



# Southampton Airport FASI-S Airspace Change Proposal

Stage 2A  
Appendix E

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# **Southampton Airport Airspace Change Proposal Appendix E – Stakeholder Resources**

## **Executive Summary**

This document contains the documentation that Southampton Airport's ACP stakeholders were provided with during Stage 2A. The presentations given to stakeholders at the briefing sessions are provided as a separate file. Full details of the communications, including communication content, can be found in Appendix C. For a timeline of key engagement activity, please see the engagement report.

# Southampton FASI-South Airspace Change Proposal Briefing

February 2022



## Plan for today

- Introductions
- Drivers for airspace change across the UK
- The Airspace Modernisation Strategy and FASI-South
- The ACP process
- Review of progress to date
- Next steps

# Southampton FASI-South Airspace Change Proposal Briefing

## Introductions



# Drivers for airspace change across the UK

Airspace modernisation remains a UK Government policy objective



The Aviation Strategy:

Quicker, Quieter and  
Cleaner journeys

More capacity

Prior to 2021  
airports were required  
to meet EASA  
legislation on  
Performance Based  
Navigation by 2024  
(EU 2018/1048).

Post 2021  
UK have not  
transposed all PBN  
rules effective 2020  
into law

CAA will consult on  
incorporating PBN  
mandate into AMS

The Airspace Modernisation  
Strategy

Modernise the airspace  
structure and route network

Add the capacity to  
accommodate forecast growth

**Southampton FASI-South  
Airspace Change Proposal  
Briefing**

**Airspace Modernisation Strategy**



# Airspace Modernisation Strategy



## Airspace Modernisation Strategy (AMS)

- The Department for Transport and the CAA have developed a shared objective for modernising airspace in the UK.
- The AMS supersedes and replaces the Future Airspace Strategy (FAS), although many key elements of FAS remain relevant and are included in this new strategy.

## Extremely wide-ranging -

- upper airspace (above c.25,000 feet)
- terminal airspace (complex lower airspace around airports from c.25,000 feet to c.7000 feet)
- airspace at lower altitudes (below c.7000 feet)
- uncontrolled airspace
- the UK's communications, navigation and surveillance (CNS) infrastructure and air traffic management.



# FASI and the Airspace Modernisation Strategy

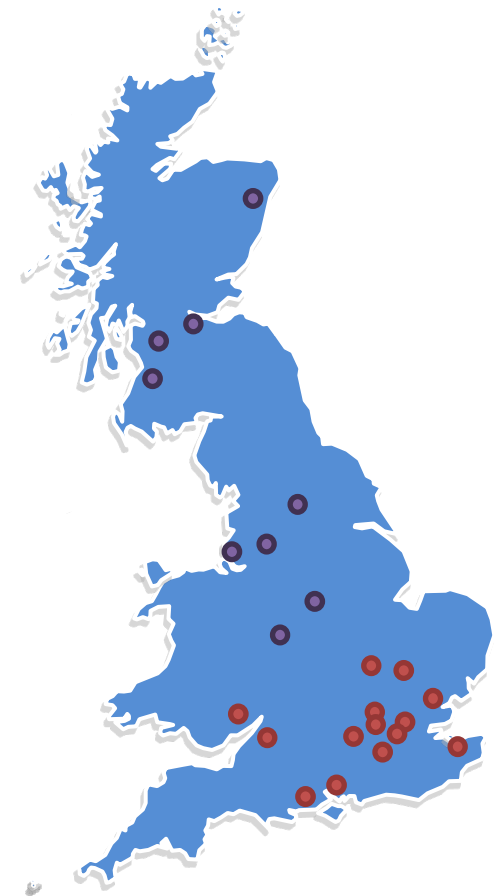
- FASI-S and FASI-N are programmes to redesign airspace in the south and north of the UK, including upper airspace structures
- Southampton ACP is part of FASI-South
- These are complex airspace design programmes that require coordination between the different ‘sponsors’ of airspace changes.

## FASI-N Airports

- Edinburgh
- Glasgow
- Aberdeen
- Liverpool
- Manchester
- Leeds Bradford
- East Midlands
- Birmingham

## FASI-S Airports

- Heathrow
- Gatwick
- Stansted
- Luton
- London City
- Southend
- Southampton
- Bournemouth
- Biggin Hill
- RAF Northolt
- Farnborough
- Bristol
- Cardiff
- Manston



## Who will these changes affect?

- The airspace change process demands that any changes to traffic patterns, such as inbound and outbound tracks near an airport, requires the sponsor to engage and consult those likely to be impacted.
- Many groups of people and organisations must be engaged and consulted throughout the airspace change process – airlines, general aviation airspace users, military organisations and, of course, individuals and organisations potentially affected on the ground.
- As well as airspace users and residents, there are many statutory consultees and local bodies which require the sponsor to engage with.
- If successful, implementation is anticipated in 2027 at the earliest

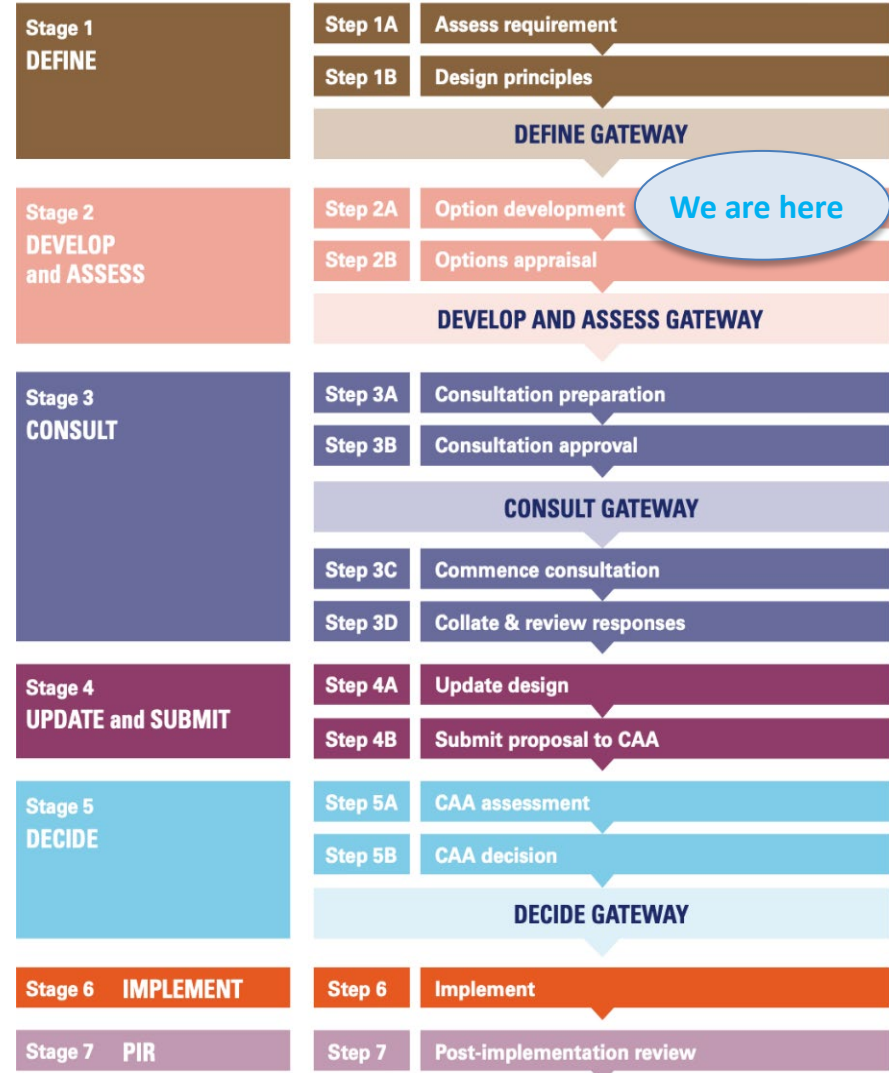
# Southampton FASI-South Airspace Change Proposal Briefing

## The Airspace Change Process



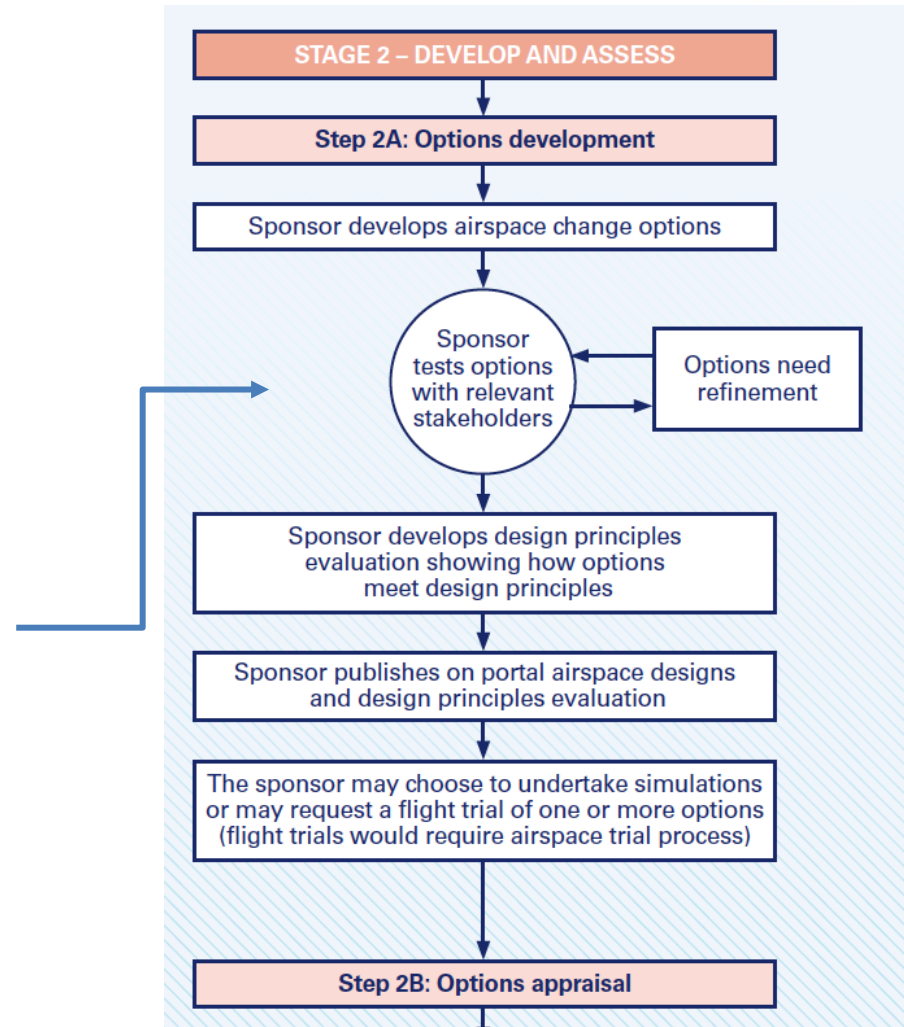
# CAP 1616 Process

- The SOU ACP developed a set of Design Principles which will be used as the basis for developing and evaluating airspace change options
- Stage 1 Define Gateway has been passed
- Now at Stage 2 Develop and Assess
- Sponsors are required to develop a comprehensive list of airspace change options that align with the design principles developed at Stage 1B. These options are then shared with stakeholders before being assessed against the Design Principles as part of the Design Principle Evaluation.



# CAP 1616 Stage 2 Develop and Assess

- Stage 2 is where Southampton Airport develop options for the airspace change.
- Step 2A is Options Development, which requires Southampton Airport to develop a first comprehensive list of options.
- This list of options should address the Statement of Need and align with the Design Principles which were developed in Stage 1.
- Southampton Airport then carry out a preliminary test of these options with the same stakeholders who were engaged in Step 1B (Design Principles).
- Southampton Airport will then produce a design principle evaluation, which will show how our design options have responded to the design principles.



# Southampton FASI-South Airspace Change Proposal Briefing

## Review of Progress



# Review of Progress to Date

- Design principles established & Stage 1 completed in 2019
- ACP paused due to COVID-19
- ACP restarted July 2021
- Design work
  - Briefing sessions
  - Initial comprehensive list of options to go forward into stakeholder engagement in Q2/3 2022 to verify design principle evaluation process

# CAA Airspace Classification Review

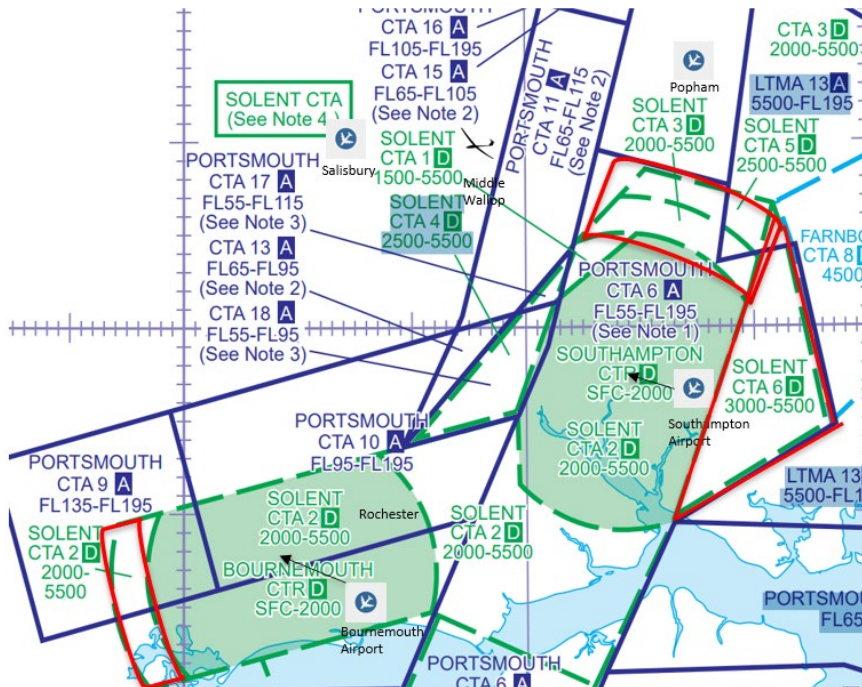
- What is the CAA Airspace Classification Review?
- In December 2019 the CAA launched a consultation to ask respondents to identify volumes of controlled airspace, where the classification could be amended to better reflect the needs of all airspace users on an equitable basis.
- *"We are committed to making the amount of controlled airspace in the UK the minimum required to maintain a high standard of safety, while ensuring the needs of all airspace users are reflected on an equitable basis."*
- The CAA will expect to see evidence that the Change Sponsor has considered and responded to this review at the appropriate stage of the CAP1616 process. The CAA's Airspace Regulation team will look for evidence of this within the ACP's final submission.
- 21 comments were received during the CAA consultation



# Responses related to Southampton/Solent Airspace

The key points raised were:

- Respondents mention “choke points” between Southampton and Salisbury Plain Danger Area and between Southampton and Farnborough. They have expressed concern about Southampton traffic growth and potential need for more controlled airspace in the future.
- Glider “choke points” mentioned between Popham and Middle Wallop and the edges of Solent CTA 3 & 5.
- Base levels over water are very low for cross-channel flights.
- Solent CTA 2 base level could be raised since it no longer needs to support operating Trislander type aircraft.
- Several responses claim most controlled airspace areas around Solent CTA is underutilised, especially CTA 3, CTA 5 & CTA 6.



One response suggests a more flexible use of controlled airspace around Southampton/Solent where controlled airspace would only be active during the operating hours of Southampton airport.

Another response suggests raising the base level of airspace over the sea to allow safer cross-channel flights in case of engine failure. It has also been suggested to release airspace / raise base levels of Solent CTA 3 & 5 to fit modern day aircraft climb performance, and also help alleviate the choke points between Popham and Widdle Wallop.

