

## **Section 2: Feedback received to Design Principles stakeholder review**

# Manston Airport Airspace Design and Procedures

Design Principle  
Stakeholder Review



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# 1. Airspace Design and Procedures

## 1.1 Introduction

RiverOak Strategic Partners Limited (RSP) would like to thank all stakeholders who have engaged with the Airspace Design and Procedures process so far and for the feedback provided by various representative bodies. This has helped us to derive a comprehensive list of potential Design Principles that reflect the statements made during focus group events and from questionnaires received.

This document has been prepared to share the list of Design Principles developed during recent engagement activities. We now need your help to provide further comments on the list to help us understand which Design Principles are most important to your organisations.

## 1.2 Background

RSP is proposing to redevelop and reopen Manston Airport as a successful hub for international air freight which also offers passenger travel, executive travel and aircraft engineering services. The airport would be comprehensively rebuilt and upgraded, including the provision of extensive cargo aircraft stands. The proposed development is subject to a Development Consent Order (DCO) application submitted by RSP to the government Planning Inspectorate (PINS) in July 2019.

In addition to the DCO, RSP will need to submit an application to the CAA to establish the procedures required to enable safe and efficient operations to and from the airport in accordance with the Civil Aviation Publication (CAP) 1616 – *Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements*.

The guidance in CAP 1616 sets out the framework for the 7 stages of the process and the activities that must be undertaken, including engagement and consultation requirements. We have now completed the initial phase of our engagement (part of Stage 1, CAP 1616) to establish our Design Principles for the introduction of Instrument Flight Procedures (IFP) at Manston Airport.

**The process to gain approval for procedures is separate to the DCO process. We are only concerned with the Design Principles that will inform the design of the procedures as part of the CAP 1616 process.**





## 1.3 Development Methodology

All airspace changes within the UK must follow the regulatory process described in CAP 1616. The process was developed to ensure a high degree of transparency and adequate levels of two-way engagement with all relevant stakeholders, including local communities. The early stage of the process involves the development of Design Principles and the activities shown below have helped us to determine the initial list of potential Design Principles detailed later in Section 2:

- Design Principles Questionnaire – Aviation Stakeholders
- Design Principles Questionnaire – Non-Aviation Stakeholders
- Focus Groups

In early October, questionnaires were distributed to specialist aviation and technical groups, local authorities, parishes and politicians representing their organisations and communities, to seek their feedback on a number of topics related to airspace design. In addition, three focus groups were held in November where aviation and non-aviation stakeholders were offered the opportunity to discuss the proposed introduction of procedures.

The questionnaire responses have been analysed and along with the comments and discussion recorded during the focus groups, have helped us to develop a list of potential Design Principles which will serve as a qualitative framework against which the different design options that we produce, will be evaluated. It is therefore important that your views have been accurately captured.

## 1.4 Highest Priority Design Principles

Any changes to airspace arrangements must maintain high standards of safety. This is the main priority of the CAA in accordance with its statutory duties set out in Section 70(1) of the Transport Act 2000. Therefore, the overriding Design Principle against which the design options will be developed will be as follows:

- **SAFETY**

Procedures must be designed to meet acceptable levels of flight safety

The CAA's Airspace Modernisation Strategy (AMS) and the Masterplan that NERL has been commissioned (jointly by the Department for Transport and the CAA) to produce will affect any airspace and procedures that Manston Airport will be proposing to introduce. It is important that the impact of the AMS and the Masterplan work on this airspace change is included. Any design work will also take into account the change in vertical reference caused by the transition altitude, particularly with interactions with other airports. Therefore, subject to the overriding Design Principle of Safety, the highest priority Design Principle for this airspace change will be as follows:

- **HARMONISATION**

Design options must accord with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.

## 1.5 Stakeholder Review Requirements

### Section 2 - Review of Design Principles

Please take a look at the potential Design Principles listed in Table 1 below. For each of the Design Principles listed, we would like you to state whether or not you agree that the statement constitutes a Design Principle. If you do not agree, please provide detail in the comment box provided.

In addition, we would like you to rank the Design Principles according to your organisation's priorities. Please rank the Design Principles from 1 (Highest priority) to 6 (Lowest priority). If you feel any of the Design Principles are not applicable to your organisation, please mark it as '0'. Please add any amplifying comments you wish to include, also in the comments box.

Please note that this list, and your subsequent prioritisation, does not include the highest priority Design Principles (SAFETY and HARMONISATION) that have been described in paragraph 1.4 above.

Please complete Table 2 to provide any additional comments that you feel have not been considered, or suggest any additional Design Principles you feel ought to be considered by RSP for Manston Airport.

### Section 3 – Potential Design Principles Not Taken Forward

Table 3 articulates some other potential Design Principles that have not been included in the list of Design Principles under consideration. Please make any comments relating to this list in the space provided in Table 3.

Design Principles are used to help us identify design options at the next stage in the CAP 1616 process. By prioritising Design Principles now, we will be able to develop design options that best meet the Principles identified as the highest priorities while also maximising other potential benefits.

## 1.6 How to Respond

**Please save the file that includes your responses as a Microsoft word document and attach to an email to the following address: [manstonairspace@communityrelations.co.uk](mailto:manstonairspace@communityrelations.co.uk)**

In addition to the word file, we will accept scanned, hand-written responses as long as they are legible, or email responses that clearly identify the Design Principle or question to which your response relates.

It is important that email responses clearly show your name, representative organisation and contact details; this will allow us to cross-refer your response to the emails we send out.

We will also accept legible postal responses to Free Post 1616 by the deadline date below:

**Please respond by mid-day Friday 17th January 2020.**

---

<sup>1</sup> A single coordinated UK airspace design and implementation masterplan for airspace changes up to 2040.

<sup>2</sup> NERL – NATS En-Route Ltd - the sole provider of civilian en-route air traffic control over the UK.

## 1.7 Next Steps

**The CAP 1616 process relates to gaining approval for airspace and procedures only for Manston Airport.**

### **Completion of Stage 1 – Design Principles**

The responses you now provide will help us to refine the Design Principles before we submit them to the CAA for its review and approval. This is known as the CAA's DEFINE Gateway and marks the completion of Stage 1 of the CAP 1616 airspace change process for Manston Airport.

### **Stage 2 – Design Options**

Once the Design Principles are approved by the CAA, we will then progress to Stage 2 of the CAP 1616 process, where we will commence detailed airspace and procedure design work to develop design options.

Further engagement activities will take place during this stage to seek your views on the design options before they are submitted to the CAA for their appraisal. This is known as the CAA's DEVELOP and ASSESS Gateway currently planned for mid-2020.

Engagement during Stage 1 and 2 is for representatives of specialist aviation and local authority bodies who represent their local organisations and communities.

### **Stage 3 – Consultation on Design Options**

We will be consulting widely with residents, businesses, communities, the public and other stakeholders at Stage 3 (Consult) later in 2020 or early 2021 when detailed design options have been developed.

RSP will ensure any feedback given during Stages 1 and 2 will be collated and included in a consultation report alongside feedback at Stage 3. The consultation report will be part of RSP's airspace change and procedures proposal submitted to the CAA for approval.

**Documentation relating to the CAP 1616 process is published on the [CAA's portal](#).**



## 2. Review of Design Principles

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### 2.1 Your Responses

Please complete

**Table** and **Error! Reference source not found.** below in line with the guidance provided in Section **Error! Reference source not found.** Please use as much space as you require, the size of the response box will expand as you type your response.

Please complete the following:

**Representative Organisation:**

Air Navigation Solutions LTD (ANS)

**Table 1 – Design Principles Review and Prioritisation**

| Design Principle  | Rationale   | Do you agree this is a Design Principle?<br>(Yes or No) | How would you rank this Design Principle as a priority?<br>(1 = Highest to 6 = Lowest or 0) |
|---|---|---|---|
| Procedures should be designed to minimise the impact of noise below 7,000 ft. | One of the Government’s key environmental objectives is to limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise. Current government policy states that below 7,000 ft., the noise impact of aviation on those on the ground takes greater precedence than the management of aircraft emissions. | YES   | 4   |
| <b>Comments:</b> We agree with the rationale.                                 |   |   |   |

| Design Principle  | Rationale  | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|---|--|--|--|
| Procedures should be designed that minimise aircraft emissions to reduce air pollution.                 | Improving environmental performance by reducing emissions is an outcome that the CAA's AMS is expected to deliver. More direct routes and the use of continuous climbs and descents are some of the measures that can be employed to reduce fuel burn, therefore reducing emissions per flight.  | YES  | 6  |
| <b>Comments:</b> We agree with the rationale.   |  |  |  |
| Where practicable, designs should seek to minimise the impact of noise on particularly sensitive areas. | The new routes should be designed to protect, as much as practicable, areas that are sensitive to noise. These may include sites of care or education, tranquil or rural areas that are used by the public for recreational purposes and cultural or historical assets. Avoiding overflight of all of these locations in every case would be impractical but we will endeavour to achieve this where possible. | YES  | 5  |
| <b>Comments:</b> We agree with the rationale.   |  |  |  |
| Procedures should be designed, where possible, to minimise the number of track miles flown.             | In order to minimise emissions and to optimise operational efficiencies, designs should where possible, minimise the number of track miles flown.  | YES  | 3  |



| Design Principle  | Rationale   | Do you agree this is a Design Principle?<br>(Yes or No) | How would you rank this Design Principle as a priority?<br>(1 = Highest to 6 = Lowest or 0) |
|---|---|---|---|
| <p><b>Comments:</b> Minimisation of track miles will decrease the amount of time and distance of airspace usage for more efficiency and is more environmentally friendly.</p>   |   |   |   |
| <p>Designs should minimise the impact on other airspace users in the local area.</p>  | <p>The airspace and procedure design should aim to address the needs of all air traffic operating in the local area. New routes must take into account General Aviation (Sports &amp; Recreation) operations at local airfields and avoid any unnecessary impact. Access to airspace should be ensured, especially for military fixed wing and rotary aircraft to meet defence operational and training requirements.</p> | <p>YES</p>  | <p>1</p>  |
| <p><b>Comments:</b> A good assessment and coordination with local operations increases efficiency and decreases airspace infringements. Routes should not impact traffic arriving to or departing from Gatwick Airport.</p> |   |   |   |
| <p>Designs should where possible, make provision for multiple routes that can be used to spread the noise burden more equitably.</p>  | <p>Airspace design should make provision for multiple arrival and departure routes to spread the burden of over-flight more equitably between communities.</p>  | <p>YES</p>  | <p>2</p>  |
| <p><b>Comments:</b> We agree with the rationale.</p>  |   |   |   |

**Table 2 – Additional Comments**

If there are any other areas of concern that you feel have not been considered, please provide additional comments below.

