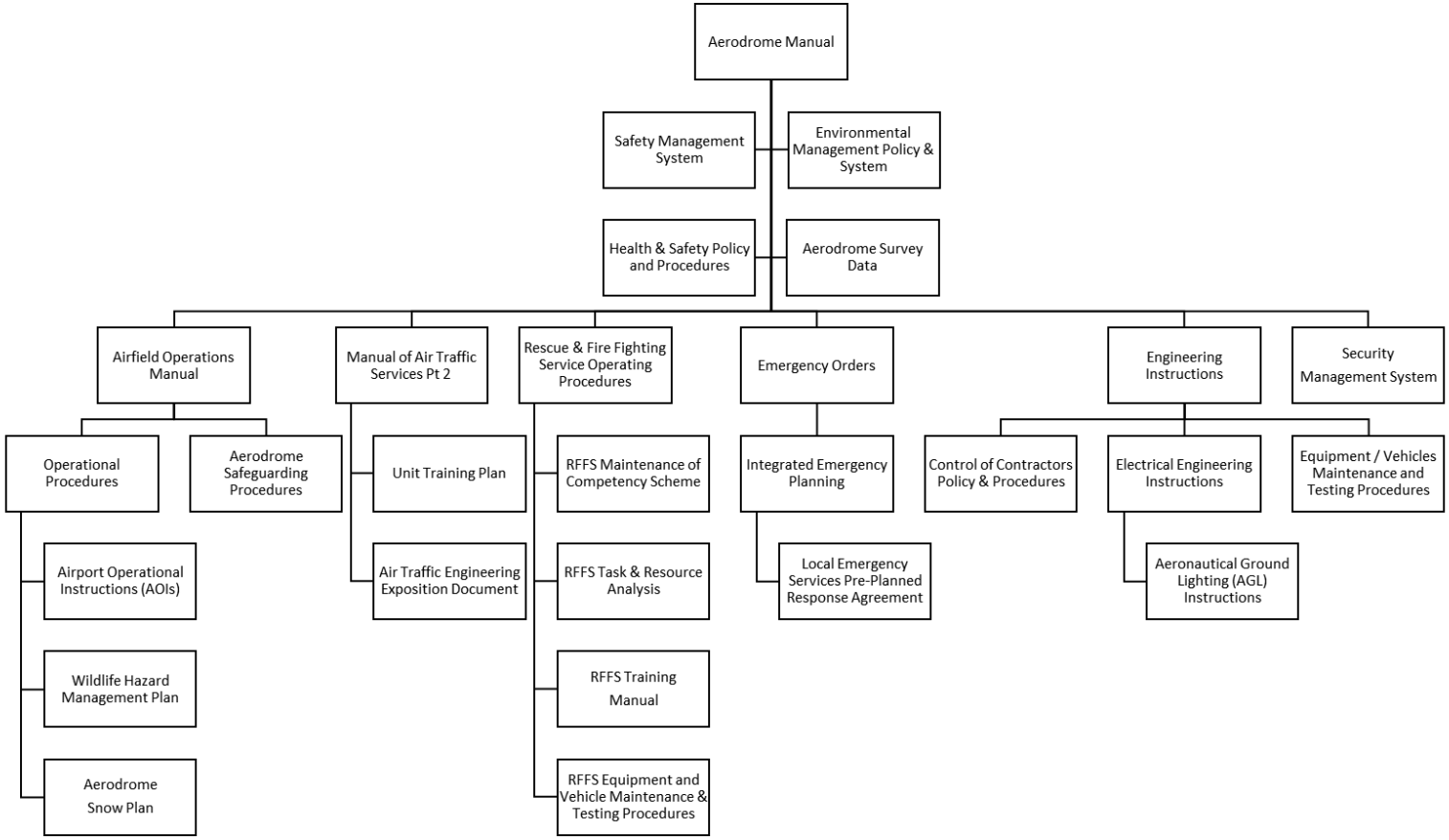

Figure 2 Example Aerodrome Manual Documents Hierarchy