# Southampton FASI-South Airspace Change Proposal Briefing

## Next Steps



## Next steps in the ACP

- Feedback from CAA classification work has been captured and will be incorporated into the appropriate stage of the ACP process.
- As part of our Stage 2 documentation, we will outline where we have used this feedback to inform our comprehensive list of Airspace Options and where we aim to use it in future stages of the ACP process.
- The comprehensive list of airspace options will be shared during Stakeholder Engagement workshops planned for Q2/3 2022 and the purpose of those engagement sessions is to ensure that -
  - Stakeholders are satisfied that the design options are comprehensive and aligned with the design principles.
  - The airport has properly understood and accounted for stakeholder concerns, specifically related to the design options.
- Following the workshops, stakeholders and the groups/individuals that they represent will be requested to provide feedback on the two key purposes outlined above.

# Design Principles

#	Airspace design principle
DP1	<b>Top priority:</b> Be as safe or safer than today for both commercial air transport and general aviation users that are affected by the airspace change.
DP2	<b>Second priority:</b> The SOU ACP accords with the CAA's published Airspace Modernisation Strategy (CAP1711) and any current or future plans associated with it.
DP3	Avoid introducing additional complexity and bottlenecks into controlled and uncontrolled airspace and contribute to a reduction in airspace infringements.
DP4	Minimise tactical intervention by Air Traffic Control (ATC) below 7000ft.
DP5	Ensure sufficient airspace capacity to accommodate SOU's master plan traffic forecasts while providing for the integration of GA traffic.
DP6	Minimise, and where possible, reduce aircraft emissions, the degradation in air quality and adverse ecological impacts.
DP7	Minimise and where possible reduce, the total adverse effects on health and quality of life from aircraft noise.
DP8	Ensure a predictable, fair and equitable share of traffic across all routes, through multiple route options and respite routes.
DP9	Avoid overflying densely populated residential areas, national parks, AONBs, noise sensitive buildings and other areas prized for tranquillity.
DP10	Maximise operational efficiency for commercial air transport and general aviation users affected by the airspace change.
DP11	Ensure that aircraft operating at SOU climb and descend continuously to/from at least 7000ft.
DP12	Adopt the most beneficial form of enhanced navigation standards for arrivals and departure routes.
DP13	Avoid increasing the overall volume of controlled airspace and where deemed necessary, mitigate the impact by including measures that improve access to GA and do not increase airspace segregation.
DP14	Consider the use of electronic conspicuity to improve airspace integration where possible.
DP15	Take into account the combination of effects on the operations at neighbouring airports that are affected by the airspace change.
DP16	Offer flexibility in the route structure to strengthen resilience against adverse weather and network issues that may affect operations at SOU.

Questions?



## Final report

Table 1: Final list of airspace design principles that SOU propose to adopt

#	Airspace design principle
DP1	<b>Top priority:</b> Be as safe or safer than today for both commercial air transport and general aviation users that are affected by the airspace change.
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# Southampton Airport FASI-S Airspace Change Proposal

Stage 2A Engagement on Comprehensive List of Options



June 2022

# Agenda

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- Introductions and project overview
- Purpose of Stage 2A Engagement
- Our approach to developing the comprehensive list of options
- Comprehensive List of Options
- Our questions for you
- Next Steps



# Introductions and project overview



# Introductions & Overview

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Southampton Airport is developing an airspace change proposal (ACP) to upgrade the airport's arrival and departure routes. The ACP will cover a review of routes from the ground up to 7000ft and will also review the boundaries between controlled and uncontrolled airspace.

Every ACP sponsor must follow the regulatory process for changing the airspace design, including community engagement requirements - known as CAP1616 (Civil Aviation Publication no. 1616).

CAP1616 sets out the process for developing airspace change options. This entails engaging with affected stakeholders, evaluating the impacts of options, consulting the public, regulatory approval and implementation.

The outputs of each stage are reviewed by the CAA to ensure the engagement and analysis is robust prior to moving to the next stage.



# CAP1616

In August 2019 Southampton Airport submitted the Stage 1 Design Principles documents to the CAA and moved onto Stage 2 of the 7-stage CAP1616 process.

The outcome of Stage 1 are 16 Design Principles that we will be utilising in Stage 2.

Due to COVID-19 the ACP was paused in April 2020.

Following the announcement in March 2021 from the Department for Transport and the CAA of short-term financial support for the next phase of the FASI project, Southampton Airport have been able to progress this ACP.

In line with CAP1616 guidance, during Stage 2, Southampton Airport will continue to seek involvement from the same stakeholders that were engaged as part of Step 1B.



# CAP1616 Stage 2 - Develop & Assess

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**Our ACP is currently in Step 2A of the CAP1616 process – known as Options Development.**

Step 2A requires Southampton Airport to first develop a comprehensive list options to the extent that a list is possible. This list of options should address the Statement of Need and align with the Design Principles which were developed in Stage 1.

Southampton Airport must now carry out a preliminary test of these options with the same stakeholders who were engaged in Step 1B (Design Principles) to ensure that they are satisfied that the design options are aligned with the design principles and that the airport has properly understood and accounted for stakeholder concerns, specifically related to the design options.

Southampton Airport will then produce a design principle evaluation which will set out how our design options have responded to the design principles.



# Purpose of Stage 2A Engagement



# Purpose of this engagement

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- The purpose of this session is to explore and test our approach to developing the options and answer questions relating to our approach.
- We will use your feedback to try and address any concerns raised. We are able to refine or develop more options, based on your feedback.
- The purpose of this engagement is **NOT** to seek feedback on individual route options by examining the detailed specific geographical position of the options.
- We do not yet have any detail on the potential impacts of each option, that will come later.
- At this stage we are engaging community groups, local authorities, airline, general aviation bodies, other airports and NATS.
- This is not a public consultation exercise, that comes later, on the preferred option(s).





Our approach to developing the  
comprehensive list of options



# Our approach

When developing Airspace Change options, Southampton Airport must address the Statement of Need and align with the Design Principles which were developed in Stage 1 with stakeholders:

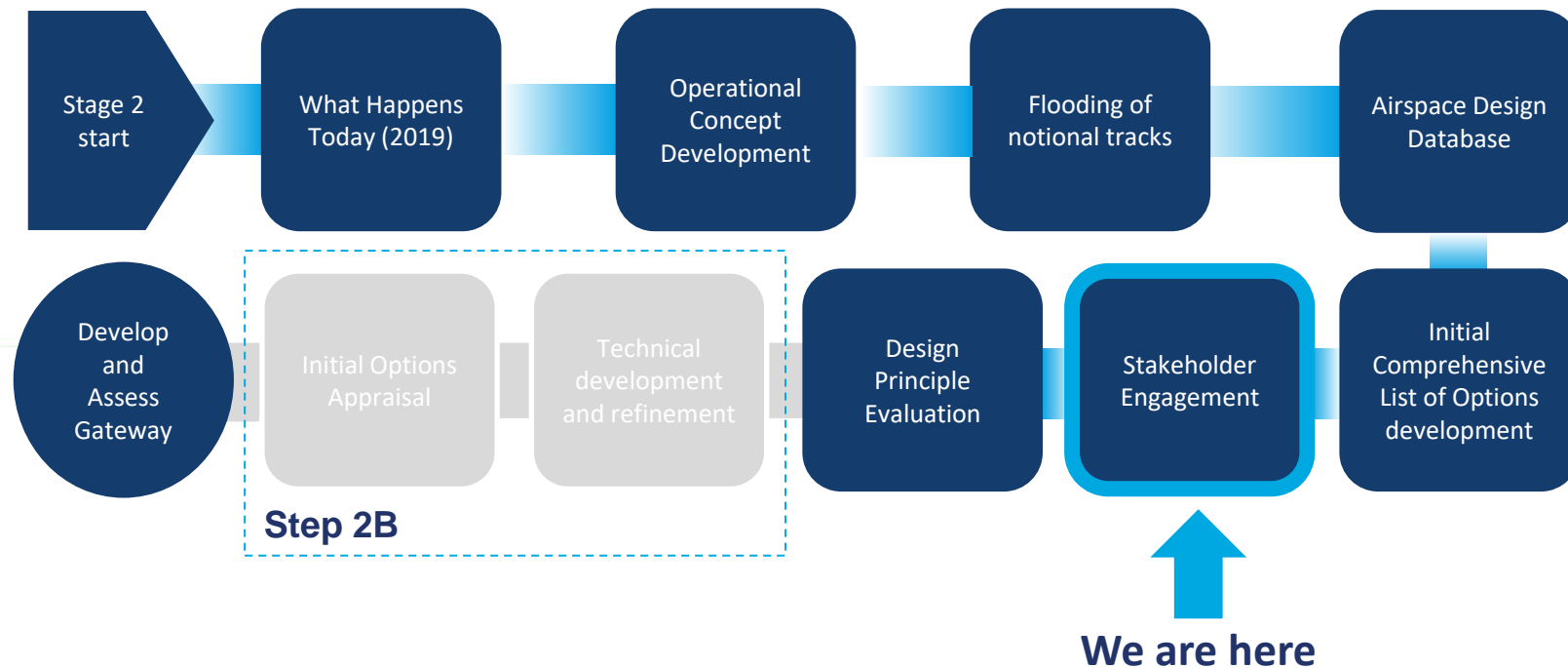
#	Airspace design principle
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DP16	Offer flexibility in the route structure to strengthen resilience against adverse weather and network issues that may affect operations at SOU.



# Our approach

In practice, developing a comprehensive list of options that address the statement of need and align with the design principles is a complex task, especially when faced with a ‘blank sheet’ approach. There are several stages of work that are required to take place in order to arrive at a comprehensive list of options. The following slides summarise the methods employed to develop as many options as practicable.

## Overview of our approach:



# Our approach

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What  
happens  
today


All DPs

The first step in developing our Comprehensive List of Options is to understand what happens today. When we restarted the project after COVID-19, we refreshed this analysis.

We took initial steps to understand the existing Airspace Environment and how we can change and improve it to meet the Design Principles. This included:

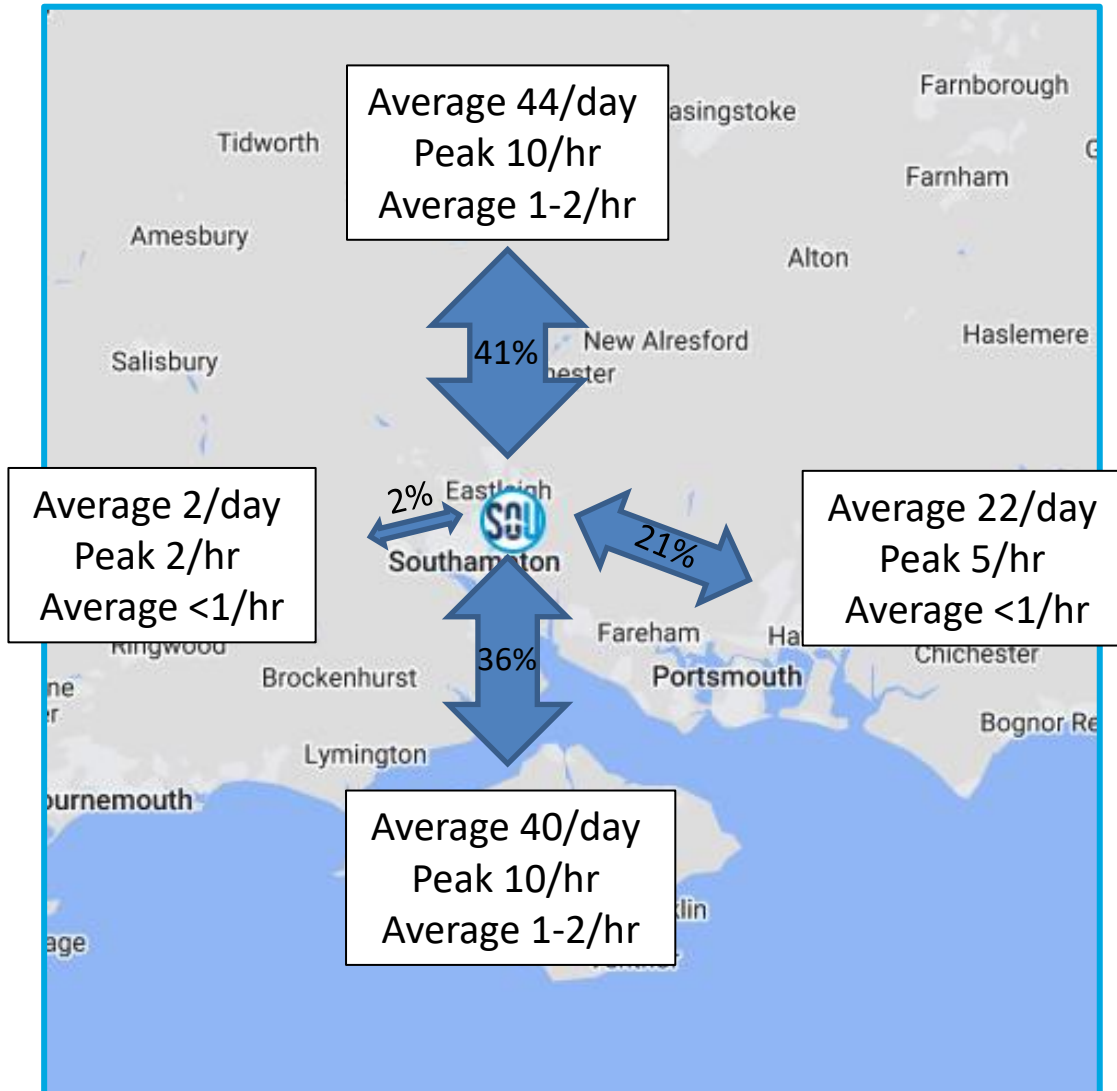
- Analysing flight track data to understand how aircraft currently operate at Southampton Airport (shown over the next slides)
- Engaging with General Aviation and Airlines around the Controlled Airspace structure
- Engaging with Airlines to understand their future fleet capabilities

The following information is based on 2019 data, as this is most representative of a recovered COVID-19 scenario.