**Comments:**

Are there other Design Principles not included in the list that you feel should be considered as candidates for the final shortlist?  
If so, please provide your comments.

**Comments:**

# 3 Potential Design Principles Not Taken Forward

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## 3.1 Potential Design Principles

**Error! Reference source not found.** below articulates some potential Design Principles that have also been developed as a result of the feedback received from questionnaires and the focus group meetings. However, these have not been included in the list of Design Principles shown in

**Table** above for your review for the reasons indicated. If you wish to make any comments relating to this list, please do so in the space provided. Please use as much space as you require, the size of the response box will expand as you type your response.

**Table 2 – Potential Design Principles Not Taken Forward**

| Potential Design Principle  | Reasons for not Including   |
|---|---|
| Routes should, where possible, be designed to be PANS-OPS compliant | The new routes will be designed, where possible, so that they comply with the internationally agreed criteria set down in the International Civil Aviation Organisation (ICAO) document PANS-OPS 8168 Volume 2 – <i>Construction of Visual and Instrument Flight Procedures</i> . Any deviation from the criteria set down in PANS-OPS would require Manston Airport to produce a robust safety case to justify why the designs are not compliant, before they can be approved by the CAA. Manston Airport considers that this is a safety-related principle and as such, will be considered under the Design Principle SAFETY. |
| Comments:   |   |



| Potential Design Principle  | Reasons for not Including  |
|---|--|
| <p>Routes should be chosen to minimise the flight distance over land and maximise distance over the sea to reduce the impact of noise and emissions</p> | <p>Consideration of the impact of noise and emissions has already been included as Design Principles. Manston Airport is required to produce a comprehensive list of route designs at Stage 2 of the CAP 1616 process and this list will include options that minimise the time spent overland by designing tracks that route over the sea as much as possible. As a result, this is considered to be a design option, rather than a Design Principle, and will be considered at the next step of the process.</p> |
| <p>Comments:</p>  |  |
| <p>There should be no overflying of Ramsgate</p>  | <p>Given the location of Manston Airport in relation to the town of Ramsgate, it would not be possible to design procedures to the east of the airport that completely avoids any overflight of the town. However, designs will seek to minimise the impact of noise and emissions over the town in line with the Design Principles above. Manston Airport is also planning to introduce operational procedures (a noise preferential runway system) to minimise the impact on Ramsgate.</p>                       |
| <p>Comments:</p>  |  |
| <p>Any new airspace should be the minimum volume necessary</p>  | <p>At this stage, Manston Airport is not planning on introducing any new airspace other than an Aerodrome Traffic Zone (ATZ). Notwithstanding this, the provision of regulated airspace to protect traffic operating at Manston Airport is a potential design option, rather than a Design Principle. Any requirement to introduce additional Controlled Airspace (CAS) would be considered under the Design Principle SAFETY.</p>   |
| <p>Comments:</p>  |  |

| Potential Design Principle  | Reasons for not Including  |
|---|--|
| Consider the Flexible Use of Airspace                                 | Any revised airspace structure should be adaptable to minimise the impact on other airspace users. Manston Airport assesses that this could be considered as a potential design option relating to the type of CAS required to protect traffic operating at Manston Airport. As previously stated, this will be considered under the Design Principle SAFETY.  |
| Comments:   |  |
| Any new airspace should facilitate fair access to all airspace users. | Any regulatory change or airspace amendment should continue to allow fair access to the airspace for all aviation users. Manston Airport is not currently planning on introducing any regulated airspace to protect traffic operating from the airport, but should this be required, consideration of fair access will be considered under the Design Principle that seeks to minimise the impact on other airspace users. |
| Comments:   |  |



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**Documentation relating to the CAP 1616 process is published on the [CAA's portal](#).**



## 2. Review of Design Principles

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### 2.1 Your Responses

Please complete

**Table** and **Error! Reference source not found.** below in line with the guidance provided in Section **Error! Reference source not found.**  
Please use as much space as you require, the size of the response box will expand as you type your response.

Please complete the following:

**Representative Organisation:**

*Biggin Hill Airport*

**Table 1 – Design Principles Review and Prioritisation**

| Design Principle  | Rationale   | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|---|---|--|--|
| Procedures should be designed to minimise the impact of noise below 7,000 ft. | One of the Government’s key environmental objectives is to limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise. Current government policy states that below 7,000 ft., the noise impact of aviation on those on the ground takes greater precedence than the management of aircraft emissions. | YES  | 2  |
| <b>Comments:</b>  |   |  |  |

| Design Principle  | Rationale  | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|---|--|--|--|
| Procedures should be designed that minimise aircraft emissions to reduce air pollution.                 | Improving environmental performance by reducing emissions is an outcome that the CAA's AMS is expected to deliver. More direct routes and the use of continuous climbs and descents are some of the measures that can be employed to reduce fuel burn, therefore reducing emissions per flight.  | YES  | 3  |
| <b>Comments:</b>  |  |  |  |
| Where practicable, designs should seek to minimise the impact of noise on particularly sensitive areas. | The new routes should be designed to protect, as much as practicable, areas that are sensitive to noise. These may include sites of care or education, tranquil or rural areas that are used by the public for recreational purposes and cultural or historical assets. Avoiding overflight of all of these locations in every case would be impractical but we will endeavour to achieve this where possible. | YES  | 2  |
| <b>Comments:</b>  |  |  |  |
| Procedures should be designed, where possible, to minimise the number of track miles flown.             | In order to minimise emissions and to optimise operational efficiencies, designs should where possible, minimise the number of track miles flown.  | YES  | 3  |



| Design Principle  | Rationale  | Do you agree this is a Design Principle?<br>(Yes or No) | How would you rank this Design Principle as a priority?<br>(1 = Highest to 6 = Lowest or 0) |
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| <b>Comments:</b>  |  |   |   |
| Designs should minimise the impact on other airspace users in the local area.   | The airspace and procedure design should aim to address the needs of all air traffic operating in the local area. New routes must take into account General Aviation (Sports & Recreation) operations at local airfields and avoid any unnecessary impact. Access to airspace should be ensured, especially for military fixed wing and rotary aircraft to meet defence operational and training requirements. | YES   | 3   |
| <b>Comments:</b>  |  |   |   |
| Designs should where possible, make provision for multiple routes that can be used to spread the noise burden more equitably. | Airspace design should make provision for multiple arrival and departure routes to spread the burden of over-flight more equitably between communities.  | YES   | 5   |
| <b>Comments:</b>  |  |   |   |

## Table 2 – Additional Comments

If there are any other areas of concern that you feel have not been considered, please provide additional comments below.

### Comments:

**Additional comments regarding Safety Design Principle - The provision of Controlled Airspace –**

- 1. The CAA's Airspace Modernisation Programme requires that aircraft follow specific published RNAV routes. The provision of controlled airspace will enable aircraft to better remain on published routes, rather than having to avoid unknown traffic.**
- 2. Any aircraft operators intending to operate from the Airport will be required to conduct a Risk Assessment to ensure the safe transition of aircraft on arrival and departure. The provision of Controlled Airspace will assist the Risk Assessment mitigation against unknown air traffic, which may affect a decision to operate from Manston. .**
- 3. Future proofing - Under ICAO regulations, an Air Traffic Service can only be provided in Controlled Airspace. These procedures are due to be incorporated under EASA by 2022, although this is yet to be confirmed.**

Are there other Design Principles not included in the list that you feel should be considered as candidates for the final shortlist?  
If so, please provide your comments.

### Comments:

# 3 Potential Design Principles Not Taken Forward

---

## 3.1 Potential Design Principles

**Error! Reference source not found.** below articulates some potential Design Principles that have also been developed as a result of the feedback received from questionnaires and the focus group meetings. However, these have not been included in the list of Design Principles shown in

**Table** above for your review for the reasons indicated. If you wish to make any comments relating to this list, please do so in the space provided. Please use as much space as you require, the size of the response box will expand as you type your response.

**Table 2 – Potential Design Principles Not Taken Forward**

| Potential Design Principle  | Reasons for not Including   |
|---|---|
| Routes should, where possible, be designed to be PANS-OPS compliant | The new routes will be designed, where possible, so that they comply with the internationally agreed criteria set down in the International Civil Aviation Organisation (ICAO) document PANS-OPS 8168 Volume 2 – <i>Construction of Visual and Instrument Flight Procedures</i> . Any deviation from the criteria set down in PANS-OPS would require Manston Airport to produce a robust safety case to justify why the designs are not compliant, before they can be approved by the CAA. Manston Airport considers that this is a safety-related principle and as such, will be considered under the Design Principle SAFETY. |
| Comments:   |   |



| Potential Design Principle   | Reasons for not Including   |
|--|---|
| Routes should be chosen to minimise the flight distance over land and maximise distance over the sea to reduce the impact of noise and emissions | Consideration of the impact of noise and emissions has already been included as Design Principles. Manston Airport is required to produce a comprehensive list of route designs at Stage 2 of the CAP 1616 process and this list will include options that minimise the time spent overland by designing tracks that route over the sea as much as possible. As a result, this is considered to be a design option, rather than a Design Principle, and will be considered at the next step of the process. |
| Comments:  |   |
| There should be no overflying of Ramsgate  | Given the location of Manston Airport in relation to the town of Ramsgate, it would not be possible to design procedures to the east of the airport that completely avoids any overflight of the town. However, designs will seek to minimise the impact of noise and emissions over the town in line with the Design Principles above. Manston Airport is also planning to introduce operational procedures (a noise preferential runway system) to minimise the impact on Ramsgate.                       |
| Comments:  |   |
| Any new airspace should be the minimum volume necessary  | At this stage, Manston Airport is not planning on introducing any new airspace other than an Aerodrome Traffic Zone (ATZ). Notwithstanding this, the provision of regulated airspace to protect traffic operating at Manston Airport is a potential design option, rather than a Design Principle. Any requirement to introduce additional Controlled Airspace (CAS) would be considered under the Design Principle SAFETY.   |
| Comments:  |   |

| Potential Design Principle  | Reasons for not Including  |
|---|--|
| Consider the Flexible Use of Airspace                                 | Any revised airspace structure should be adaptable to minimise the impact on other airspace users. Manston Airport assesses that this could be considered as a potential design option relating to the type of CAS required to protect traffic operating at Manston Airport. As previously stated, this will be considered under the Design Principle SAFETY.  |
| Comments:   |  |
| Any new airspace should facilitate fair access to all airspace users. | Any regulatory change or airspace amendment should continue to allow fair access to the airspace for all aviation users. Manston Airport is not currently planning on introducing any regulated airspace to protect traffic operating from the airport, but should this be required, consideration of fair access will be considered under the Design Principle that seeks to minimise the impact on other airspace users. |
| Comments:   |  |

## **British Microlight Aircraft Association**

### **Policy for Design Principles during ACP engagement**

#### **Introduction**

The following text describes the underlying principles that the British Microlight Aircraft Association (BMAA) believes must be followed by applicants for airspace change proposals.

#### **Consultation**

1. The BMAA welcomes the opportunity to engage in consultation at an early stage within the ACP CAP 1616 process.
2. Sponsors are encouraged to engage with the BMAA and its members as early as possible during the development of the ACP. Previous ACPs have missed the opportunity for early engagement and dialogue resulting in significant and costly delays.

#### **Airspace classification**

1. The BMAA considers that the UK airspace's default classification is G and that sponsors must establish a safety case for proposing to change this class or add any further restrictions or requirements by their ACP.
2. All sponsors must demonstrate that alternatives have been considered such as RMZ and TMZ before considering controlled airspace.
3. Where Class E is proposed, without a TMZ or RMZ should be considered as the default option.

#### **Access by GA**

1. Sponsors must accept the assumption that GA including sporting and recreational aviation is entitled to continued safe use of airspace and that commercial aviation does not have a right to limit airspace access.
2. Sponsors should ensure that there will be measures to allow flexible use of airspace and prepare for the wider use of electronic conspicuity devices and interoperability with existing e-conspicuity, e.g. FLARM and Pilot Aware etc...



## Airspace volume

1. In line with the principles of the Airspace Modernisation (was FAS) principles the ACP must respect the requirement for minimum airspace volumes designed for efficiency and reduced environmental impact. These principles will include:
  - Minimum size of controlled airspace
  - Minimum number of departure/arrival routes
  - Steeper and continuous climbs and descents for cost and environmental benefits as well as minimisation of CAS footprint.

## Justification

1. Sponsors must conduct and present proper analysis of overall airspace safety changes i.e. based on modelling and evidence rather than purely subjective opinion.
2. Sponsors must provide proper validation of forecast traffic levels. There is an expectation that data used, particularly forecasts, will be verifiable including details of any and all assumptions.

## Airspace integration

1. Sponsors must show how they are integrating their proposal within the overall UK airspace modernisation context, for example proposals which do not connect efficiently between upper and lower airspace (potentially under different airspace "management") would only inhibit overall airspace efficiency and therefore not receive our support)
2. Optimisation of the development work above and below the 7,000ft NATS en-route split.

# Manston Airport Airspace Design and Procedures

Design Principle  
Stakeholder Review



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# 1. Airspace Design and Procedures

## 1.1 Introduction

RiverOak Strategic Partners Limited (RSP) would like to thank all stakeholders who have engaged with the Airspace Design and Procedures process so far and for the feedback provided by various representative bodies. This has helped us to derive a comprehensive list of potential Design Principles that reflect the statements made during focus group events and from questionnaires received.

This document has been prepared to share the list of Design Principles developed during recent engagement activities. We now need your help to provide further comments on the list to help us understand which Design Principles are most important to your organisations.

## 1.2 Background

RSP is proposing to redevelop and reopen Manston Airport as a successful hub for international air freight which also offers passenger travel, executive travel and aircraft engineering services. The airport would be comprehensively rebuilt and upgraded, including the provision of extensive cargo aircraft stands. The proposed development is subject to a Development Consent Order (DCO) application submitted by RSP to the government Planning Inspectorate (PINS) in July 2019.

In addition to the DCO, RSP will need to submit an application to the CAA to establish the procedures required to enable safe and efficient operations to and from the airport in accordance with the Civil Aviation Publication (CAP) 1616 – *Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements*.

The guidance in CAP 1616 sets out the framework for the 7 stages of the process and the activities that must be undertaken, including engagement and consultation requirements. We have now completed the initial phase of our engagement (part of Stage 1, CAP 1616) to establish our Design Principles for the introduction of Instrument Flight Procedures (IFP) at Manston Airport.

**The process to gain approval for procedures is separate to the DCO process. We are only concerned with the Design Principles that will inform the design of the procedures as part of the CAP 1616 process.**



## 1.3 Development Methodology

All airspace changes within the UK must follow the regulatory process described in CAP 1616. The process was developed to ensure a high degree of transparency and adequate levels of two-way engagement with all relevant stakeholders, including local communities. The early stage of the process involves the development of Design Principles and the activities shown below have helped us to determine the initial list of potential Design Principles detailed later in Section 2:

- Design Principles Questionnaire – Aviation Stakeholders
- Design Principles Questionnaire – Non-Aviation Stakeholders
- Focus Groups

In early October, questionnaires were distributed to specialist aviation and technical groups, local authorities, parish and politicians representing their organisations and communities, to seek their feedback on a number of topics related to airspace design. In addition, three focus groups were held in November where aviation and non-aviation stakeholders were offered the opportunity to discuss the proposed introduction of procedures.

The questionnaire responses have been analysed and along with the comments and discussion recorded during the focus groups, have helped us to develop a list of potential Design Principles which will serve as a qualitative framework against which the different design options that we produce, will be evaluated. It is therefore important that your views have been accurately captured.

## 1.4 Highest Priority Design Principles

Any changes to airspace arrangements must maintain high standards of safety. This is the main priority of the CAA in accordance with its statutory duties set out in Section 70(1) of the Transport Act 2000. Therefore, the overriding Design Principle against which the design options will be developed will be as follows:

- **SAFETY**

Procedures must be designed to meet acceptable levels of flight safety

The CAA's Airspace Modernisation Strategy (AMS) and the Masterplan that NERL has been commissioned (jointly by the Department for Transport and the CAA) to produce will affect any airspace and procedures that Manston Airport will be proposing to introduce. It is important that the impact of the AMS and the Masterplan work on this airspace change is included. Any design work will also take into account the change in vertical reference caused by the transition altitude, particularly with interactions with other airports. Therefore, subject to the overriding Design Principle of Safety, the highest priority Design Principle for this airspace change will be as follows:

- **HARMONISATION**

Design options must accord with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.



## 1.5 Stakeholder Review Requirements

### Section 2 - Review of Design Principles

Please take a look at the potential Design Principles listed in Table 1 below. For each of the Design Principles listed we would like you to state whether or not you agree that the statement constitutes a Design Principle. If you do not agree, please provide detail in the comment box provided.

In addition, we would like you to rank the Design Principles according to your organisation's priorities. Please rank the Design Principles from 1 (Highest priority) to 6 (Lowest priority). If you feel any of the Design Principles are not applicable to your organisation, please mark it as '0'. Please add any amplifying comments you wish to include, also in the comments box.

Please note that this list, and your subsequent prioritisation, does not include the highest priority Design Principles (SAFETY and HARMONISATION) that have been described in paragraph 1.4 above.

Please complete Table 2 to provide any additional comments that you feel have not been considered, or suggest any additional Design Principles you feel ought to be considered by RSP for Manston Airport.

### Section 3 – Potential Design Principles Not Taken Forward

Table 3 articulates some other potential Design Principles that have not been included in the list of Design Principles under consideration. Please make any comments relating to this list in the space provided in Table 3.

Design Principles are used to help us identify design options at the next stage in the CAP 1616 process. By prioritising Design Principles now, we will be able to develop design options that best meet the Principles identified as the highest priorities while also maximising other potential benefits.

## 1.6 How to Respond

**Please save the file that includes your responses as a Microsoft word document and attach to an email to the following address: [manstonairspace@communityrelations.co.uk](mailto:manstonairspace@communityrelations.co.uk)**

In addition to the word file, we will accept scanned, hand-written responses as long as they are legible, or email responses that clearly identify the Design Principle or question to which your response relates.

It is important that email responses clearly show your name, representative organisation and contact details; this will allow us to cross-refer your response to the emails we send out.

We will also accept legible postal responses to Free Post 1616 by the deadline date below:

**Please respond by mid-day Friday 17th January 2020.**

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<sup>1</sup> A single coordinated UK airspace design and implementation masterplan for airspace changes up to 2040.

<sup>2</sup> NERL – NATS En-Route Ltd - the sole provider of civilian en-route air traffic control over the UK.



## 1.7 Next Steps

**The CAP 1616 process relates to gaining approval for airspace and procedures only for Manston Airport.**

### **Completion of Stage 1 – Design Principles**

The responses you now provide will help us to refine the Design Principles before we submit them to the CAA for review and approval. This is known as the CAA's DEFINE Gateway and marks the completion of Stage 1 of the CAP 1616 airspace change process for Manston Airport.

### **Stage 2 – Design Options**

Once the Design Principles are approved by the CAA, we will then progress to Stage 2 of the CAP 1616 process, where we will commence detailed airspace and procedure design work to develop design options.

Further engagement activities will take place during this stage to seek your views on the design options before they are submitted to the CAA for their appraisal. This is known as the CAA's DEVELOP and ASSESS Gateway currently planned for mid-2020.

Engagement during Stage 1 and 2 is for representatives of specialist aviation and local authority bodies who represent their local organisations and communities.

### **Stage 3 – Consultation on Design Options**

We will be consulting widely with residents, businesses, communities, the public and other stakeholders at Stage 3 (Consult) later in 2020 or early 2021 when detailed design options have been developed.

RSP will ensure any feedback given during Stages 1 and 2 will be collated and included in a consultation report alongside feedback at Stage 3. The consultation report will be part of RSP's airspace change and procedures proposal submitted to the CAA for approval.

**Documentation relating to the CAP 1616 process is published on the [CAA's portal](#).**



# 1. 2. Review of Design Principles

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## 2.1 Your Responses

Please complete Table 1 and Table 2 below in line with the guidance provided in Section 1. Please use as much space as you require, the size of the response box will expand as you type your response.