# Our approach

Typical movement figures (Summer 2019). A movement is an arrival or a departure



Average commercial movements per day: **110**

Average commercial movements per hour: **6-7**

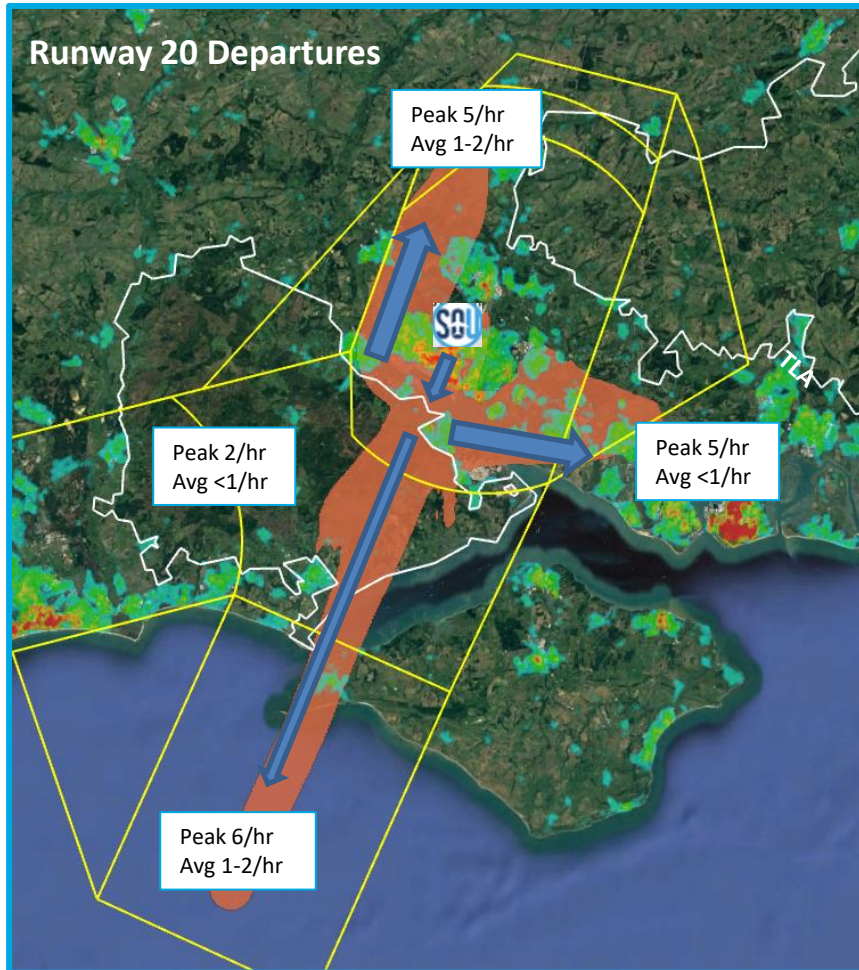
Peak commercial movements per day: **130**

Peak commercial movements per hour: **20**

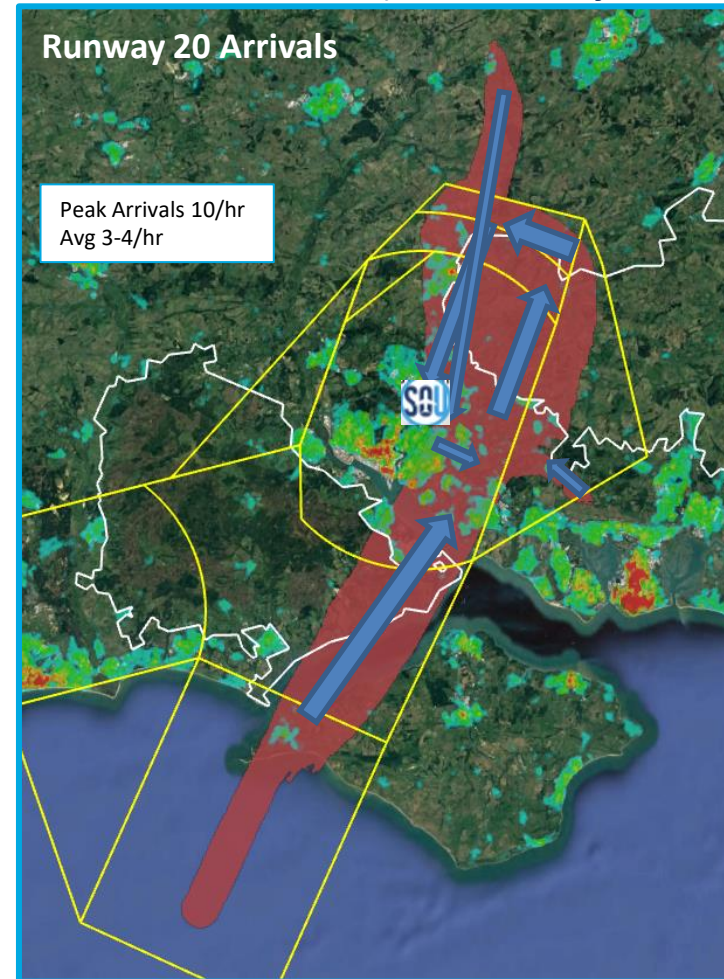
# Our approach

## Existing Radar Tracks: Runway 20

Aircraft land from the Winchester direction and take-off towards Southampton and the New Forest (72% of the year in 2019)



- Orange = RWY 20 Departures
- Red = RWY 20 Arrivals
- Yellow = Existing controlled airspace arrangements
- White = New Forest & South Downs
- Gradient red to green = Population density
- Blue arrows = Direction of flight



Arrivals are vectored by Air Traffic Control onto Final Approach. Aircraft join final approach at around 6 – 9 nm.

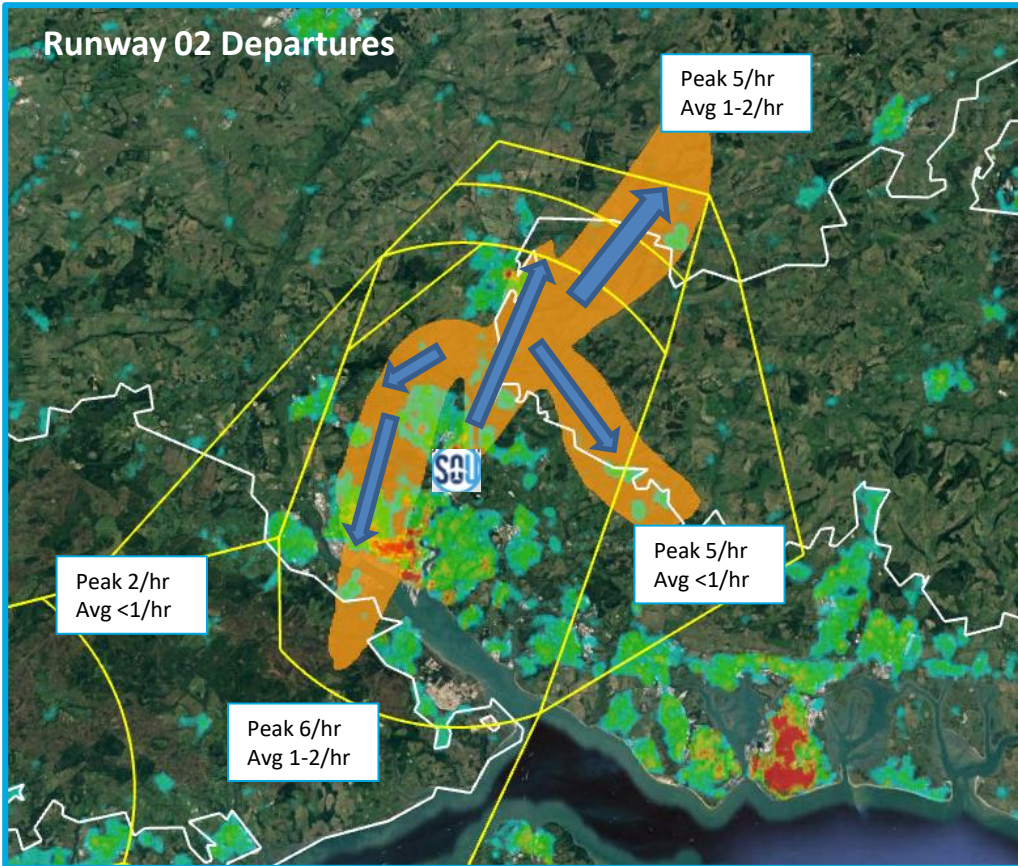
There are no published departure routes from Southampton other than the NPRs. Departures are then directed to 1 of 4 different locations.



# Our approach

## Existing Radar Tracks: Runway 02

Aircraft land from the New Forest and Southampton direction and take off towards Eastleigh and Winchester (28% of the year in 2019)



- Orange = RWY02 Departures
- Purple = RWY 02 Arrivals
- Yellow = Existing controlled airspace arrangements
- White = New Forest & South Downs
- Gradient red to green = Population density
- Blue arrows = Direction of flight



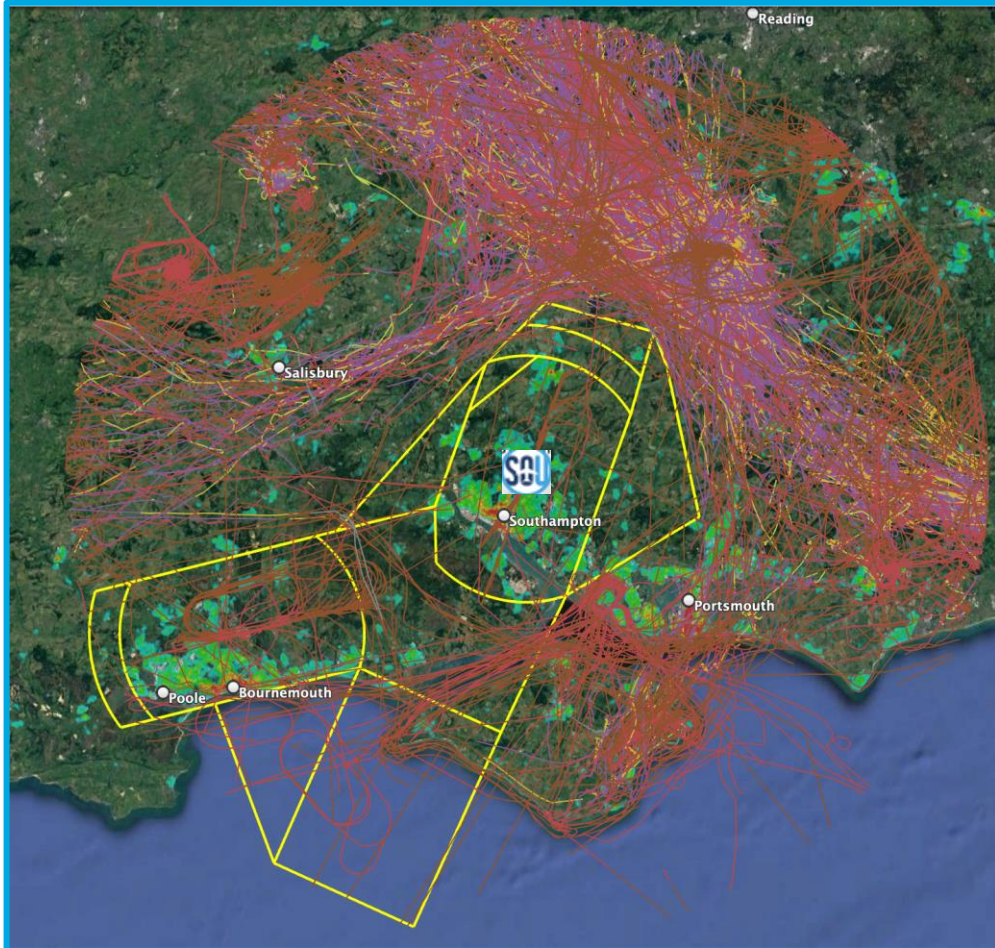
There are no published departure routes from Southampton other than the NPRs. Departures are then directed to 1 of 4 different locations.

Arrivals are vectored by Air Traffic Control onto Final Approach. Aircraft join final approach at around 8nm and beyond.



# Our approach

## Controlled Airspace



### General Aviation activity

We also looked at the existing controlled airspace arrangements (yellow) and how other airspace users use the airspace surrounding Southampton.

This was the starting point for engagement with the local General Aviation community around how the controlled airspace could be improved.

### Technical Information

The image displays FLARM up to 7000ft and ADSB up to 3000ft within 30nm of the Southampton Airport ARP for 2 weeks in Summer 2019 (pre-Farnborough CAS).

Some of the ADSB data is commercial traffic to from Bournemouth, Southampton and Farnborough but this image helps to show GA concentrations around the Solent Zone.

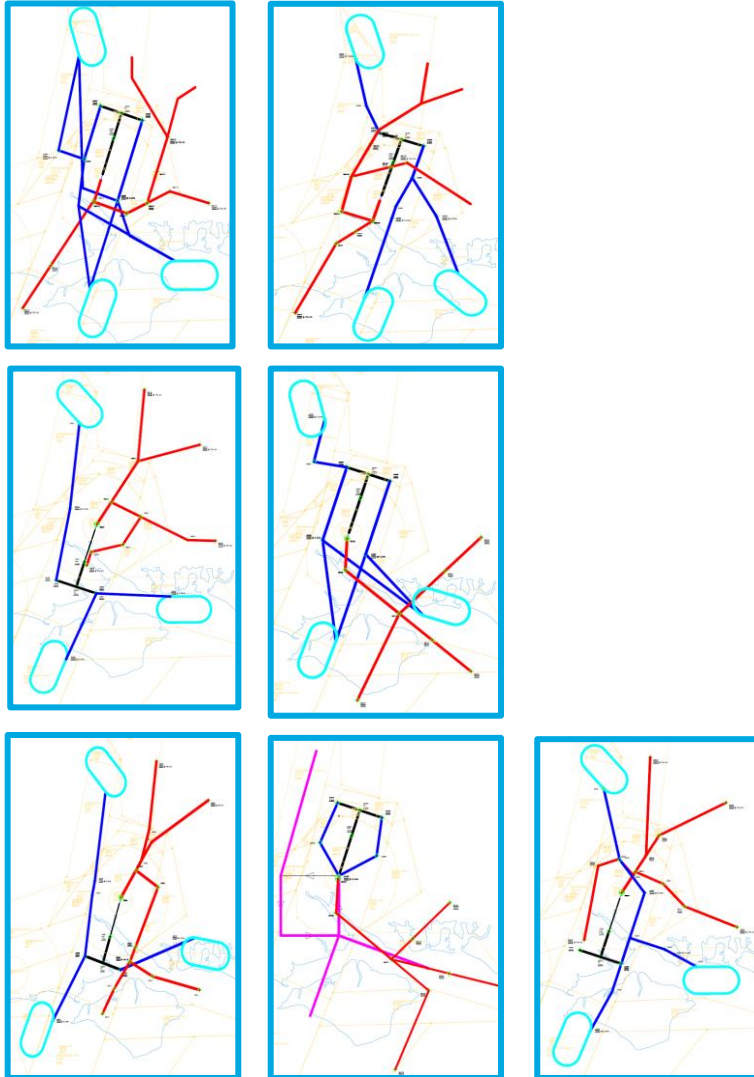
Any Questions?



# Our approach

Operational  
Concept  
Development

All DPs



We initially sketched lots of different design components to create operational concepts that aimed to meet the various Design Principles.

We then spoke to Southampton's Air Traffic Controllers to see if the various concepts could work operationally.

This helped us to understand the art of the possible and what would and wouldn't work.



# Our approach

Flooding of  
notional  
tracks

DP 1 2 3 6 7 9  
10 11 12 13

To ensure we investigated as many route positionings as practicable, we created hundreds of possible notional flight paths in a process called ‘flooding’.

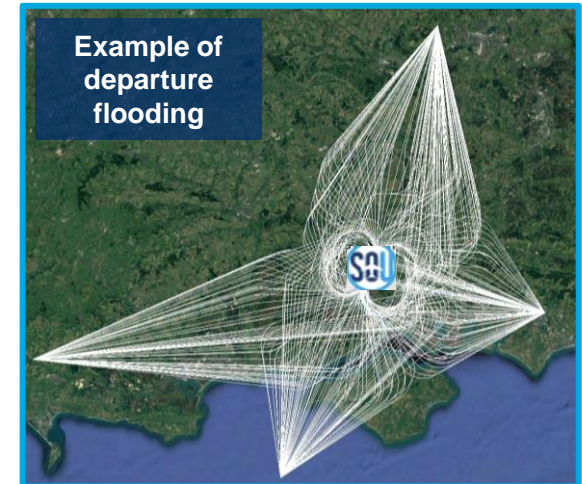
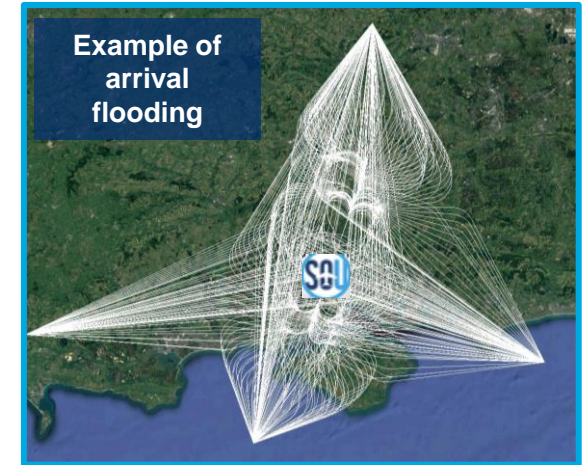
This allowed us to analyse each track using a variety of different metrics to understand geographically what is surrounding the airport.

The notional flight paths are developed to join network entry/exit points (where need to route to/from in the network, well above 7000ft). These groupings allow us to create actual options later in this process.