Please complete the following:

|                                     |
|-------------------------------------|
| <b>Representative Organisation:</b> |
| <i>Canterbury City Council</i>      |

**Table 1 – Design Principles Review and Prioritisation**

| Design Principle | Rationale |
|------------------|-----------|
|                  |           |

|   |   |
|---|---|
| <p>Procedures should be designed to minimise the impact of noise below 7,000 ft.</p>  | <p>One of the Government's key environmental objectives is to limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise. Current government policy states that below 7,000 ft., the noise impact of aviation on those on the ground takes greater precedence than the management of aircraft emissions.</p>  |
| <p><b>Comments: Current policy states that below 7000 ft noise is the most important factor. Until the policy changes (which I believe it should ultimately) procedures must minimise noise</b></p> |   |
| <p>Procedures should be designed that minimise aircraft emissions to reduce air pollution.</p>  | <p>Improving environmental performance by reducing emissions is an outcome that the CAA's AMS is expected to deliver. More direct routes and the use of continuous climbs and descents are some of the measures that can be employed to reduce fuel burn, therefore reducing emissions per flight.</p>  |
| <p><b>Comments: What criteria will be used to determine whether a specific plane has minimised its pollution (i.e. age and type of plane)</b></p>   |   |
| <p>Where practicable, designs should seek to minimise the impact of noise on particularly sensitive areas.</p>  | <p>The new routes should be designed to protect, as much as practicable, areas that are sensitive to noise. These may include sites of care or education, tranquil or rural areas that are used by the public for recreational purposes and cultural or historical assets. Avoiding overflight of all of these locations in every case would be impractical but we will endeavour to achieve this where possible.</p>     |
| <p><b>Comments: Width of flight corridor?</b></p>   |   |
| <p>Procedures should be designed, where possible, to minimise the number of track miles flown.</p>  | <p>In order to minimise emissions and to optimise operational efficiencies, designs should where possible, minimise the number of track miles flown.</p>  |
| <p><b>Comments: Extra track miles acceptable if it helps reduce noise impact</b></p>  |   |
| <p>Designs should minimise the impact on other airspace users in the local area.</p>  | <p>The airspace and procedure design should aim to address the needs of all air traffic operating in the local area. New routes must take into account General Aviation (Sports &amp; Recreation) operations at local airfields and avoid any unnecessary impact. Access to airspace should be ensured, especially for military fixed wing and rotary aircraft to meet defence operational and training requirements.</p> |



**Comments: Agreed**

Designs should where possible, make provision for multiple routes that can be used to spread the noise burden more equitably.

Airspace design should make provision for multiple arrival and departure routes to spread the burden of over-flight more equitably between communities.

**Comments: Agreed**

**Table 2 – Additional Comments**

If there are any other areas of concern that you feel have not been considered, please provide your comments.

**Comments: Road traffic impact**

Are there other Design Principles not included in the list that you feel should be considered for the shortlist?  
If so, please provide your comments.

**Comments:**



# 3 Potential Design Principles Not Taken Forward

## 3.1 Potential Design Principles

Table 3 below articulates some potential Design Principles that have also been developed as a result of the feedback received from questionnaires and the focus group meetings. However, these have not been included in the list of Design Principles shown in Table 1 above for your review for the reasons indicated. If you wish to make any comments relating to this list, please do so in the space provided. Please use as much space as you require, the size of the response box will expand as you type your response.

**Table 3 – Potential Design Principles Not Taken Forward**

| Potential Design Principle   | Reasons for not Including  |
|--|--|
| Routes should, where possible, be designed to be PANS-OPS compliant  | The new routes will be designed, where possible, so internationally agreed criteria set down in the International Civil Aviation Organisation (ICAO) document PANS-OPS 8168 Volume 2 – <i>Construction of Visual Aids</i> . Any deviation from the criteria set down in PANS-OPS would require a safety case to justify why the designs are not compliant, before Manston Airport considers that this is a safety-related principle. This is not the Design Principle SAFETY.              |
| Comments: Agreed   |  |
| Routes should be chosen to minimise the flight distance over land and maximise distance over the sea to reduce the impact of noise and emissions | Consideration of the impact of noise and emissions is a key part of the Design Principles. Manston Airport is required to produce a comprehensive Environmental Statement as part of the CAP 1616 process and this list will include options that minimise the impact of noise and emissions by designing tracks that route over the sea as much as possible. As a result, this is a design option, rather than a Design Principle, and will be considered in the Environmental Statement. |
| Comments: Agreed - should be a top priority  |  |
| There should be no overflying of Ramsgate  | Given the location of Manston Airport in relation to Ramsgate, it is not possible to design procedures to the east of the airport that completely avoid overflying Ramsgate. However, designs will seek to minimise the impact of noise and emissions by implementing the Design Principles above. Manston Airport is also planning to introduce a preferential runway system to minimise the impact on Ramsgate.  |
| Comments:  |  |

|  |   |
|--|---|
| <p>Any new airspace should be the minimum volume necessary</p>               | <p>At this stage, Manston Airport is not planning on introducing an Aerodrome Traffic Zone (ATZ). Notwithstanding this, the potential for traffic operating at Manston Airport is a potential design option. A requirement to introduce additional Controlled Airspace (CAS) will be considered under the Design Principle SAFETY.</p>                          |
| <p>Comments: Agreed</p>  |   |
| <p>Consider the Flexible Use of Airspace</p>                                 | <p>Any revised airspace structure should be adaptable to all users. Manston Airport assesses that this could be considered as a potential design option. The type of CAS required to protect traffic operating at Manston Airport will be considered under the Design Principle SAFETY.</p>   |
| <p>Comments: Agreed</p>  |   |
| <p>Any new airspace should facilitate fair access to all airspace users.</p> | <p>Any regulatory change or airspace amendment should be considered under the Design Principle SAFETY. Any new airspace for all aviation users. Manston Airport is not currently introducing new airspace to protect traffic operating from the airport, but should be considered under the Design Principle that seeks to ensure fair access to all users.</p> |
| <p>Comments: Agreed</p>  |   |





# Manston Airport Airspace Design and Procedures

Design Principle  
Stakeholder Review



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# 1. Airspace Design and Procedures

## 1.1 Introduction

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This document has been prepared to share the list of Design Principles developed during recent engagement activities. We now need your help to provide further comments on the list to help us understand which Design Principles are most important to your organisations.

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In addition to the DCO, RSP will need to submit an application to the CAA to establish the procedures required to enable safe and efficient operations to and from the airport in accordance with the Civil Aviation Publication (CAP) 1616 – *Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements*.

The guidance in CAP 1616 sets out the framework for the 7 stages of the process and the activities that must be undertaken, including engagement and consultation requirements. We have now completed the initial phase of our engagement (part of Stage 1, CAP 1616) to establish our Design Principles for the introduction of Instrument Flight Procedures (IFP) at Manston Airport.

**The process to gain approval for procedures is separate to the DCO process. We are only concerned with the Design Principles that will inform the design of the procedures as part of the CAP 1616 process.**





### 1.3 Development Methodology

All airspace changes within the UK must follow the regulatory process described in CAP 1616. The process was developed to ensure a high degree of transparency and adequate levels of two-way engagement with all relevant stakeholders, including local communities. The early stage of the process involves the development of Design Principles and the activities shown below have helped us to determine the initial list of potential Design Principles detailed later in Section 2:

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- **SAFETY**

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The CAA's Airspace Modernisation Strategy (AMS) and the Masterplan that NERL has been commissioned (jointly by the Department for Transport and the CAA) to produce will affect any airspace and procedures that Manston Airport will be proposing to introduce. It is important that the impact of the AMS and the Masterplan work on this airspace change is included. Any design work will also take into account the change in vertical reference caused by the transition altitude, particularly with interactions with other airports. Therefore, subject to the overriding Design Principle of Safety, the highest priority Design Principle for this airspace change will be as follows:

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Design options must accord with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.

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### Section 2 - Review of Design Principles

Please take a look at the potential Design Principles listed in Table 1 below. For each of the Design Principles listed, we would like you to state whether or not you agree that the statement constitutes a Design Principle. If you do not agree, please provide detail in the comment box provided.

In addition, we would like you to rank the Design Principles according to your organisation's priorities. Please rank the Design Principles from 1 (Highest priority) to 6 (Lowest priority). If you feel any of the Design Principles are not applicable to your organisation, please mark it as '0'. Please add any amplifying comments you wish to include, also in the comments box.

Please note that this list, and your subsequent prioritisation, does not include the highest priority Design Principles (SAFETY and HARMONISATION) that have been described in paragraph 1.4 above.

Please complete Table 2 to provide any additional comments that you feel have not been considered, or suggest any additional Design Principles you feel ought to be considered by RSP for Manston Airport.

### Section 3 – Potential Design Principles Not Taken Forward

Table 3 articulates some other potential Design Principles that have not been included in the list of Design Principles under consideration. Please make any comments relating to this list in the space provided in Table 3.

Design Principles are used to help us identify design options at the next stage in the CAP 1616 process.

By prioritising Design Principles now, we will be able to develop design options that best meet the Principles identified as the highest priorities while also maximising other potential benefits.

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It is important that email responses clearly show your name, representative organisation and contact details; this will allow us to cross-refer your response to the emails we send out.

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**Please respond by mid-day Friday 17th January 2020.**

## 1.7 Next Steps

**The CAP 1616 process relates to gaining approval for airspace and procedures only for Manston Airport.**

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The responses you now provide will help us to refine the Design Principles before we submit them to the CAA for its review and approval. This is known as the CAA's DEFINE Gateway and marks the completion of Stage 1 of the CAP 1616 airspace change process for Manston Airport.

### **Stage 2 – Design Options**

Once the Design Principles are approved by the CAA, we will then progress to Stage 2 of the CAP 1616 process, where we will commence detailed airspace and procedure design work to develop design options.

Further engagement activities will take place during this stage to seek your views on the design options before they are submitted to the CAA for their appraisal. This is known as the CAA's DEVELOP and ASSESS Gateway currently planned for mid-2020.

Engagement during Stage 1 and 2 is for representatives of specialist aviation and local authority bodies who represent their local organisations and communities.

### **Stage 3 – Consultation on Design Options**

We will be consulting widely with residents, businesses, communities, the public and other stakeholders at Stage 3 (Consult) later in 2020 or early 2021 when detailed design options have been developed.

RSP will ensure any feedback given during Stages 1 and 2 will be collated and included in a consultation report alongside feedback at Stage 3. The consultation report will be part of RSP's airspace change and procedures proposal submitted to the CAA for approval.

**Documentation relating to the CAP 1616 process is published on the [CAA's portal](#).**





## 2. Review of Design Principles

---

### 2.1 Your Responses

Please complete Table 1 and Table 2 below in line with the guidance provided in Section 1. Please use as much space as you require, the size of the response box will expand as you type your response.