Although notional flight paths are based on the basic principles of the rules Instrument Flight Procedure designers use when designing arrival and departure routes, they are not considered final flight paths. It is intended that they will be refined as we progress through the process to incorporate greater IFP detail. As we are undertaking this work, we will use map underlays and continue to process any developments through the database to ensure we optimally refine.

## Vertical Profiles

All notional flight paths assume a continuous arrival and descent to/from 7,000ft to meet DP11



# Our approach

Airspace  
Design  
Database

DP 2 3 6 7 9

An Airspace Design Database was created which allowed high performing notional flight paths to be identified. These are the flight paths which most align with our Design Principles.

The database includes a noise assessment of each path, based on single noise events such as  $L_{Amax}$  and overflight metrics telling us the numbers of population overflown,  $Km^2$  of National Parks, numbers of schools, hospitals etc. It also includes track mileage to enable high level comparison of potential fuel burn /  $CO_2$  and information about whether an option would require additional new Controlled Airspace.

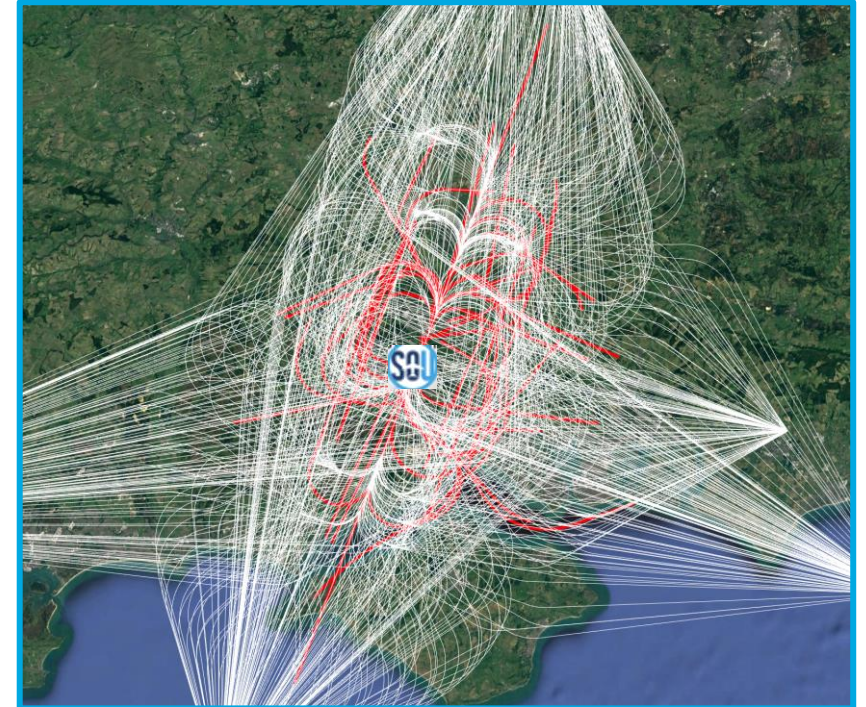
## Our Noise Assessment Methodology

Our noise assessment methodology must comply with the requirements set out in CAP1616 and [CAP2091](#) (the CAA's policy on minimum standards for noise modelling).

However, CAP1616 advocates a proportionate approach to assessment and the CAA recognises that it is not always proportionate to undertake detailed noise modelling to the requirements set out in CAP2091 when appraising the comprehensive list of options at Stage 2.

Therefore, in consultation with the CAA, we have developed a more proportionate approach for this stage of the assessment. This involves the use of a noise calculation tool with simplified assumptions such as standard flight profiles, allowing us to calculate noise indicators for thousands of flight path options.

For the Full Options Appraisal at Stage 3, and any subsequent noise assessment, we will undertake detailed noise modelling with airport specific assumptions in line with the standard of noise modelling set out in CAP2091.



# Our approach

Initial  
Comprehensive  
List of Options  
Development

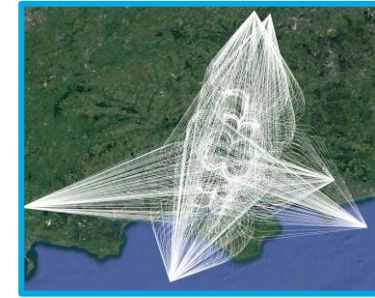
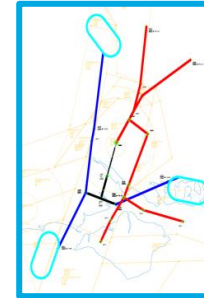
All Design  
Principles

The Airspace Design Database has given us the high performing notional flight paths for each network exit/entry group however this only looks at the paths as individuals. In order to develop options that meet DP8, we needed to consider how systems of arrivals and departures routes would work together, for example to provide a share of traffic across different routes.

To achieve this, we developed concepts. The final stage in the process was to bring together the concepts and the best performing notional flight paths from the Airspace Design Database:

## Concept

Concepts describe broad directions of routes, that take into account expected traffic distribution. The concepts were generated to try and meet the design principles at a basic level with a view to use the airspace design database to refine route positioning



## Airspace Design Database

Contains noise, environment and airspace data on thousands of notional flight paths.



## Airspace Option

The airspace option brings together the concept and the best performing notional flight paths alongside separation standards and other technical experience\*, to build system options that form our initial comprehensive list of options.

\*To create working systems is a complex task and therefore this is a collaborative group exercise between ATM experts, IFP designers, and ATC.



Illustrative example only



Any Questions?



BREAK

Back in 10 minutes



# Comprehensive List of Options



# Comprehensive List of Options

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## Stakeholder Engagement

The following section gives an overview of our comprehensive list of options. A link to this presentation will be circulated following the meeting to allow Stakeholder's time to review each option in detail.

It's important to note that at this stage we are not consulting on these options or seeking feedback on individual route options by examining the specific geographic positions.

**The purpose of this session is to explore and test our approach to developing the options and answer questions relating to our approach. We are able to refine or develop more options based on your feedback.**

The questions we are asking our Stakeholder are:

- **Are you satisfied that we have taken into account the Design Principles when developing our comprehensive list of route options?**
- **Are there any further considerations that relate to the Design Principles which we have not taken into account?**
- **For General Aviation stakeholders: Please can you provide feedback on how the various additional sections of Controlled Airspace would affect your operations for each option. Please can you also advise of any amendments/suggestions/recommendations you may have regarding the existing volume of Controlled Airspace which would most benefit your operation.**

# Comprehensive List of Options

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- Our Comprehensive List comprises of 4 main options.
- These options have been designed as full systems i.e. groups of Runway 20 arrivals and departures, and Runway 02 arrivals and departures.
- All the flight paths within each system are comprised of the best performing tracks from our Airspace Design Database for various Design Principles.
- The systems themselves aim to meet the design principles that can't be evaluated as individual routes (DP3, 4, 8, 9, 10 and 13).
- Later on in the airspace change process at Stage 3, we may combine various elements of these 4 options into a final system option if it will deliver greater benefits and/or better mitigate impacts. However, this is also dependent on changes to adjacent airspace by

## **Flight path**

One individual arrival or departure route

## **System**

Group of flight paths for either runway 20 arrivals or departures, or runway 02 arrivals or departures

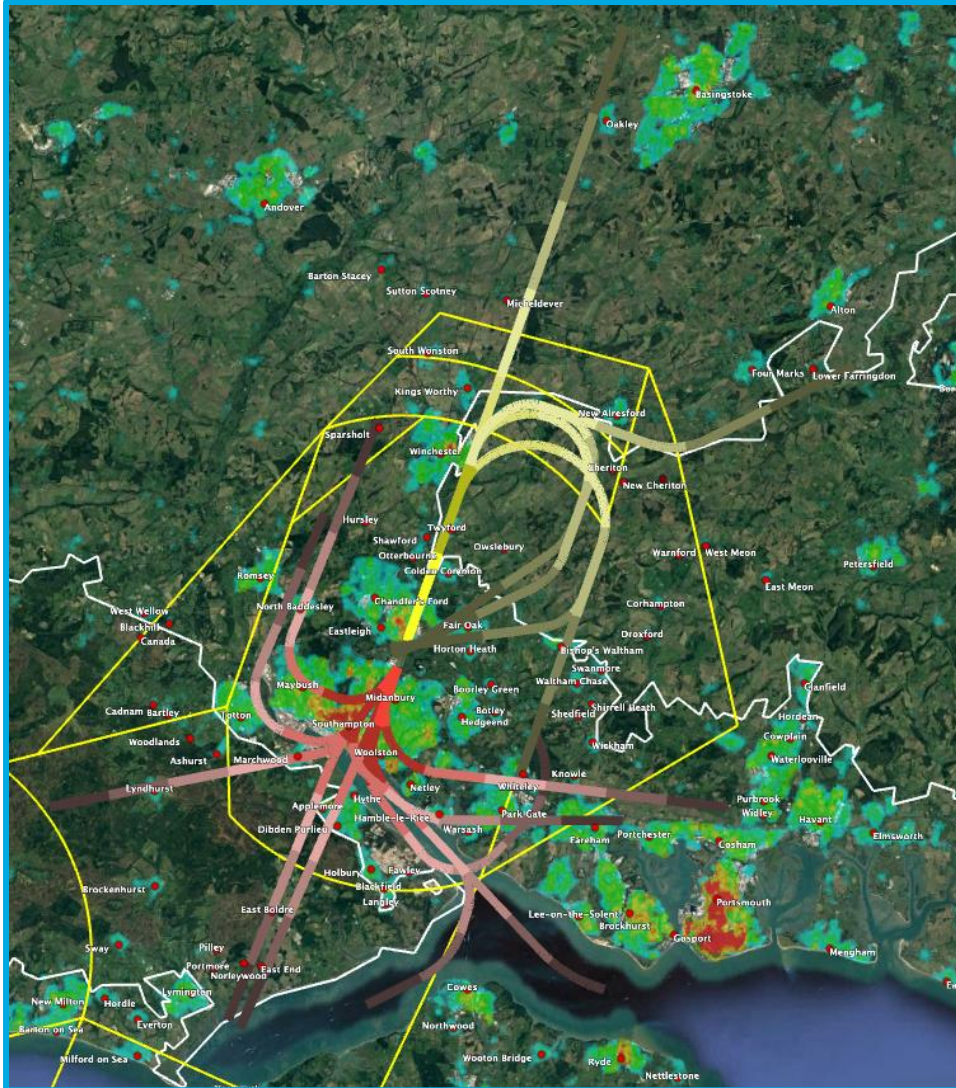
## **Option**

A combination of compatible systems for each runway both arrivals and departures.



# Comprehensive List of Options

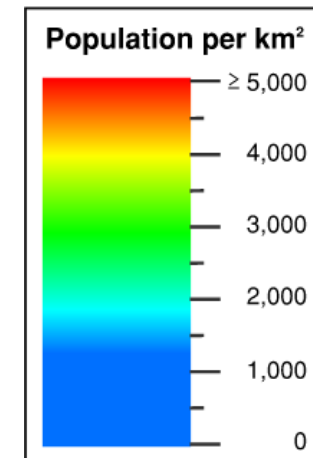
## All Runway 20 Options:



This picture shows all the 4 options on the same image for just Westerly (RWY 20) operations.

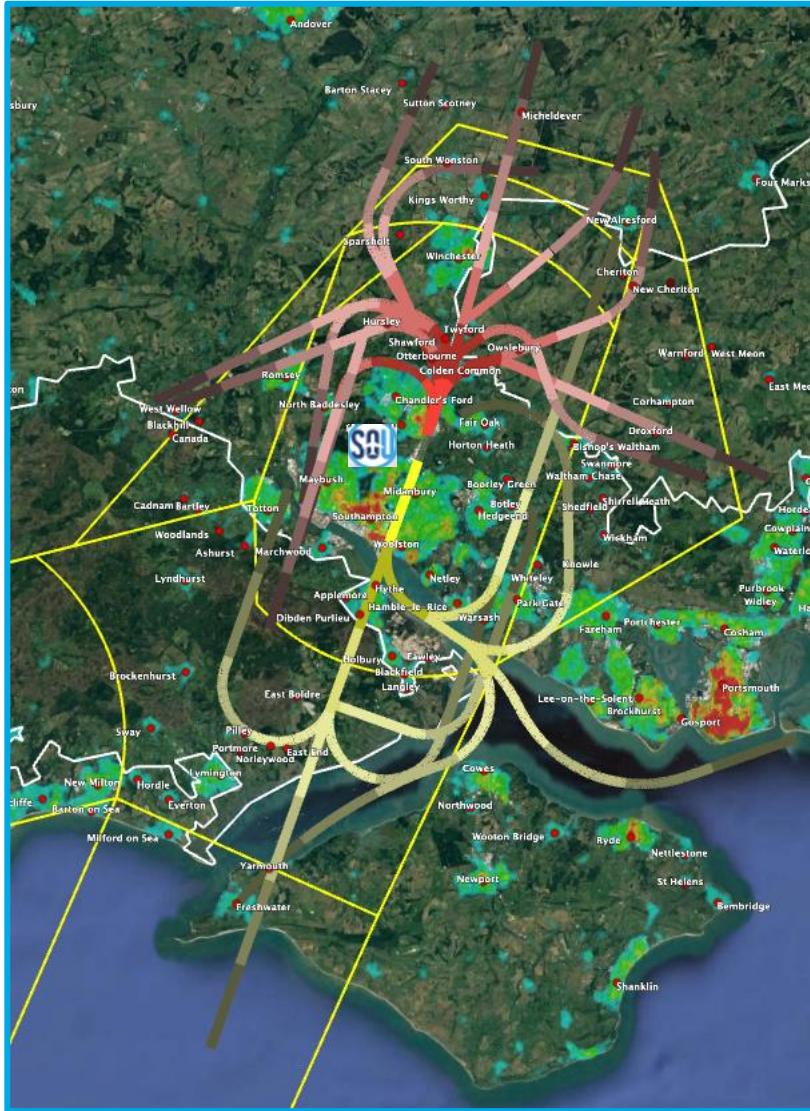
**Runway 20 was in use 72% of the time in 2019**

Indicative (Conservative) Altitude (ft)	Departure Options and aircraft track data	Arrival Options and aircraft track data
0 – 1000		
1000 – 2000		
2000 – 3000		
3000 – 4000		
4000 – 5000		
5000 – 6000		
6000 - 7000		



# Comprehensive List of Options

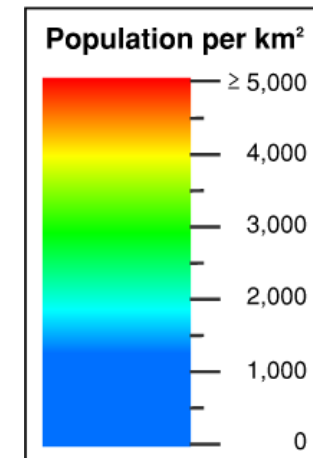
## All Runway 02 Options:



This picture shows all the 4 options on the same image for just Easterly (RWY 02) operations.

**Runway 02 was in use 28% of the time in 2019**

Indicative (Conservative) Altitude (ft)	Departure Options and aircraft track data	Arrival Options and aircraft track data
0 – 1000		
1000 – 2000		
2000 – 3000		
3000 – 4000		
4000 – 5000		
5000 – 6000		
6000 - 7000		






# Comprehensive List of Options

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The following slides show examples from our comprehensive list of options. Information about each option is shown across four slides:

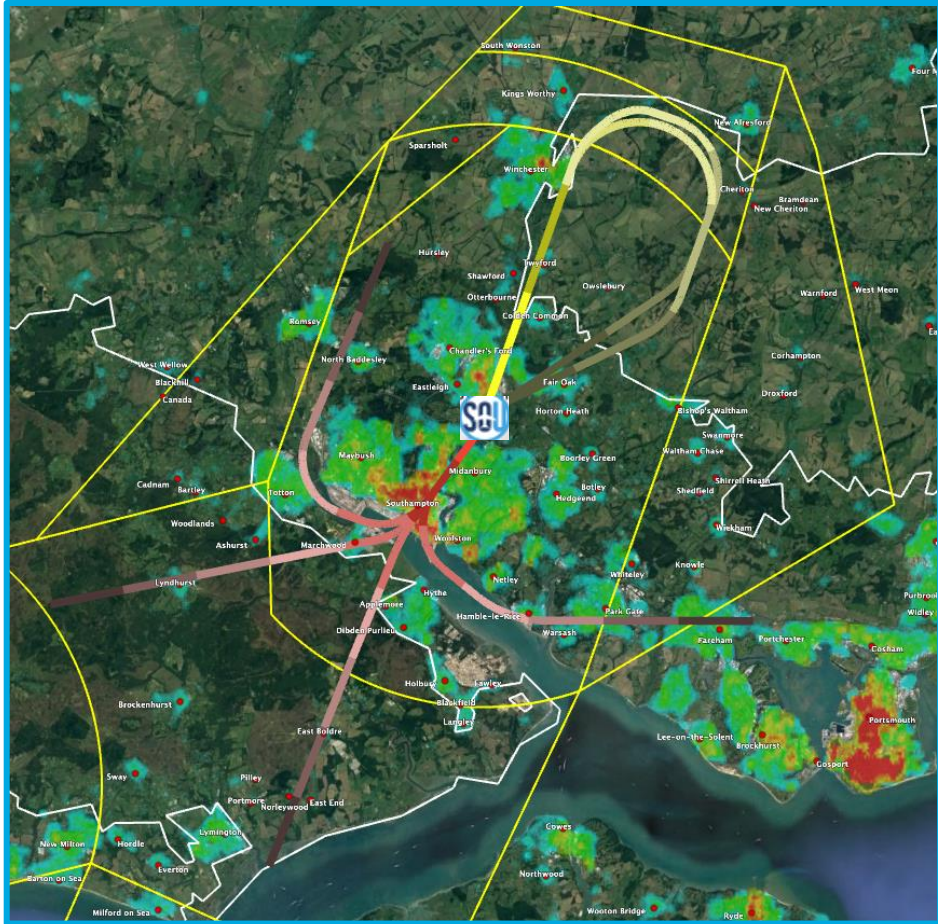
- The first slide shows Runway 20 operations. It illustrates the expected usage of the route, how the route centrelines compare to today's radar tracks and their position against areas of dense population.
  - The second slide shows the same information, but for Runway 02 operations.
  - The third slides provides an indicative illustration of how the option could affect existing Controlled Airspace arrangements. **This does not represent Southampton's proposals at this stage but is for the purposes of stakeholder engagement only.**
  - The fourth slide provides a **preliminary** indication of how the option may perform against certain indicators (this is not the Design Principle Evaluation). It is very important to note that detailed environmental analysis of these options takes place at a later stage of the process and therefore the information provided is **indicative** to help Stakeholders understand whether we have developed our Comprehensive List of options to meet the Design Principles and Statement of Need.
- 

Option 1

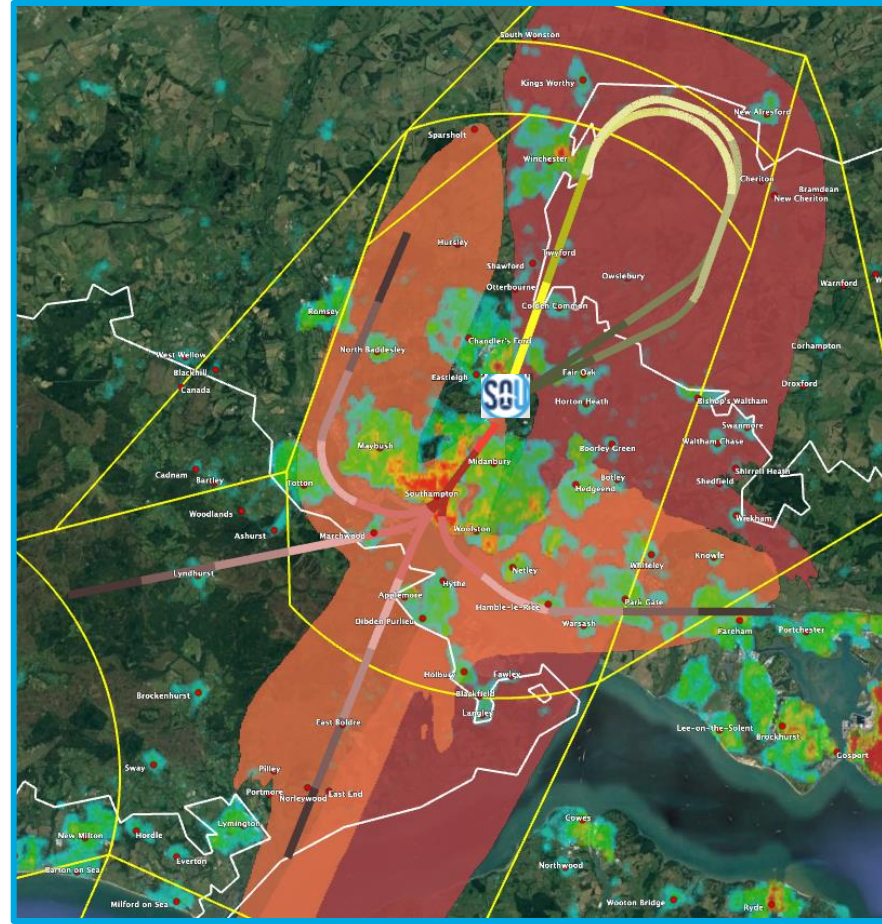


# Comprehensive List of Options: Runway 20

## Option 1



Runway 20 Option 1 departures (red in 1000ft bands), arrivals (yellow in 1000ft bands), existing CAS structure (solid yellow), population density (graduated red - green)

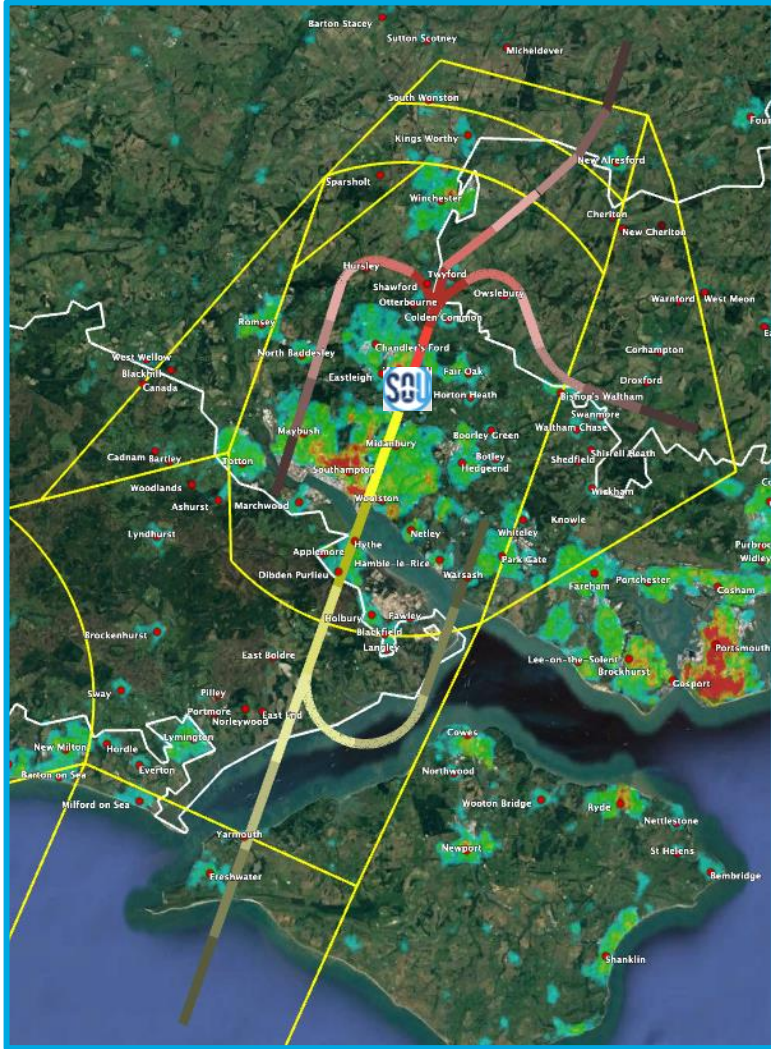


2019 NTK overlay: 2019 departures (orange), arrivals (red)

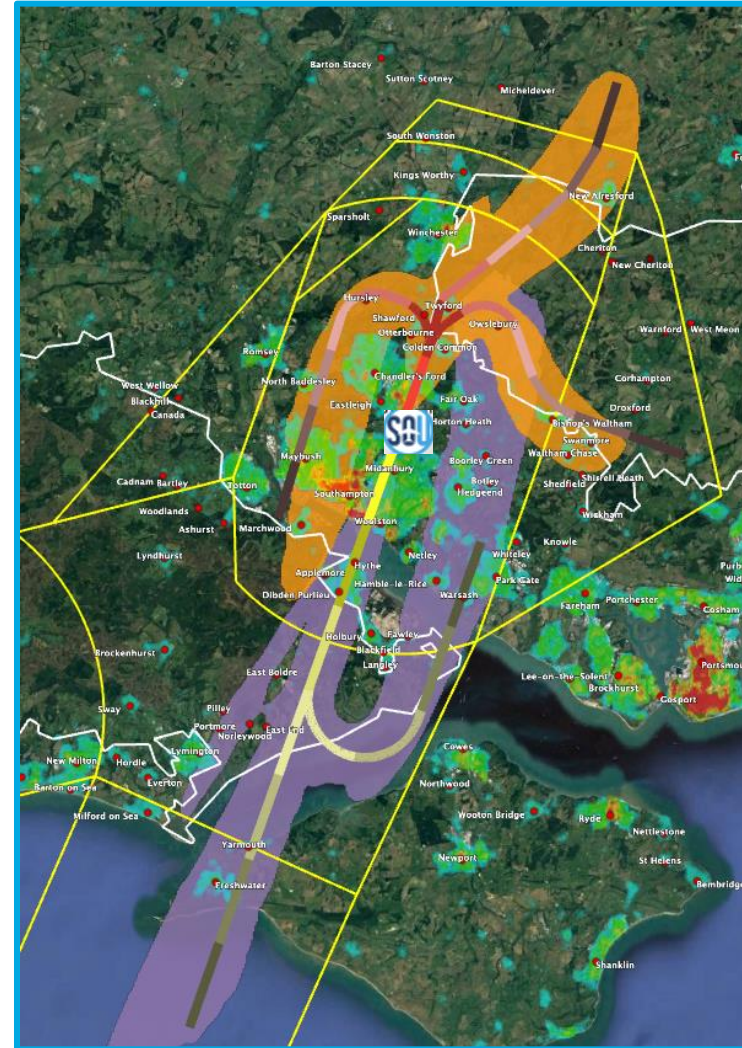


# Comprehensive List of Options: Runway 02

## Option 1



Runway 02 Option 1 departures (red in 1000ft bands), arrivals (yellow in 1000ft bands), existing CAS structure (solid yellow), population density (graduated red - green)

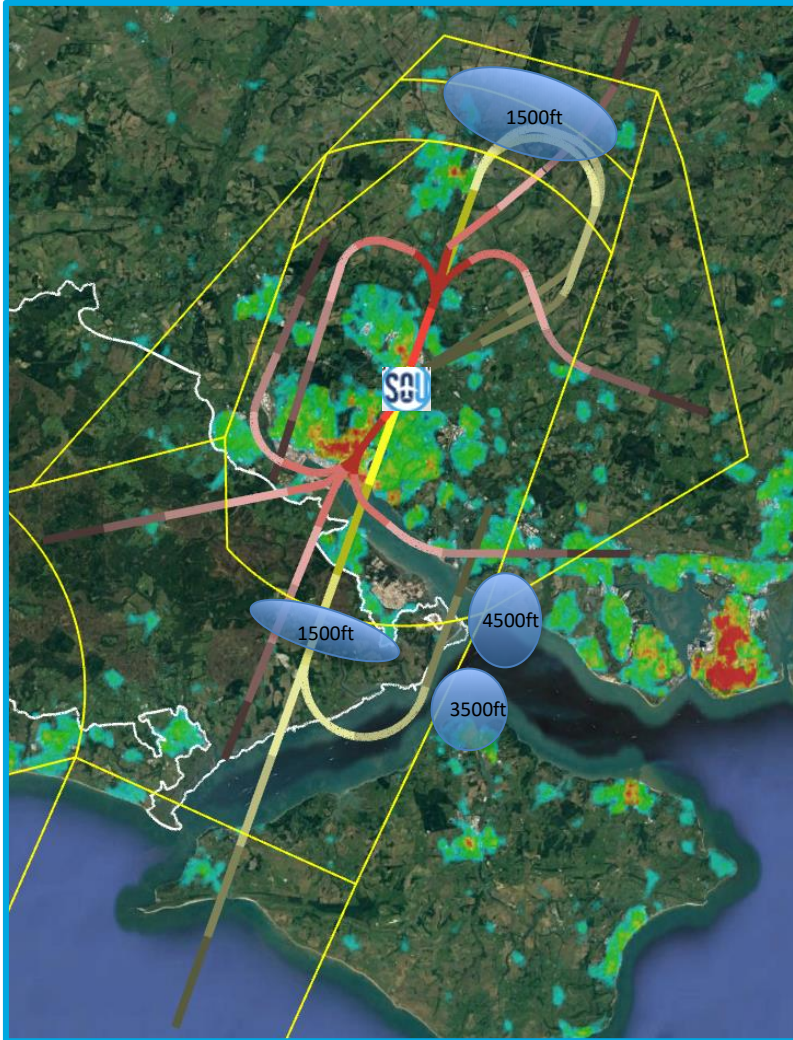


2019 NTK overlay: 2019 departures (orange), arrivals (purple)



# Comprehensive List of Options

## Option 1 Controlled Airspace considerations



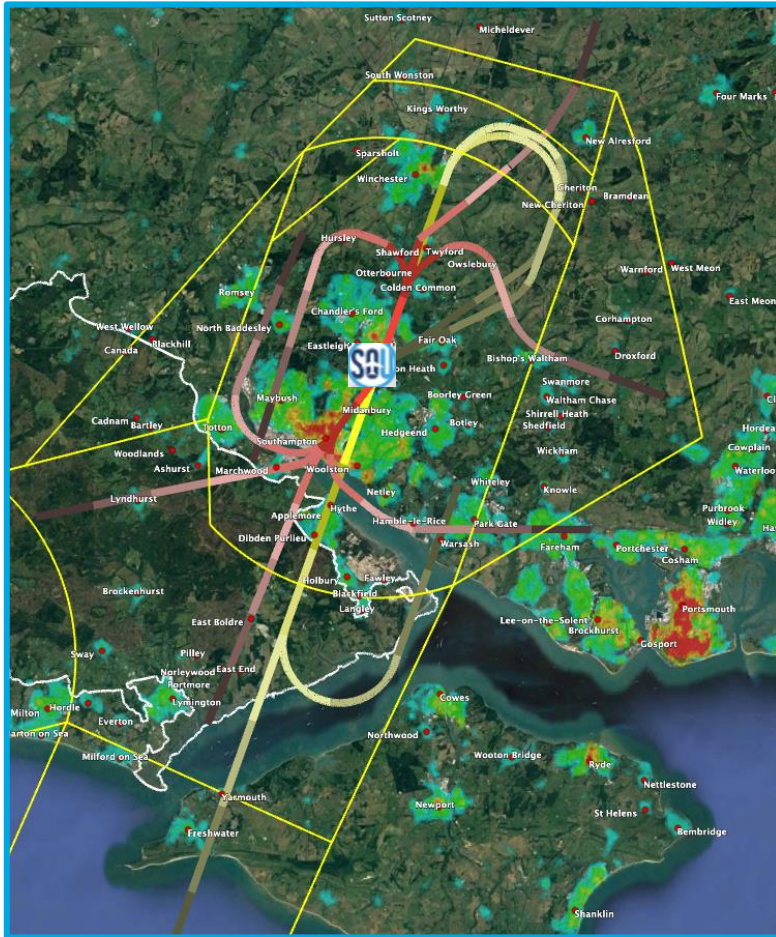
CTR/CTA dimensions depend very much on the Instrument Flight Procedures and/or Radar Vectoring patterns to and from the aerodrome. Therefore, until very detailed IFP design takes place and locations of the waypoints, fixes, PBN specifications and associated protection areas are available we can only provide some indications as to the general areas where changes are likely to be required to accommodate the options. With all options, it is not possible to contain a RWY 20 RNP Approach or a PBN transition to RWY 20 final approach within the existing structures. Amendments to Solent CTA 3 and possibly CTA 5 and CTA 2 required with lowering of those bases in some areas.