Please complete the following:

**Representative Organisation:**

*Canterbury City Council*

**Table 1 – Design Principles Review and Prioritisation**

| Design Principle  | Rationale   | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|---|---|--|--|
| Procedures should be designed to minimise the impact of noise below 7,000 ft.           | One of the Government’s key environmental objectives is to limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise. Current government policy states that below 7,000 ft., the noise impact of aviation on those on the ground takes greater precedence than the management of aircraft emissions. |  |  |
| <b>Comments:</b>  |   |  |  |
| Procedures should be designed that minimise aircraft emissions to reduce air pollution. | Improving environmental performance by reducing emissions is an outcome that the CAA’s AMS is expected to deliver. More direct routes and the use of continuous climbs and descents are some of the measures that can be employed to reduce fuel burn, therefore reducing emissions per flight.   |  |  |
| <b>Comments:</b>  |   |  |  |

|  |  |  |  |
|--|--|--|--|
| <p>Where practicable, designs should seek to minimise the impact of noise on particularly sensitive areas.</p>                       | <p>The new routes should be designed to protect, as much as practicable, areas that are sensitive to noise. These may include sites of care or education, tranquil or rural areas that are used by the public for recreational purposes and cultural or historical assets. <b>Avoiding overflight of all of these locations in every case would be impractical but we will endeavour to achieve this where possible.</b></p> |  |  |
| <p><b>Comments:</b></p>  |  |  |  |
| <p>Procedures should be designed, where possible, to minimise the number of track miles flown.</p>                                   | <p>In order to minimise emissions and to optimise operational efficiencies, designs should where possible, minimise the number of track miles flown.</p>   |  |  |
| <p><b>Comments:</b></p>  |  |  |  |
| <p>Designs should minimise the impact on other airspace users in the local area.</p>   | <p>The airspace and procedure design should aim to address the needs of all air traffic operating in the local area. New routes must take into account General Aviation (Sports &amp; Recreation) operations at local airfields and avoid any unnecessary impact. Access to airspace should be ensured, especially for military fixed wing and rotary aircraft to meet defence operational and training requirements.</p>    |  |  |
| <p><b>Comments:</b></p>  |  |  |  |
| <p>Designs should where possible, make provision for multiple routes that can be used to spread the noise burden more equitably.</p> | <p>Airspace design should make provision for multiple arrival and departure routes to spread the burden of over-flight more equitably between communities.</p>   |  |  |

**Comments:**

**Table 2 – Additional Comments**

**If there are any other areas of concern that you feel have not been considered, please provide additional comments below.**

**Comments:**

**Herne Bay Councillors and members of the public discussed the consultation at Herne Bay Forum on Tuesday 14 January. The following points were noted:**

- The economic benefits of reopening Manston, including the new jobs it will generate, are welcomed.
- There was concern raised about the impacts of the airport on Climate Change
- That RSP should offer the best mitigation possible (including financial) to offset the impact of flights over Herne Bay.

**Are there other Design Principles not included in the list that you feel should be considered as candidates for the final shortlist? If so, please provide your comments.**



**Comments:**

- Design principles should include a ban on all night flights (2300-0700)
- Design principles should include that aircraft join a straight-line approach as late as safely possible to minimise the number of flights over Herne Bay.

# 3 Potential Design Principles Not Taken Forward

---

## 3.1 Potential Design Principles

Table 3 below articulates some potential Design Principles that have also been developed as a result of the feedback received from questionnaires and the focus group meetings. However, these have not been included in the list of Design Principles shown in Table 1 above for your review for the reasons indicated. If you wish to make any comments relating to this list, please do so in the space provided. Please use as much space as you require, the size of the response box will expand as you type your response.

**Table 3 – Potential Design Principles Not Taken Forward**

| Potential Design Principle   | Reasons for not Including   |
|--|---|
| Routes should, where possible, be designed to be PANS-OPS compliant  | The new routes will be designed, where possible, so that they comply with the internationally agreed criteria set down in the International Civil Aviation Organisation (ICAO) document PANS-OPS 8168 Volume 2 – <i>Construction of Visual and Instrument Flight Procedures</i> . Any deviation from the criteria set down in PANS-OPS would require Manston Airport to produce a robust safety case to justify why the designs are not compliant, before they can be approved by the CAA. Manston Airport considers that this is a safety-related principle and as such, will be considered under the Design Principle SAFETY. |
| Comments:  |   |
| Routes should be chosen to minimise the flight distance over land and maximise distance over the sea to reduce the impact of noise and emissions | Consideration of the impact of noise and emissions has already been included as Design Principles. Manston Airport is required to produce a comprehensive list of route designs at Stage 2 of the CAP 1616 process and this list will include options that minimise the time spent overland by designing tracks that route over the sea as much as possible. As a result, this is considered to be a design option, rather than a Design Principle, and will be considered at the next step of the process.   |

|   |   |
|---|---|
| Comments:   |   |
| Ramsgate<br>There should be no overflying of            | Given the location of Manston Airport in relation to the town of Ramsgate, it would not be possible to design procedures to the east of the airport that completely avoids any overflight of the town. However, designs will seek to minimise the impact of noise and emissions over the town in line with the Design Principles above. Manston Airport is also planning to introduce operational procedures (a noise preferential runway system) to minimise the impact on Ramsgate. |
| Comments:   |   |
| Any new airspace should be the minimum volume necessary | At this stage, Manston Airport is not planning on introducing any new airspace other than an Aerodrome Traffic Zone (ATZ). Notwithstanding this, the provision of regulated airspace to protect traffic operating at Manston Airport is a potential design option, rather than a Design Principle. Any requirement to introduce additional Controlled Airspace (CAS) would be considered under the Design Principle SAFETY.   |
| Comments:   |   |
| Consider the Flexible Use of Airspace                   | Any revised airspace structure should be adaptable to minimise the impact on other airspace users. Manston Airport assesses that this could be considered as a potential design option relating to the type of CAS required to protect traffic operating at Manston Airport. As previously stated, this will be considered under the Design Principle SAFETY.   |
| Comments:   |   |

|  |   |
|--|---|
| <p>Any new airspace should facilitate fair access to all airspace users.</p> | <p>Any regulatory change or airspace amendment should continue to allow fair access to the airspace for all aviation users. Manston Airport is not currently planning on introducing any regulated airspace to protect traffic operating from the airport, but should this be required, consideration of fair access will be considered under the Design Principle that seeks to minimise the impact on other airspace users.</p> |
| <p>Comments:</p>   |   |



## 2. Review of Design Principles

### 2.1 Your responses

Please complete Table 1 and Table 2 below in line with the guidance provided in Section 1.

#### Representative Organisation:

Example: Kent County Council, Maypole Airfield, NATS etc

Charnel Gliding Club

Table 1 – Design Principles Review and Prioritisation

| Design Principle  | Rationale  | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|---|--|--|--|
| <p>Procedures should be designed to minimise the impact of noise below 7,000 ft.</p> <p>Comments: Channel Gliding Club use local airspace up to 7000 feet. Routing outbound aircraft north over the sea would reduce the conflict between traffic. Gliders do not fly over the sea due to the lack of thermals.</p> | <p>One of the Government's key environmental objectives is to limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise. Current government policy states that below 7,000 ft., the noise impact of aviation on those on the ground takes greater precedence than the management of aircraft emissions.</p> | <p>YES</p>   | <p>1</p>   |
| <p>Procedures should be designed that minimise aircraft emissions to reduce air pollution.</p> <p>Comments: Direct routing <del>could</del> could badly affect gliding from Watershare Park.</p>  | <p>Improving environmental performance by reducing emissions is an outcome that the CAA's AMS is expected to deliver. More direct routes and the use of continuous climbs and descents are some of the measures that can be employed to reduce fuel burn, therefore reducing emissions per flight.</p>   | <p>No</p>  | <p>6</p>   |

| Design Principle   | Rationale  | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0)  |
|--|--|--|---|
| <p>Where practicable, designs should seek to minimise the impact of noise on particularly sensitive areas.</p> | <p>The new routes should be designed to protect, as much as practicable, areas that are sensitive to noise. These may include sites of care or education, tranquil or rural areas that are used by the public for recreational purposes and cultural or historical assets.</p> <p>Avoiding overflight of all of these locations in every case would be impractical but we will endeavour to achieve this where possible.</p> | <p style="text-align: center;">/</p>                 | <p>Comments: Noise is not really an issue for the gliding club. We are more concerned about routing which will affect our safety.</p> |
| <p>Procedures should be designed, where possible, to minimise the number of track miles flown.</p>             | <p>In order to minimise emissions and to optimise operational efficiencies, designs should where possible, minimise the number of track miles flown.</p>   | <p>No</p>  | <p>6</p>  |
| <p>Comments:</p>   | <p>Track miles are dependent on routing. Routing should be the priority to ensure a safe mix of commercial and recreational traffic.</p>   |  |   |

| Design Principle   | Rationale   | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|--|---|--|--|
| <p>Designs should minimise the impact on other airspace users in the local area.</p> | <p>The airspace and procedure design should aim to address the needs of all air traffic operating in the local area. New routes must take into account General Aviation (Sports &amp; Recreation) operations at local airfields and avoid any unnecessary impact. Access to airspace should be ensured, especially for military fixed wing and rotary aircraft to meet defence operational and training requirements.</p> | <p>YES</p>   | <p>1</p>   |

Comments:

Designs should where possible, make provision for multiple routes that can be used to spread the noise burden more equitably.

Airspace design should make provision for multiple arrival and departure routes to spread the burden of over-flight more equitably between communities.

Comments:

Not sure how this would affect us.



## Table 2 – Additional Comments

If there are any other areas of concern that you feel have not been considered, please provide additional comments below.

Comments: Commercial traffic should be routed away from existing airfields to improve safety.

Are there other Design Principles not included in the list that you feel should be considered as candidates for the final shortlist?  
If so, please provide your comments.

Comments:

# Manston Airport Airspace Design and Procedures

Design Principle  
Stakeholder Review



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# 1. Airspace Design and Procedures

## 1.1 Introduction

RiverOak Strategic Partners Limited (RSP) would like to thank all stakeholders who have engaged with the Airspace Design and Procedures process so far and for the feedback provided by various representative bodies. This has helped us to derive a comprehensive list of potential Design Principles that reflect the statements made during focus group events and from questionnaires received.

This document has been prepared to share the list of Design Principles developed during recent engagement activities. We now need your help to provide further comments on the list to help us understand which Design Principles are most important to your organisations.

## 1.2 Background

RSP is proposing to redevelop and reopen Manston Airport as a successful hub for international air freight which also offers passenger travel, executive travel and aircraft engineering services. The airport would be comprehensively rebuilt and upgraded, including the provision of extensive cargo aircraft stands. The proposed development is subject to a Development Consent Order (DCO) application submitted by RSP to the government Planning Inspectorate (PINS) in July 2019.