There may be scope to **reduce** the volume of the existing CTR by decreasing its width either side of the extended centreline, stepping up to a 1500ft base then progressively higher. We would hope to enable a raising of parts of CTA 2, CTA 4, CTA 6 and CTA 8.

**Appreciating that all reduction in CAS are welcome, this slide only aims to highlight the general areas where more CAS would be required to enable feedback on the potential impacts to GA in those areas.**

# Comprehensive List of Options

## Option 1 Design Principle indicators



Broad Design Principle Category	Design Principles	Notes on option development
Safety	DP1	Options developed by SMEs using concepts developed in collaboration with ATC and flight paths designed to meet the basic principles of PANS-Ops.
Air Quality	DP2 DP6	Option does not make any changes below 1,000ft*
Controlled Airspace	DP2 DP3 DP5 DP13	See previous slide. Adjustments required to CTA3/5/2. CAS north of CTA subject to SID gradient. Scope to simplify and release in other areas.
CO <sub>2</sub>	DP 2 DP6 DP10 DP11	Outputs from the airspace design database used to identify flight paths which are expected to be a similar order of magnitude to baseline
Noise: Population	DP2 DP7 DP9	Flight paths are similar to today in this option although population overflown expected to be lower due to concentration of tracks.
Aircraft Capability	DP 2 DP4 DP9 DP10 DP12	Option aims to meet RNAV 1 standards. There's an opportunity to use RNP1 + RF for RWY20 which could reduce CAS impact
Sharing of noise	DP2 DP7 DP8	RWY 02 NORRY departure overflies same areas as RWY20 final approach between Eastleigh and Kingsworthy. RWY 02 GWC departure overflies same areas as RWY20 arrivals near Lower Upham and Upham,
Operational performance	DP2 DP3 DP4 DP5 DP10 DP11	Option utilises PBN arrival transitions to final approach, which are expected to enhance operational performance and therefore meet the design principles around this
Noise: AONB / New Forest	DP2 DP7 DP9	Outputs of the airspace design database used to identify runway 20 THRED departure which a similar level of overflight to today.

\* (ANG2017 states that due to the effects of mixing and dispersion, emissions from aircraft above 1,000 feet are unlikely to have a significant impact on local air quality)

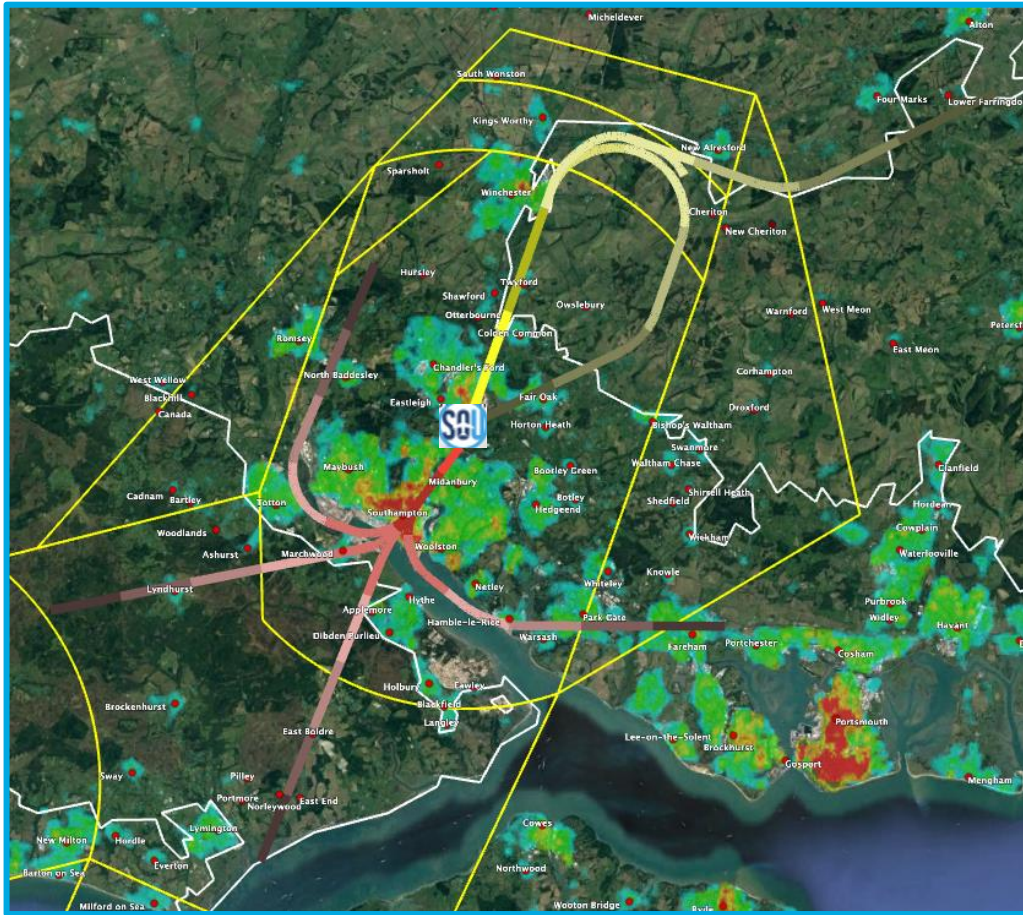


Option 2

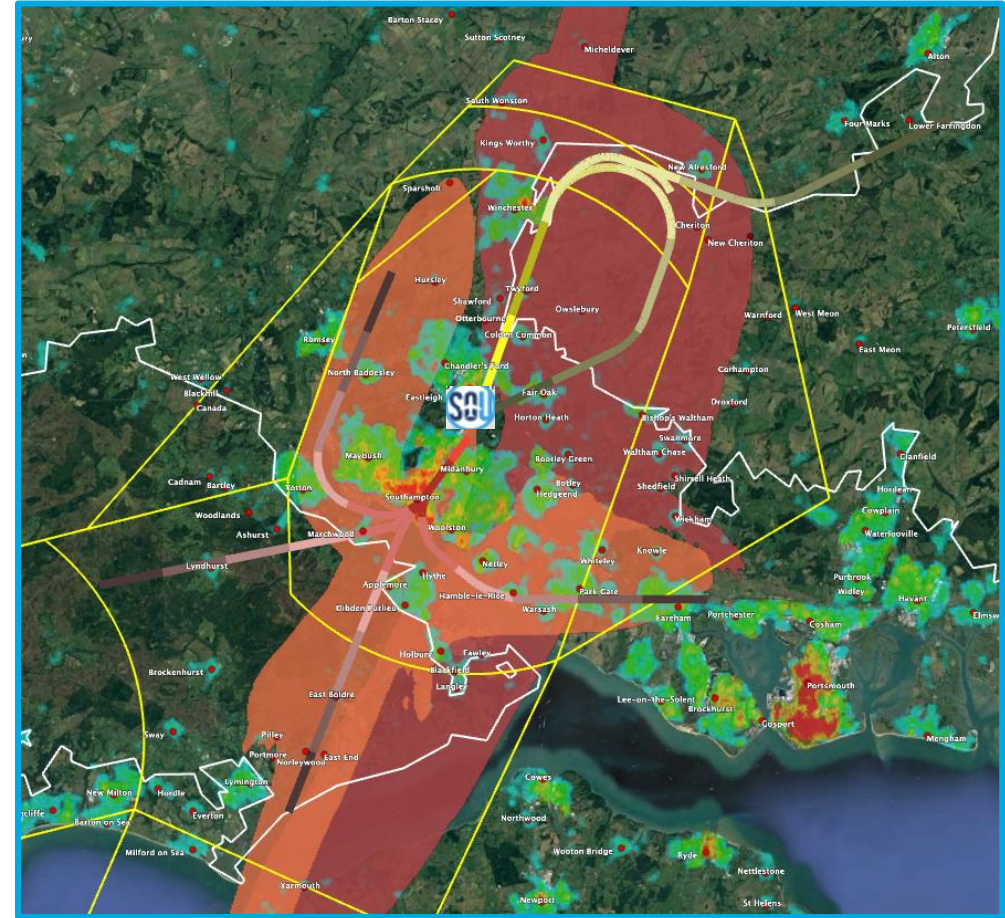


# Comprehensive List of Options: Runway 20

## Option 2



Runway 20 Option 2 departures (red in 1000ft bands), arrivals (yellow in 1000ft bands), existing CAS structure (solid yellow), population density (graduated red - green)

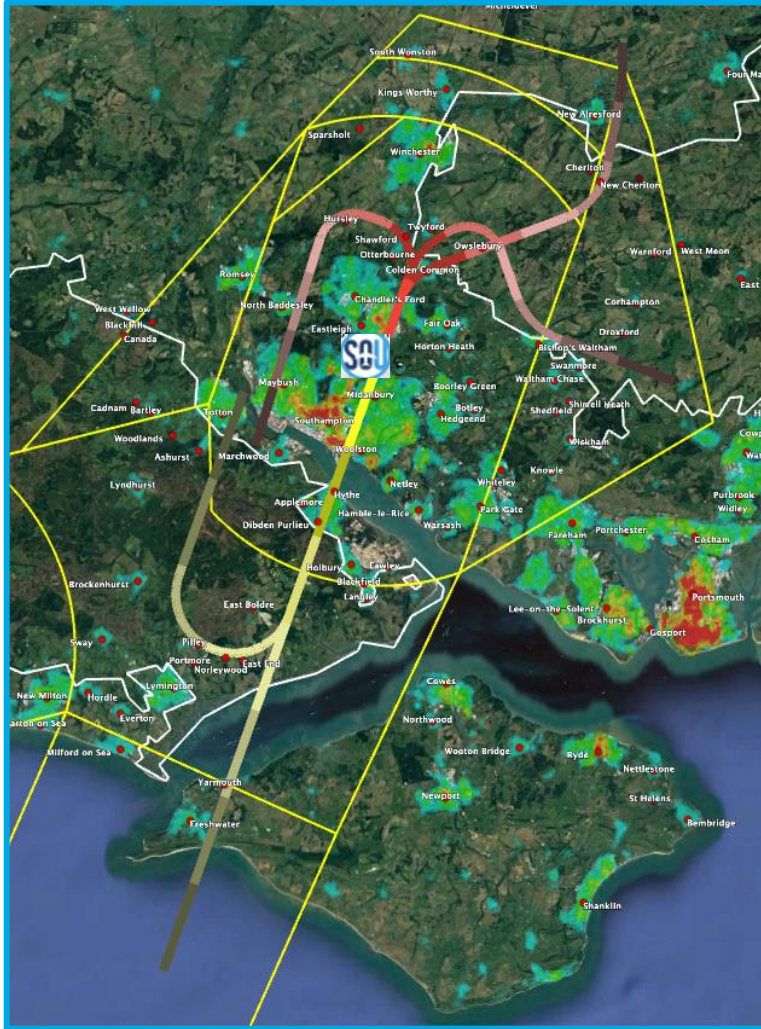


2019 NTK overlay: 2019 departures (orange), arrivals (red)

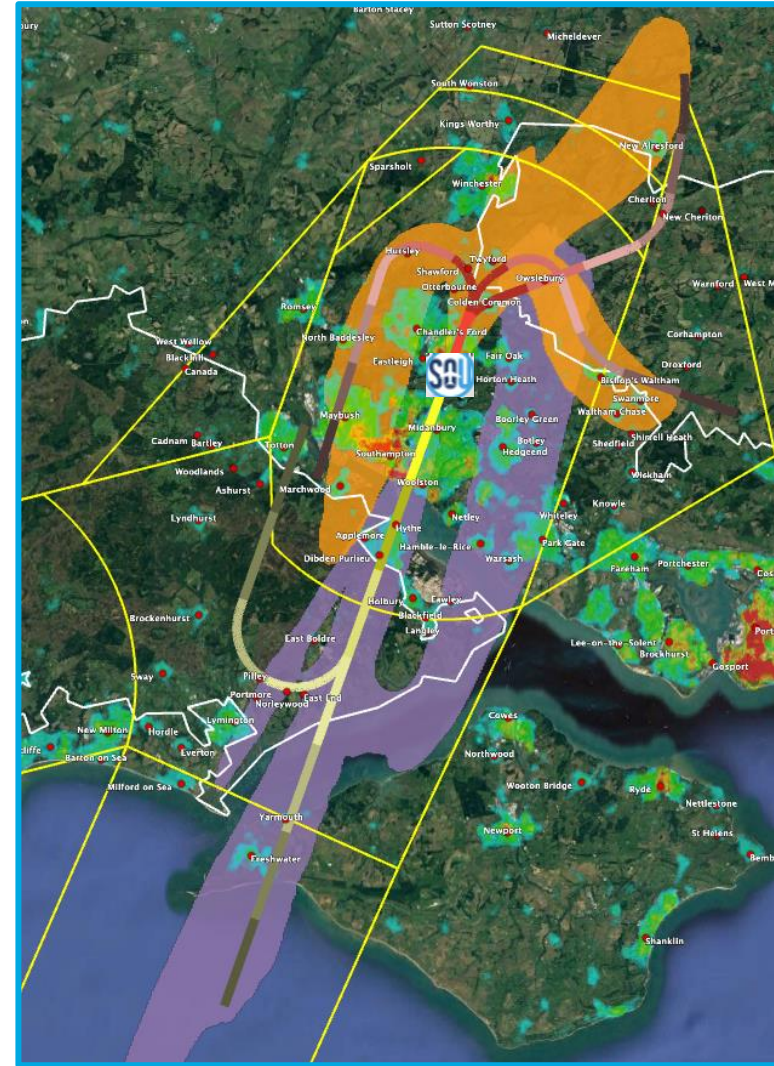


# Comprehensive List of Options: Runway 02

## Option 2



Runway 20 Option 2  
departures (red in  
1000ft bands),  
arrivals (yellow in  
1000ft bands),  
existing CAS structure  
(solid yellow),  
population density  
(graduated red -  
green)

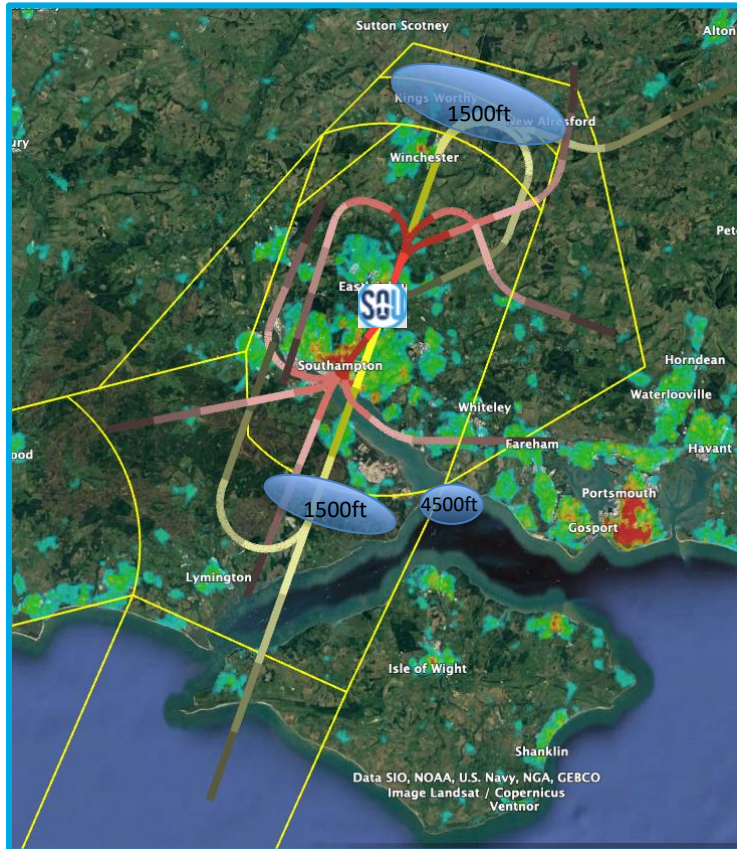


2019 NTK  
overlay: 2019  
departures  
(orange),  
arrivals (purple)



# Comprehensive List of Options

## Option 2 Controlled Airspace considerations



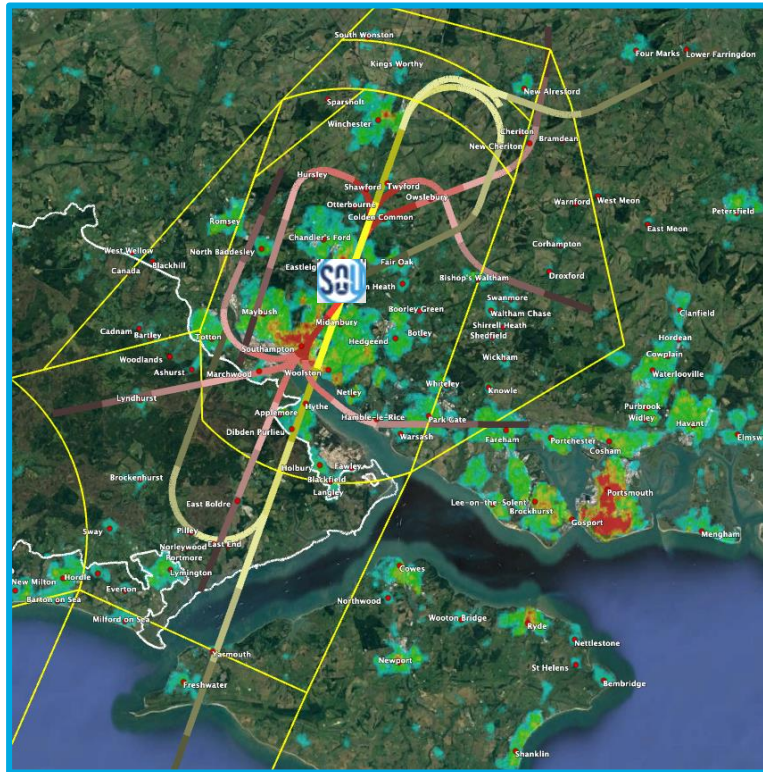
CTR/CTA dimensions depend very much on the Instrument Flight Procedures and/or Radar Vectoring patterns to and from the aerodrome. Therefore, until very detailed IFP design takes place and locations of the waypoints, fixes, PBN specifications and associated protection areas are available we can only provide some indications as to the general areas where changes are likely to be required to accommodate the options. With all options, it is not possible to contain a RWY 20 RNP Approach or a PBN transition to RWY 20 final approach within the existing structures. Amendments to Solent CTA 3 and possibly CTA 5 and CTA 2 required with lowering of those bases in some areas.

There may be scope to **reduce** the volume of the existing CTR by decreasing its width either side of the extended centreline, stepping up to a 1500ft base then progressively higher. We would hope to enable a raising of parts of CTA 2, CTA 4, CTA 6 and CTA 8.

Appreciating that all reduction in CAS are welcome, this slide only aims to highlight the general areas where **more** CAS would be required to enable feedback on the potential impacts to GA in those areas.

# Comprehensive List of Options

## Option 2 Design Principle indicators



Broad Design Principle Category	Design Principles	Notes on option development
Safety	DP1	Options developed by SMEs using concepts developed in collaboration with ATC and flight paths designed to meet the basic principles of PANS-Ops.
Air Quality	DP2 DP6	Option does not make any changes below 1,000ft*
Controlled Airspace	DP2 DP3 DP5 DP13	See previous slide. Adjustments required to CTA3/5. Scope to simplify and release in other areas. Aims to make use of Farnborough CTA 8 to enable fuel savings from the north.
CO <sub>2</sub>	DP 2 DP6 DP10 DP11	Arrivals from the SE to RWY 02 would see more miles flown but potential reductions available for arrivals from the North to RWY 20 however longer miles for RWY 02 NORRY departures. Operational complexities could lead to ground delay
Noise: Population	DP2 DP7 DP9	Flight paths are similar to today in this option although population overflown expected to be lower due to concentration of tracks
Aircraft Capability	DP 2 DP4 DP9 DP10 DP12	Option aims to meet RNAV 1 standards. There's an opportunity to use RNP1 + RF for RWY20 which could reduce CAS impact
Sharing of noise	DP2 DP7 DP8	Relief for between Eastleigh and Kingsworth due to NORRY departure tracking NE but New Alresford and Cheriton could experience increased overflight. Increased overflight in Totton, Machwood and Maybush due to RWY 02 arrivals
Operational performance	DP2 DP3 DP4 DP5 DP10 DP11	Option utilises PBN arrival transitions to final approach, which are expected to enhance operational performance and therefore meet the design principles around this. Increased complexity due to convergence of RWY 02 THRED departures and RWY 02 arrivals but enhanced due to PBN arrival transitions to final approach, particularly RWY 20
Noise: AONB / New Forest	DP2 DP7 DP9	More overflight by the majority of RWY 02 arrivals in an effort to reduce the CAS requirements to the East.

\*(ANG2017 states that due to the effects of mixing and dispersion, emissions from aircraft above 1,000 feet are unlikely to have a significant impact on local air quality)

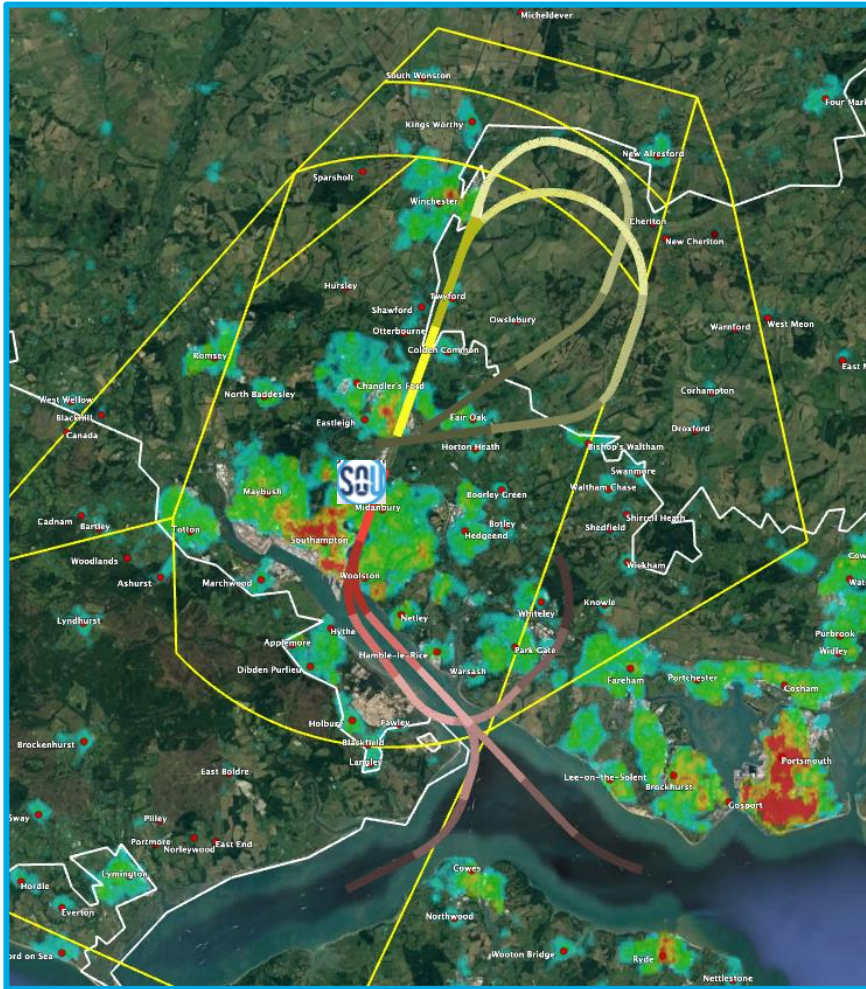
# Option 3



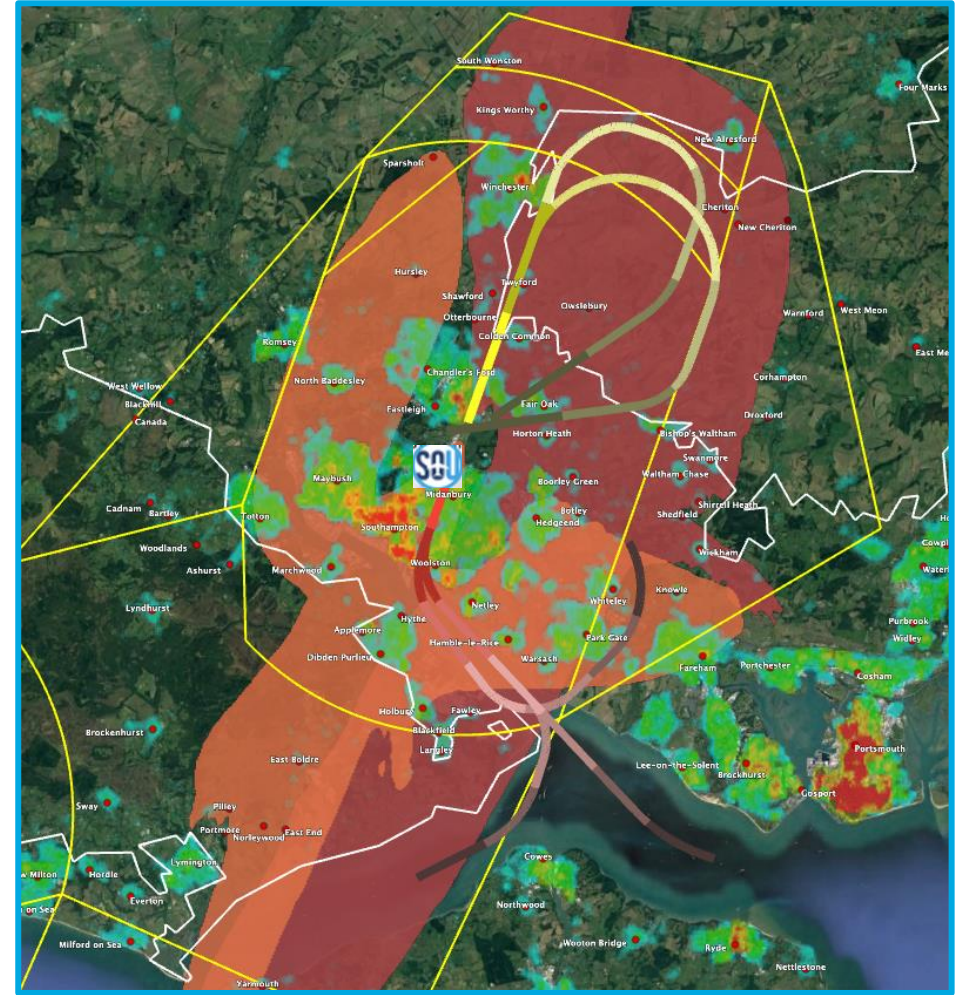


# Comprehensive List of Options: Runway 20

## Option 3



Runway 20 Option 3 departures (red in 1000ft bands), arrivals (yellow in 1000ft bands), existing CAS structure (solid yellow), population density (graduated red - green)

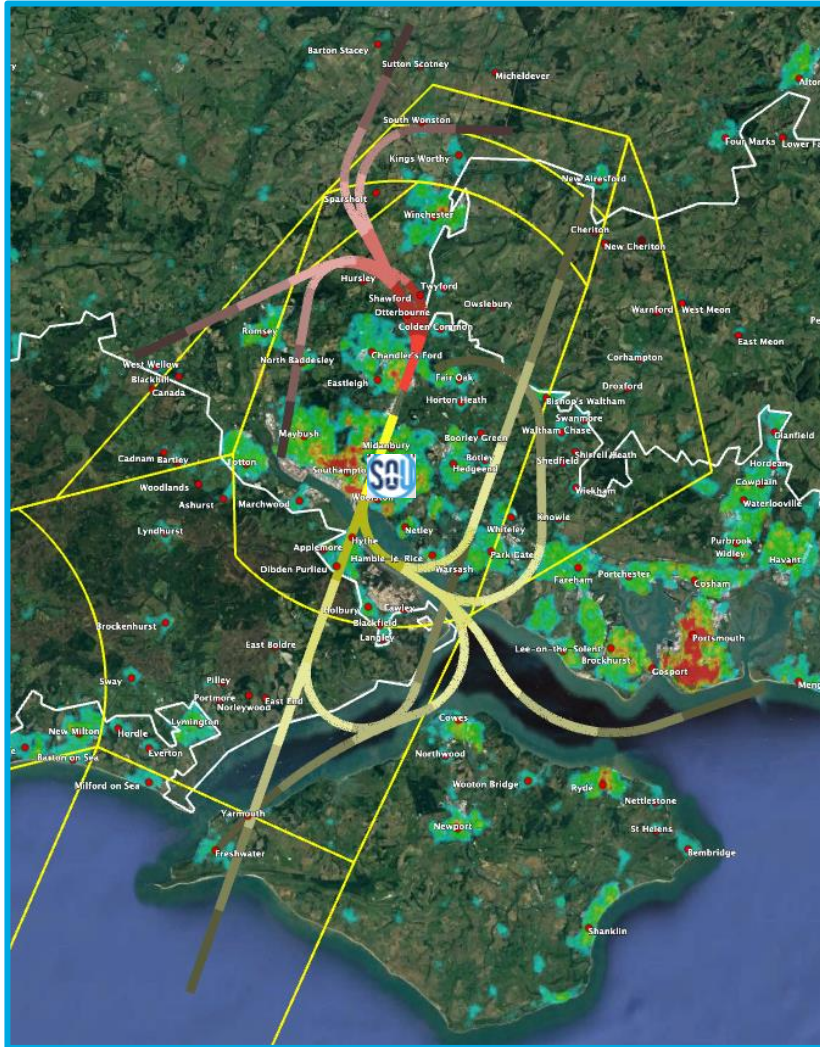


2019 NTK overlay: 2019 departures (orange), arrivals (red)

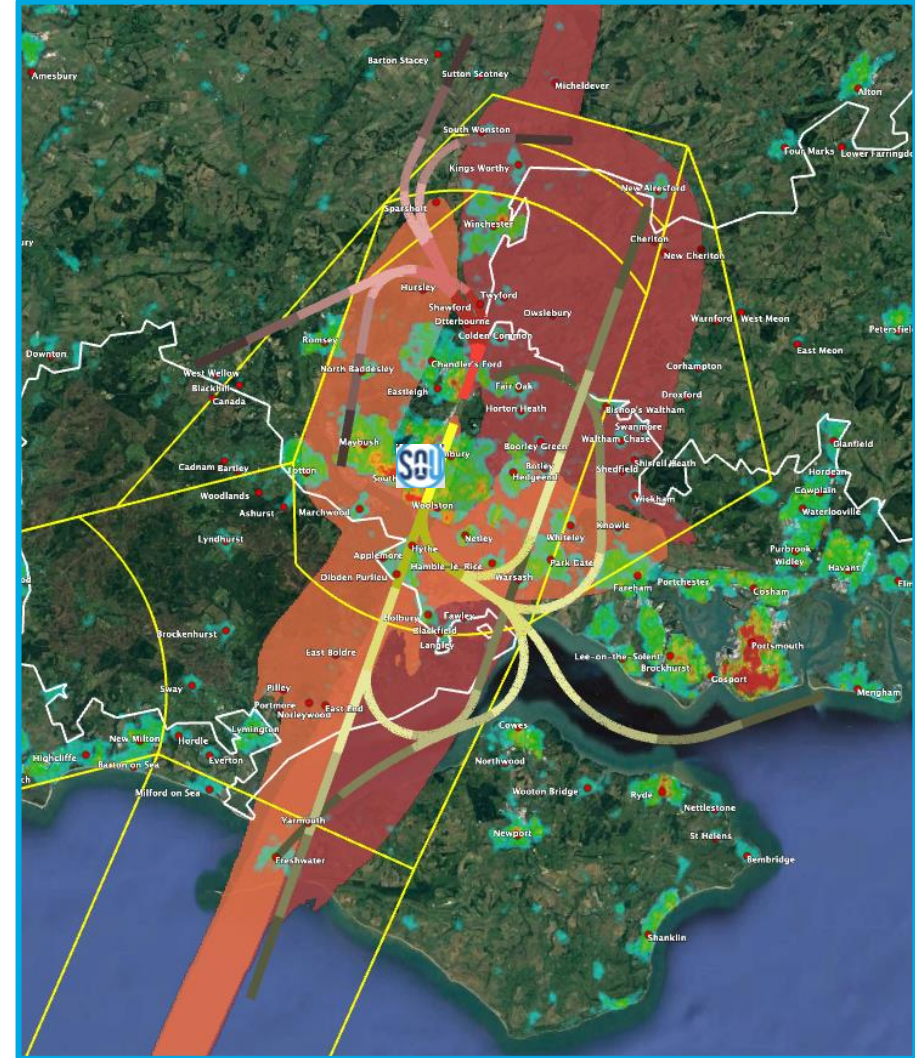


# Comprehensive List of Options: Runway 02

## Option 3



Runway 02 Option 3 departures (red in 1000ft bands), arrivals (yellow in 1000ft bands), existing CAS structure (solid yellow), population density (graduated red - green)