In addition to the DCO, RSP will need to submit an application to the CAA to establish the procedures required to enable safe and efficient operations to and from the airport in accordance with the Civil Aviation Publication (CAP) 1616 – *Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements*.

The guidance in CAP 1616 sets out the framework for the 7 stages of the process and the activities that must be undertaken, including engagement and consultation requirements. We have now completed the initial phase of our engagement (part of Stage 1, CAP 1616) to establish our Design Principles for the introduction of Instrument Flight Procedures (IFP) at Manston Airport.

**The process to gain approval for procedures is separate to the DCO process. We are only concerned with the Design Principles that will inform the design of the procedures as part of the CAP 1616 process.**





## 1.3 Development Methodology

All airspace changes within the UK must follow the regulatory process described in CAP 1616. The process was developed to ensure a high degree of transparency and adequate levels of two-way engagement with all relevant stakeholders, including local communities. The early stage of the process involves the development of Design Principles and the activities shown below have helped us to determine the initial list of potential Design Principles detailed later in Section 2:

- Design Principles Questionnaire – Aviation Stakeholders
- Design Principles Questionnaire – Non-Aviation Stakeholders
- Focus Groups

In early October, questionnaires were distributed to specialist aviation and technical groups, local authorities, parishes and politicians representing their organisations and communities, to seek their feedback on a number of topics related to airspace design. In addition, three focus groups were held in November where aviation and non-aviation stakeholders were offered the opportunity to discuss the proposed introduction of procedures.

The questionnaire responses have been analysed and along with the comments and discussion recorded during the focus groups, have helped us to develop a list of potential Design Principles which will serve as a qualitative framework against which the different design options that we produce, will be evaluated. It is therefore important that your views have been accurately captured.

## 1.4 Highest Priority Design Principles

Any changes to airspace arrangements must maintain high standards of safety. This is the main priority of the CAA in accordance with its statutory duties set out in Section 70(1) of the Transport Act 2000. Therefore, the overriding Design Principle against which the design options will be developed will be as follows:

- **SAFETY**

Procedures must be designed to meet acceptable levels of flight safety

The CAA's Airspace Modernisation Strategy (AMS) and the Masterplan that NERL has been commissioned (jointly by the Department for Transport and the CAA) to produce will affect any airspace and procedures that Manston Airport will be proposing to introduce. It is important that the impact of the AMS and the Masterplan work on this airspace change is included. Any design work will also take into account the change in vertical reference caused by the transition altitude, particularly with interactions with other airports. Therefore, subject to the overriding Design Principle of Safety, the highest priority Design Principle for this airspace change will be as follows:

- **HARMONISATION**

Design options must accord with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.

## 1.5 Stakeholder Review Requirements

### Section 2 - Review of Design Principles

Please take a look at the potential Design Principles listed in Table 1 below. For each of the Design Principles listed, we would like you to state whether or not you agree that the statement constitutes a Design Principle. If you do not agree, please provide detail in the comment box provided.

In addition, we would like you to rank the Design Principles according to your organisation's priorities. Please rank the Design Principles from 1 (Highest priority) to 6 (Lowest priority). If you feel any of the Design Principles are not applicable to your organisation, please mark it as '0'. Please add any amplifying comments you wish to include, also in the comments box.

Please note that this list, and your subsequent prioritisation, does not include the highest priority Design Principles (SAFETY and HARMONISATION) that have been described in paragraph 1.4 above.

Please complete Table 2 to provide any additional comments that you feel have not been considered, or suggest any additional Design Principles you feel ought to be considered by RSP for Manston Airport.

### Section 3 – Potential Design Principles Not Taken Forward

Table 3 articulates some other potential Design Principles that have not been included in the list of Design Principles under consideration. Please make any comments relating to this list in the space provided in Table 3.

Design Principles are used to help us identify design options at the next stage in the CAP 1616 process. By prioritising Design Principles now, we will be able to develop design options that best meet the Principles identified as the highest priorities while also maximising other potential benefits.

## 1.6 How to Respond

**Please save the file that includes your responses as a Microsoft word document and attach to an email to the following address: [manstonairspace@communityrelations.co.uk](mailto:manstonairspace@communityrelations.co.uk)**

In addition to the word file, we will accept scanned, hand-written responses as long as they are legible, or email responses that clearly identify the Design Principle or question to which your response relates.

It is important that email responses clearly show your name, representative organisation and contact details; this will allow us to cross-refer your response to the emails we send out.

We will also accept legible postal responses to Free Post 1616 by the deadline date below:

**Please respond by mid-day Friday 17th January 2020.**

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<sup>1</sup> A single coordinated UK airspace design and implementation masterplan for airspace changes up to 2040.

<sup>2</sup> NERL – NATS En-Route Ltd - the sole provider of civilian en-route air traffic control over the UK.

## 1.7 Next Steps

**The CAP 1616 process relates to gaining approval for airspace and procedures only for Manston Airport.**

### **Completion of Stage 1 – Design Principles**

The responses you now provide will help us to refine the Design Principles before we submit them to the CAA for its review and approval. This is known as the CAA's DEFINE Gateway and marks the completion of Stage 1 of the CAP 1616 airspace change process for Manston Airport.

### **Stage 2 – Design Options**

Once the Design Principles are approved by the CAA, we will then progress to Stage 2 of the CAP 1616 process, where we will commence detailed airspace and procedure design work to develop design options.

Further engagement activities will take place during this stage to seek your views on the design options before they are submitted to the CAA for their appraisal. This is known as the CAA's DEVELOP and ASSESS Gateway currently planned for mid-2020.

Engagement during Stage 1 and 2 is for representatives of specialist aviation and local authority bodies who represent their local organisations and communities.

### **Stage 3 – Consultation on Design Options**

We will be consulting widely with residents, businesses, communities, the public and other stakeholders at Stage 3 (Consult) later in 2020 or early 2021 when detailed design options have been developed.

RSP will ensure any feedback given during Stages 1 and 2 will be collated and included in a consultation report alongside feedback at Stage 3. The consultation report will be part of RSP's airspace change and procedures proposal submitted to the CAA for approval.

**Documentation relating to the CAP 1616 process is published on the [CAA's portal](#).**



## 2. Review of Design Principles

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### 2.1 Your Responses

Please complete

Please use as much space as you require, the size of the response box will expand as you type your response.

Please complete the following:

|  |
|--|
| <b>Representative Organisation:</b>  |
| CPRE Kent (the Kent branch of the Campaign to Protect Rural England) (address Queen's Head House, Ashford Road, Charing TN270AD) |

**Table 1 – Design Principles Review and Prioritisation**

| Design Principle  | Rationale   | Do you agree this is a Design Principle?<br>(Yes or No) | How would you rank this Design Principle as a priority?<br>(1 = Highest to 6 = Lowest or 0) |
|---|---|---|---|
| Procedures should be designed to minimise the impact of noise below 7,000 ft. | One of the Government's key environmental objectives is to limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise. Current government policy states that below 7,000 ft., the noise impact of aviation on those on the ground takes greater precedence than the management of aircraft emissions. | YES   | 1   |



| Design Principle | Rationale | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|------------------|-----------|--|--|
|------------------|-----------|--|--|

**Comments: This is an absolute priority.**

The geographical location means that flights below 7000 feet would operate not only over built up areas such as Ramsgate in particular, but also other areas such as Herne Bay etc. This is unacceptable, because of the huge health impacts from such operations, as shown in Evidence provided to the Examination.

Noise above 7000 feet must also be minimised because aircraft above 7000 feet can be clearly heard over a large area, and even flights at 23,000 feet can cause annoyance under certain atmospheric conditions, such as inversion.

The target must therefore be to only allow the least noisy aircraft to use the Airport, and those that do must follow strict rules to minimise noise, with strong penalties for infringements of those rules.

|   |   |     |   |
|---|---|-----|---|
| Procedures should be designed that minimise aircraft emissions to reduce air pollution. | Improving environmental performance by reducing emissions is an outcome that the CAA's AMS is expected to deliver. More direct routes and the use of continuous climbs and descents are some of the measures that can be employed to reduce fuel burn, therefore reducing emissions per flight. | YES | 3 |
|---|---|-----|---|

**Comments:** For Kent, less direct routes, to ensure that flights go over the sea to minimise flying over land, would add a very small extra distance to the overall flight length, and can be ignored.

Over-sea routes would avoid or reduce noise impacts for many areas and must be first preference.

Continuous climbs and descents must be tailored to particular aircraft, because a heavily laden aircraft may make a lot more noise trying to climb rapidly than a more gentle climb. On the other where aircraft type and load permit rapid climbs and descents should be used.

However we do not consider that such measures would reduce impacts such as pollution sufficiently to avoid impacts on the health of the area, especially the population of 40,000 in Ramsgate, and similar numbers in Herne Bay etc.

| Design Principle  | Rationale  | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|---|--|--|--|
| Where practicable, designs should seek to minimise the impact of noise on particularly sensitive areas.   | The new routes should be designed to protect, as much as practicable, areas that are sensitive to noise. These may include sites of care or education, tranquil or rural areas that are used by the public for recreational purposes and cultural or historical assets. Avoiding overflight of all of these locations in every case would be impractical but we will endeavour to achieve this where possible. | YES  | 1  |
| <p><b>Comments:</b> Timing of flights is also important, and time restrictions are needed to reduce disturbance.</p> <p>We do not believe that any flightpaths can avoid areas vital to East Kent's success because the impacts would dramatically destroy any potential measures to improve East Kent.</p>   |  |  |  |
| Procedures should be designed, where possible, to minimise the number of track miles flown.   | In order to minimise emissions and to optimise operational efficiencies, designs should where possible, minimise the number of track miles flown.  | NO   | 6  |
| <p><b>Comments: Minimising track miles can be achieved by not flying, because alternative modes of transport would cause far lower impacts.</b></p> <p>Distances travelled can be optimised by avoiding stacking and optimising interaction with other flights.</p> <p>For Kent, less direct routes to ensure that flights go over the sea to minimise flying over land, would add a very small extra distance to the overall flight length, so can be ignored.</p> <p>Over-sea routes would avoid or reduce noise impacts for many areas, so must be first preference.</p> |  |  |  |



| Design Principle   | Rationale  | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|--|--|--|--|
| Designs should minimise the impact on other airspace users in the local area.  | The airspace and procedure design should aim to address the needs of all air traffic operating in the local area. New routes must take into account General Aviation (Sports & Recreation) operations at local airfields and avoid any unnecessary impact. Access to airspace should be ensured, especially for military fixed wing and rotary aircraft to meet defence operational and training requirements. | YES  | 3  |
| <p><b>Comments:</b> All existing users must have priority over Manston users because existing users have established rights to use the airspace. This is especially important for users such as gliders which need space to seek out best routes.</p>              |  |  |  |
| Designs should where possible, make provision for multiple routes that can be used to spread the noise burden more equitably.  | Airspace design should make provision for multiple arrival and departure routes to spread the burden of over-flight more equitably between communities.  | QUERY  | 2  |
| <p><b>Comments:</b> Proposed multiple route designs must be agreed with the people affected, as must the proposed timetables for such multiple routes, because there is no certain principle that will determine how these multiple routes will be acceptable.</p> |  |  |  |

## Table 2 – Additional Comments

**If there are any other areas of concern that you feel have not been considered, please provide additional comments below.**

**Comments:** Airspace design must take place in close consultation with the Independent Commissioner for Civil Aircraft Noise (ICCAN). This should help avoid the worst option, even if it does not clearly yield best option.

The latter can only be achieved after consultation with those likely to be affected.

Attention must be given to areas of severe deprivation, otherwise these areas will have no chance of improving.

**Are there other Design Principles not included in the list that you feel should be considered as candidates for the final shortlist? If so, please provide your comments.**

**Comments:** Detailed designs must consider impacts on nature to minimise impacts during the whole flight.

For example some birds have regular routes, which may vary according to season, so these need to be avoided.

There are also areas which would be disturbed by the aircraft, so these must also be avoided.

In view of the catastrophic decline in many species this must be a priority as much as noise. After all humans are not at risk of dying out.



### 3 Potential Design Principles Not Taken Forward

**3.1** Table 3 below articulates some potential Design Principles that have also been developed as a result of the feedback received from questionnaires and the focus group meetings. However, these have not been included in the list of Design Principles shown in Table 1 above for your review for the reasons indicated.

If you wish to make any comments relating to this list, please do so in the space provided.

Please use as much space as you require, the size of the response box will expand as you type your response.

**Table 3 – Potential Design Principles Not Taken Forward**

| Potential Design Principle   | Reasons for not Including   |
|--|---|
| Routes should, where possible, be designed to be PANS-OPS compliant  | The new routes will be designed, where possible, so that they comply with the internationally agreed criteria set down in the International Civil Aviation Organisation (ICAO) document PANS-OPS 8168 Volume 2 – <i>Construction of Visual and Instrument Flight Procedures</i> . Any deviation from the criteria set down in PANS-OPS would require Manston Airport to produce a robust safety case to justify why the designs are not compliant, before they can be approved by the CAA. Manston Airport considers that this is a safety-related principle and as such, will be considered under the Design Principle SAFETY. |
| Comments:  |   |
| Routes should be chosen to minimise the flight distance over land and maximise distance over the sea to reduce the impact of noise and emissions | Consideration of the impact of noise and emissions has already been included as Design Principles. Manston Airport is required to produce a comprehensive list of route designs at Stage 2 of the CAP 1616 process and this list will include options that minimise the time spent overland by designing tracks that route over the sea as much as possible. As a result, this is considered to be a design option, rather than a Design Principle, and will be considered at the next step of the process.   |

| Potential Design Principle  | Reasons for not Including  |
|---|--|
| <p>Comments: This is too important an issue to be left to a later stage of design, so it must be included as a Principle rather than leaving it to Stage 2 of the process.</p> <p>This will also avoid the extra costs of trying to amend proposals later. Getting right first time is the most cost-effective and quickest way of proceeding.</p>  |  |
| <p>There should be no overflying of Ramsgate</p>  | <p>Given the location of Manston Airport in relation to the town of Ramsgate, it would not be possible to design procedures to the east of the airport that completely avoids any overflight of the town. However, designs will seek to minimise the impact of noise and emissions over the town in line with the Design Principles above. Manston Airport is also planning to introduce operational procedures (a noise preferential runway system) to minimise the impact on Ramsgate.</p> |
| <p>Comments: These comments do not only apply to Ramsgate.</p> <p>Other areas such as St Nicholas at Wade, Herne Bay, Whitstable and even Canterbury all need similar details to avoid overflight.</p> <p>The acceptance that overflying Ramsgate cannot be avoided means that no airspace design will be acceptable, because of the health and welfare of people affected must be paramount.</p> <p>A major concern with previous operations was the way in which aircraft flew where they wanted, which is unacceptable, so design must optimise procedures and regulations must ensure that aircraft comply with them.</p> |  |
| <p>Any new airspace should be the minimum volume necessary</p>  | <p>At this stage, Manston Airport is not planning on introducing any new airspace other than an Aerodrome Traffic Zone (ATZ). Notwithstanding this, the provision of regulated airspace to protect traffic operating at Manston Airport is a potential design option, rather than a Design Principle. Any requirement to introduce additional Controlled Airspace (CAS) would be considered under the Design Principle SAFETY.</p>   |
| <p>Comments:</p>  |  |
| <p>Consider the Flexible Use of Airspace</p>  | <p>Any revised airspace structure should be adaptable to minimise the impact on other airspace users. Manston Airport assesses that this could be considered as a potential design option relating to the type of CAS required to protect traffic operating at Manston Airport. As previously stated, this will be considered under the Design Principle SAFETY.</p>   |



| Potential Design Principle  | Reasons for not Including  |
|---|--|
| Comments:   |  |
| Any new airspace should facilitate fair access to all airspace users.   | Any regulatory change or airspace amendment should continue to allow fair access to the airspace for all aviation users. Manston Airport is not currently planning on introducing any regulated airspace to protect traffic operating from the airport, but should this be required, consideration of fair access will be considered under the Design Principle that seeks to minimise the impact on other airspace users. |
| Comments: As noted above, all existing users must have priority over Manston users because existing users have established rights to use the airspace. This is especially important for users such as gliders which need space to seek out best routes. |  |

# Manston Airport Airspace Design and Procedures

Design Principle  
Stakeholder Review





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## 1.2 Background

RSP is proposing to redevelop and reopen Manston Airport as a successful hub for international air freight which also offers passenger travel, executive travel and aircraft engineering services. The airport would be comprehensively rebuilt and upgraded, including the provision of extensive cargo aircraft stands. The proposed development is subject to a Development Consent Order (DCO) application submitted by RSP to the government Planning Inspectorate (PINS) in July 2019.

In addition to the DCO, RSP will need to submit an application to the CAA to establish the procedures required to enable safe and efficient operations to and from the airport in accordance with the Civil Aviation Publication (CAP) 1616 – *Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements*.

The guidance in CAP 1616 sets out the framework for the 7 stages of the process and the activities that must be undertaken, including engagement and consultation requirements. We have now completed the initial phase of our engagement (part of Stage 1, CAP 1616) to establish our Design Principles for the introduction of Instrument Flight Procedures (IFP) at Manston Airport.

**The process to gain approval for procedures is separate to the DCO process. We are only concerned with the Design Principles that will inform the design of the procedures as part of the CAP 1616 process.**



## 1.3 Development Methodology

All airspace changes within the UK must follow the regulatory process described in CAP 1616. The process was developed to ensure a high degree of transparency and adequate levels of two-way engagement with all relevant stakeholders, including local communities. The early stage of the process involves the development of Design Principles and the activities shown below have helped us to determine the initial list of potential Design Principles detailed later in Section 2:

- Design Principles Questionnaire – Aviation Stakeholders
- Design Principles Questionnaire – Non-Aviation Stakeholders
- Focus Groups

In early October, questionnaires were distributed to specialist aviation and technical groups, local authorities, parishes and politicians representing their organisations and communities, to seek their feedback on a number of topics related to airspace design. In addition, three focus groups were held in November where aviation and non-aviation stakeholders were offered the opportunity to discuss the proposed introduction of procedures.

The questionnaire responses have been analysed and along with the comments and discussion recorded during the focus groups, have helped us to develop a list of potential Design Principles which will serve as a qualitative framework against which the different design options that we produce, will be evaluated. It is therefore important that your views have been accurately captured.

## 1.4 Highest Priority Design Principles

Any changes to airspace arrangements must maintain high standards of safety. This is the main priority of the CAA in accordance with its statutory duties set out in Section 70(1) of the Transport Act 2000. Therefore, the overriding Design Principle against which the design options will be developed will be as follows:

- **SAFETY**

Procedures must be designed to meet acceptable levels of flight safety

The CAA's Airspace Modernisation Strategy (AMS) and the Masterplan that NERL has been commissioned (jointly by the Department for Transport and the CAA) to produce will affect any airspace and procedures that Manston Airport will be proposing to introduce. It is important that the impact of the AMS and the Masterplan work on this airspace change is included. Any design work will also take into account the change in vertical reference caused by the transition altitude, particularly with interactions with other airports. Therefore, subject to the overriding Design Principle of Safety, the highest priority Design Principle for this airspace change will be as follows:

- **HARMONISATION**

Design options must accord with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it.



## 1.5 Stakeholder Review Requirements

### Section 2 - Review of Design Principles

Please take a look at the potential Design Principles listed in Table 1 below. For each of the Design Principles listed, we would like you to state whether or not you agree that the statement constitutes a Design Principle. If you do not agree, please provide detail in the comment box provided.

In addition, we would like you to rank the Design Principles according to your organisation's priorities. Please rank the Design Principles from 1 (Highest priority) to 6 (Lowest priority). If you feel any of the Design Principles are not applicable to your organisation, please mark it as '0'. Please add any amplifying comments you wish to include, also in the comments box.

Please note that this list, and your subsequent prioritisation, does not include the highest priority Design Principles (SAFETY and HARMONISATION) that have been described in paragraph 1.4 above.

Please complete Table 2 to provide any additional comments that you feel have not been considered, or suggest any additional Design Principles you feel ought to be considered by RSP for Manston Airport.

### Section 3 – Potential Design Principles Not Taken Forward

Table 3 articulates some other potential Design Principles that have not been included in the list of Design Principles under consideration. Please make any comments relating to this list in the space provided in Table 3.

Design Principles are used to help us identify design options at the next stage in the CAP 1616 process. By prioritising Design Principles now, we will be able to develop design options that best meet the Principles identified as the highest priorities while also maximising other potential benefits.

## 1.6 How to Respond

**Please save the file that includes your responses as a Microsoft word document and attach to an email to the following address: [manstonairspace@communityrelations.co.uk](mailto:manstonairspace@communityrelations.co.uk)**

In addition to the word file, we will accept scanned, hand-written responses as long as they are legible, or email responses that clearly identify the Design Principle or question to which your response relates.

It is important that email responses clearly show your name, representative organisation and contact details; this will allow us to cross-refer your response to the emails we send out.

We will also accept legible postal responses to Free Post 1616 by the deadline date below:

**Please respond by mid-day Friday 17th January 2020.**

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<sup>1</sup> A single coordinated UK airspace design and implementation masterplan for airspace changes up to 2040.

<sup>2</sup> NERL – NATS En-Route Ltd - the sole provider of civilian en-route air traffic control over the UK.



## 1.7 Next Steps

**The CAP 1616 process relates to gaining approval for airspace and procedures only for Manston Airport.**

### **Completion of Stage 1 – Design Principles**

The responses you now provide will help us to refine the Design Principles before we submit them to the CAA for its review and approval. This is known as the CAA's DEFINE Gateway and marks the completion of Stage 1 of the CAP 1616 airspace change process for Manston Airport.

### **Stage 2 – Design Options**

Once the Design Principles are approved by the CAA, we will then progress to Stage 2 of the CAP 1616 process, where we will commence detailed airspace and procedure design work to develop design options.

Further engagement activities will take place during this stage to seek your views on the design options before they are submitted to the CAA for their appraisal. This is known as the CAA's DEVELOP and ASSESS Gateway currently planned for mid-2020.

Engagement during Stage 1 and 2 is for representatives of specialist aviation and local authority bodies who represent their local organisations and communities.

### **Stage 3 – Consultation on Design Options**

We will be consulting widely with residents, businesses, communities, the public and other stakeholders at Stage 3 (Consult) later in 2020 or early 2021 when detailed design options have been developed.

RSP will ensure any feedback given during Stages 1 and 2 will be collated and included in a consultation report alongside feedback at Stage 3. The consultation report will be part of RSP's airspace change and procedures proposal submitted to the CAA for approval.

**Documentation relating to the CAP 1616 process is published on the [CAA's portal](#).**

## 2. Review of Design Principles

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### 2.1 Your Responses

Please complete

**Table** and **Error! Reference source not found.** below in line with the guidance provided in Section **Error! Reference source not found.**  
Please use as much space as you require, the size of the response box will expand as you type your response.

Please complete the following:

**Representative Organisation:**

Dover District Council.

**Table 1 – Design Principles Review and Prioritisation**

| Design Principle  | Rationale   | Do you agree this is a Design Principle?<br>(Yes or No) | How would you rank this Design Principle as a priority?<br>(1 = Highest to 6 = Lowest or 0) |
|---|---|---|---|
| Procedures should be designed to minimise the impact of noise below 7,000 ft. | One of the Government’s key environmental objectives is to limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise. Current government policy states that below 7,000 ft., the noise impact of aviation on those on the ground takes greater precedence than the management of aircraft emissions. | Yes   | 1   |



| Design Principle  | Rationale   | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|---|---|--|--|
| <p><b>Comments:</b></p> <p>There is evidence* that people are now more sensitive to noise further from airports and that the frequency of aircraft movements above 4000ft is a factor in annoyance.</p> <p>We note the DfT's Air Navigation Guidance 2017 states</p> <p><i>'.....in the airspace at or above 4,000 feet to below 7,000 feet, the environmental priority should continue to be minimising the impact of aviation noise in a manner consistent with the government's overall policy on aviation noise.'</i></p> <p>Flights between 4000ft and 7000ft may not be an issue when flightpaths are out to sea. However, as stated by Dover District Council in Q11 of the Design Principles Questionnaire submitted via email by [REDACTED] on 04<sup>th</sup> December 2019, <i>'We are unclear whether the proposed flight path would make the allocation of any such sites in our Local Plan more difficult (i.e. because they could be exposed to unacceptable levels of noise?). Please can this be clarified. We assume that if the flight paths are confirmed that they then become a safeguarding – for height and noise?'</i></p> <p>We therefore assume that noise becomes a consideration at 4000ft and not just below 7000ft.</p> <p><b>*as stated in the DfT / CAA paper titled Clarifying Altitude Based Priorities during airspace changes – IA No. 391 RPC Reference No: RPC-4155(1)-DfT</b></p> |   |  |  |
| Procedures should be designed that minimise aircraft emissions to reduce air pollution.   | Improving environmental performance by reducing emissions is an outcome that the CAA's AMS is expected to deliver. More direct routes and the use of continuous climbs and descents are some of the measures that can be employed to reduce fuel burn, therefore reducing emissions per flight. | Yes  | 2  |

| Design Principle   | Rationale   | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|--|---|--|--|
| <p><b>Comments:</b></p> <p>Whilst we agree on the importance of reducing emissions we understand continuous climbs and descents overall will cut noise especially in the local area but it can increase noise in areas some distance from the airport as in order to achieve smother descent/climb the approach path is joined further out from the airport, This may therefore have a larger impact in the indicative route swathe for Runway 28. 2</p>   |   |  |  |
| <p>Where practicable, designs should seek to minimise the impact of noise on particularly sensitive areas.</p>   | <p>The new routes should be designed to protect, as much as practicable, areas that are sensitive to noise. These may include sites of care or education, tranquil or rural areas that are used by the public for recreational purposes and cultural or historical assets. Avoiding overflight of all of these locations in every case would be impractical but we will endeavour to achieve this where possible.</p> | <p>Yes.</p>  | <p>3</p>   |
| <p><b>Comments:</b></p> <p>Large parts of the district are rural and made up of a number of villages, hamlets and farming areas including livestock. As such there are large areas with very low background noise levels as they are distant from major roads and industry. Such areas are valued for their tranquillity. The indicative route swathes for Runway 28 cross a number of sensitive such areas and aircraft noise in the late evening and early morning is likely to be particularly noticeable. Several sensitive properties are also below this flight path e.g. schools, a hospital and nursing homes.</p> |   |  |  |
| <p>Procedures should be designed, where possible, to minimise the number of track miles flown.</p>   | <p>In order to minimise emissions and to optimise operational efficiencies, designs should where possible, minimise the number of track miles flown.</p>  | <p>No</p>  | <p>6</p>   |
| <p><b>Comments:</b></p> <p>Whilst we recognise reducing track miles may cut emissions, this should not be to the detriment of increased noise over residential areas.</p>  |   |  |  |



| Design Principle  | Rationale  | Do you agree this is a Design Principle? (Yes or No) | How would you rank this Design Principle as a priority? (1 = Highest to 6 = Lowest or 0) |
|---|--|--|--|
| Designs should minimise the impact on other airspace users in the local area.   | The airspace and procedure design should aim to address the needs of all air traffic operating in the local area. New routes must take into account General Aviation (Sports & Recreation) operations at local airfields and avoid any unnecessary impact. Access to airspace should be ensured, especially for military fixed wing and rotary aircraft to meet defence operational and training requirements. | Yes  | 4  |
| <b>Comments:</b>  |  |  |  |
| Designs should where possible, make provision for multiple routes that can be used to spread the noise burden more equitably.   | Airspace design should make provision for multiple arrival and departure routes to spread the burden of over-flight more equitably between communities.  | No   | 5  |
| <b>Comments:</b><br>Rather than looking at creating more routes, there should be greater focus on flying out and in over the sea to reduce the impact on those below. |  |  |  |

**Table 2 – Additional Comments**

**If there are any other areas of concern that you feel have not been considered, please provide additional comments below.**

**Comments:**

**Are there other Design Principles not included in the list that you feel should be considered as candidates for the final shortlist?  
If so, please provide your comments.**

**Comments:**



# 3 Potential Design Principles Not Taken Forward

## 3.1 Potential Design Principles

**Error! Reference source not found.** below articulates some potential Design Principles that have also been developed as a result of the feedback received from questionnaires and the focus group meetings. However, these have not been included in the list of Design Principles shown in

**Table** above for your review for the reasons indicated. If you wish to make any comments relating to this list, please do so in the space provided. Please use as much space as you require, the size of the response box will expand as you type your response.

**Table 2 – Potential Design Principles Not Taken Forward**

| Potential Design Principle  | Reasons for not Including   |
|---|---|
| Routes should, where possible, be designed to be PANS-OPS compliant | The new routes will be designed, where possible, so that they comply with the internationally agreed criteria set down in the International Civil Aviation Organisation (ICAO) document PANS-OPS 8168 Volume 2 – <i>Construction of Visual and Instrument Flight Procedures</i> . Any deviation from the criteria set down in PANS-OPS would require Manston Airport to produce a robust safety case to justify why the designs are not compliant, before they can be approved by the CAA. Manston Airport considers that this is a safety-related principle and as such, will be considered under the Design Principle SAFETY. |
| Comments:   |   |

| Potential Design Principle   | Reasons for not Including   |
|--|---|
| Routes should be chosen to minimise the flight distance over land and maximise distance over the sea to reduce the impact of noise and emissions | Consideration of the impact of noise and emissions has already been included as Design Principles. Manston Airport is required to produce a comprehensive list of route designs at Stage 2 of the CAP 1616 process and this list will include options that minimise the time spent overland by designing tracks that route over the sea as much as possible. As a result, this is considered to be a design option, rather than a Design Principle, and will be considered at the next step of the process. |
| Comments:  |   |
| There should be no overflying of Ramsgate  | Given the location of Manston Airport in relation to the town of Ramsgate, it would not be possible to design procedures to the east of the airport that completely avoids any overflight of the town. However, designs will seek to minimise the impact of noise and emissions over the town in line with the Design Principles above. Manston Airport is also planning to introduce operational procedures (a noise preferential runway system) to minimise the impact on Ramsgate.                       |
| Comments:  |   |
| Any new airspace should be the minimum volume necessary  | At this stage, Manston Airport is not planning on introducing any new airspace other than an Aerodrome Traffic Zone (ATZ). Notwithstanding this, the provision of regulated airspace to protect traffic operating at Manston Airport is a potential design option, rather than a Design Principle. Any requirement to introduce additional Controlled Airspace (CAS) would be considered under the Design Principle SAFETY.   |
| Comments:  |   |

| Potential Design Principle  | Reasons for not Including  |
|---|--|
| Consider the Flexible Use of Airspace                                 | Any revised airspace structure should be adaptable to minimise the impact on other airspace users. Manston Airport assesses that this could be considered as a potential design option relating to the type of CAS required to protect traffic operating at Manston Airport. As previously stated, this will be considered under the Design Principle SAFETY.  |
| Comments:   |  |
| Any new airspace should facilitate fair access to all airspace users. | Any regulatory change or airspace amendment should continue to allow fair access to the airspace for all aviation users. Manston Airport is not currently planning on introducing any regulated airspace to protect traffic operating from the airport, but should this be required, consideration of fair access will be considered under the Design Principle that seeks to minimise the impact on other airspace users. |
| Comments:   |  |