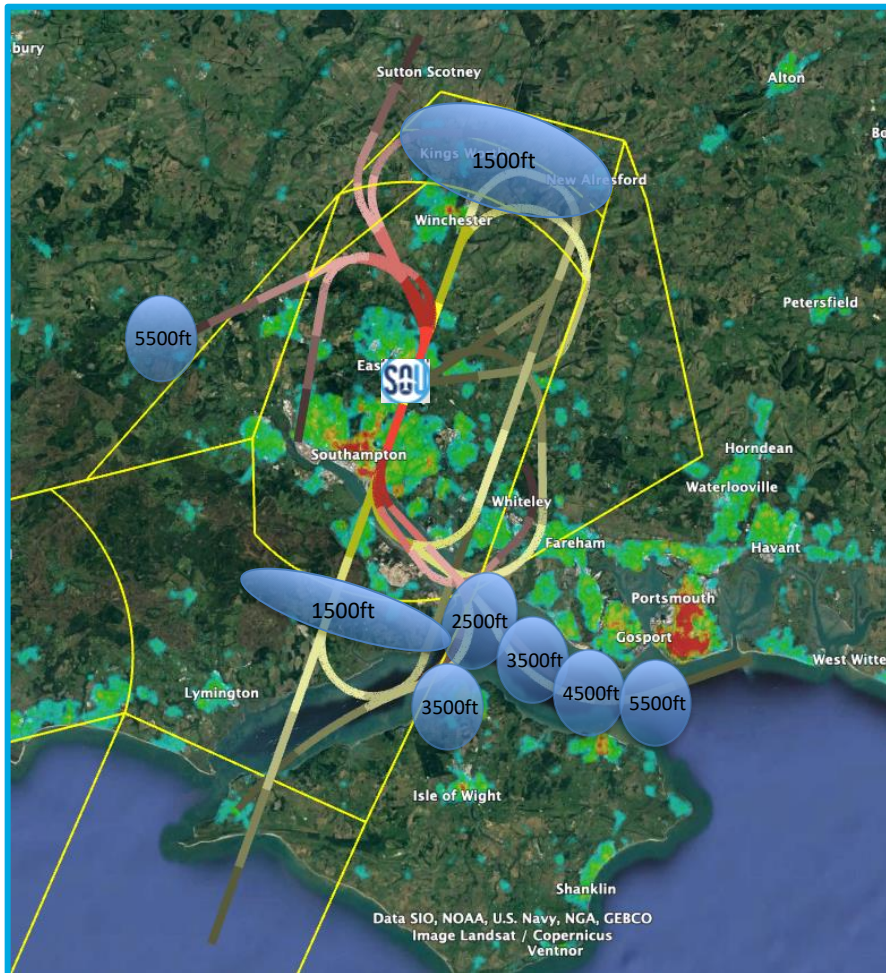


2019 NTK overlay: 2019 departures (orange), arrivals (red)



# Comprehensive List of Options

## Option 3 Controlled Airspace considerations



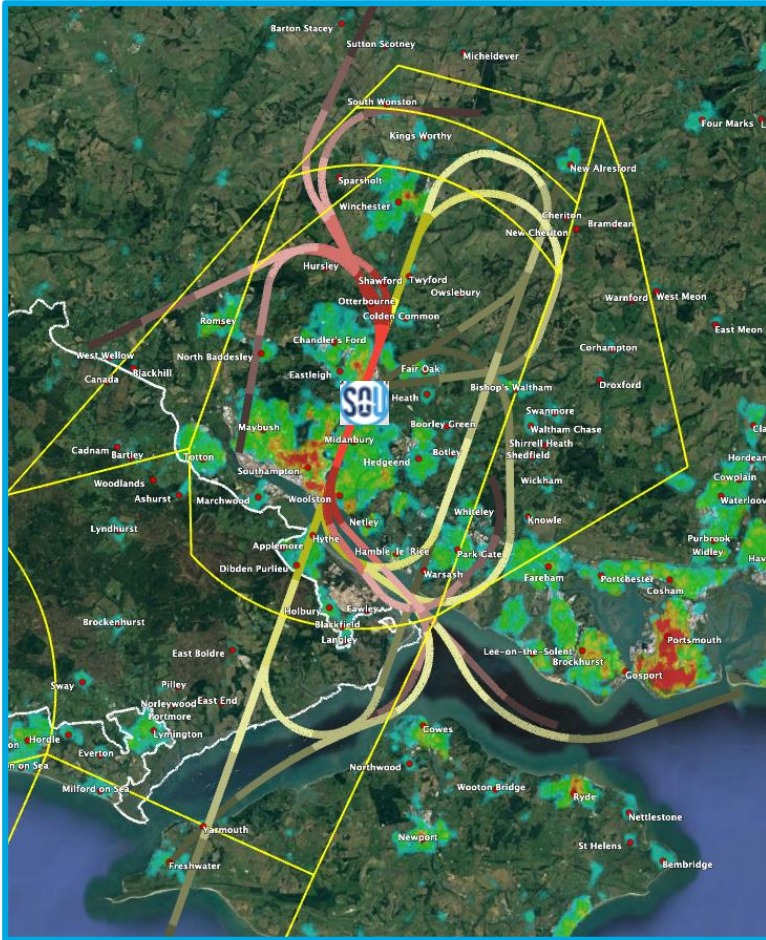
CTR/CTA dimensions depend very much on the Instrument Flight Procedures and/or Radar Vectoring patterns to and from the aerodrome. Therefore, until very detailed IFP design takes place and locations of the waypoints, fixes, PBN specifications and associated protection areas are available we can only provide some indications as to the general areas where changes are likely to be required to accommodate the options. With all options, it is not possible to contain a RWY 20 RNP Approach or a PBN transition to RWY 20 final approach within the existing structures. Amendments to Solent CTA 3 and possibly CTA 5 and CTA 2 required with lowering of those bases in some areas.

There may be scope to **reduce** the volume of the existing CTR by decreasing its width either side of the extended centreline, stepping up to a 1500ft base then progressively higher. We would hope to enable a raising of parts of CTA 2, CTA 4, CTA 6 and CTA 8.

Appreciating that all reduction in CAS are welcome, this slide only aims to highlight the general areas where **more** CAS would be required to enable feedback on the potential impacts to GA in those areas.

# Comprehensive List of Options

## Option 3 Design Principle indicators



Broad Design Principle Category	Design Principles	Notes on option development
Safety	DP1	Options developed by SMEs using concepts developed in collaboration with ATC and flight paths designed to meet the basic principles of PANS-Ops.
Air Quality	DP2 DP6	Change to RWY 20 NPR could lead to variations air quality
Controlled Airspace	DP2 DP3 DP5 DP13	See previous slide. Adjustments required to CTA3/5/6. More required to NW and West, lower base required to SE around Portsmouth CTA 1 and LTMA 13.
CO <sub>2</sub>	DP 2 DP6 DP10 DP11	Reductions available for RWY 02 arrivals (subject equipage) but increased emissions due to RWY 02 GWC/NORRY departures and RWY 20 THRED, NORRY and GIBSO departures.
Noise: Population	DP2 DP7 DP9	Population overflown expected to be lower due to concentration of tracks and this option maximises overflight of the Solent
Aircraft Capability	DP 2 DP4 DP9 DP10 DP12	Option aims to meet RNAV 1 standards but RNP-AR required for RWY 02 arrivals over Solent. Use of RF for RWY 02 arrivals could help reduce CAS impact.
Sharing of noise	DP2 DP7 DP8	Enables a sharing of noise but only due to increased use of the Solent however there are still populations on either side of the Solent that would experience noise, now from both arrivals and departures. However not all arrivals will be capable of flying the RWY 02 RNP-AR arrivals.
Operational performance	DP2 DP3 DP4 DP5 DP10 DP11	Enhanced due to PBN arrival transitions to final approach, particularly RWY 20 and more CAS over Portsmouth CTA assists positioning of RWY 02 arrivals
Noise: AONB / New Forest	DP2 DP7 DP9	Reductions in overflight of New Forest due to use of Solent.

\*ANG2017 states that due to the effects of mixing and dispersion, emissions from aircraft above 1,000 feet are unlikely to have a significant impact on local air quality)

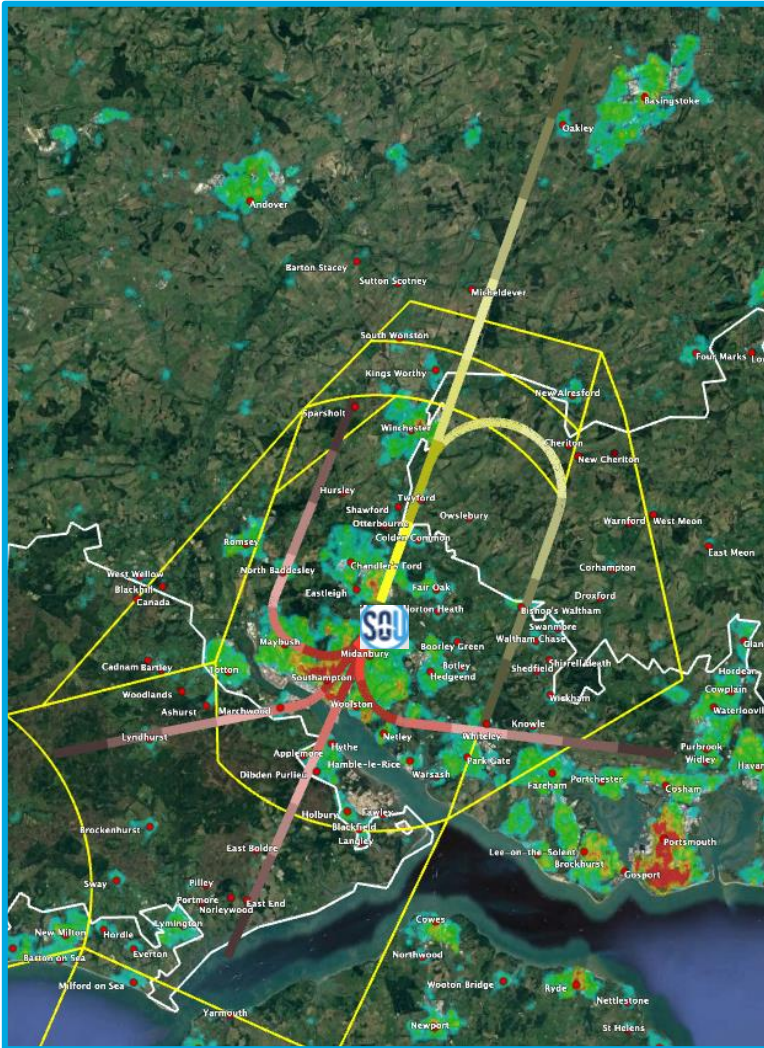
# Option 4



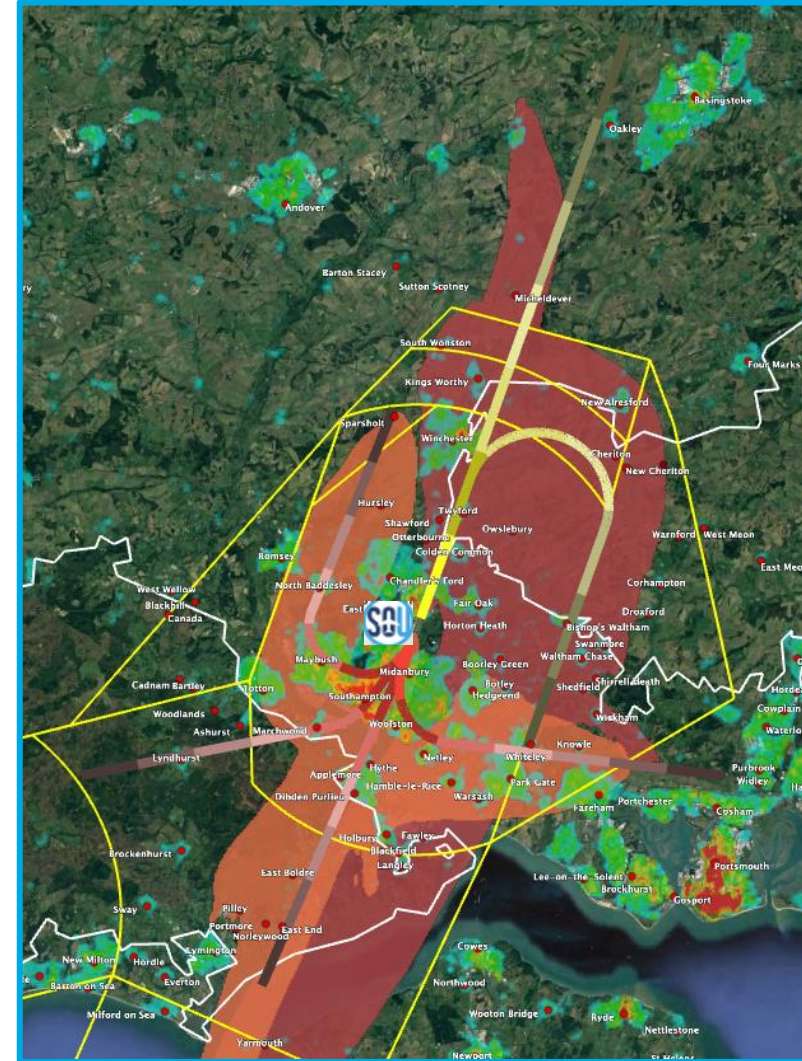


# Comprehensive List of Options: Runway 20

## Option 4



Runway 20 Option 4 departures (red in 1000ft bands), arrivals (yellow in 1000ft bands), existing CAS structure (solid yellow), population density (graduated red - green)

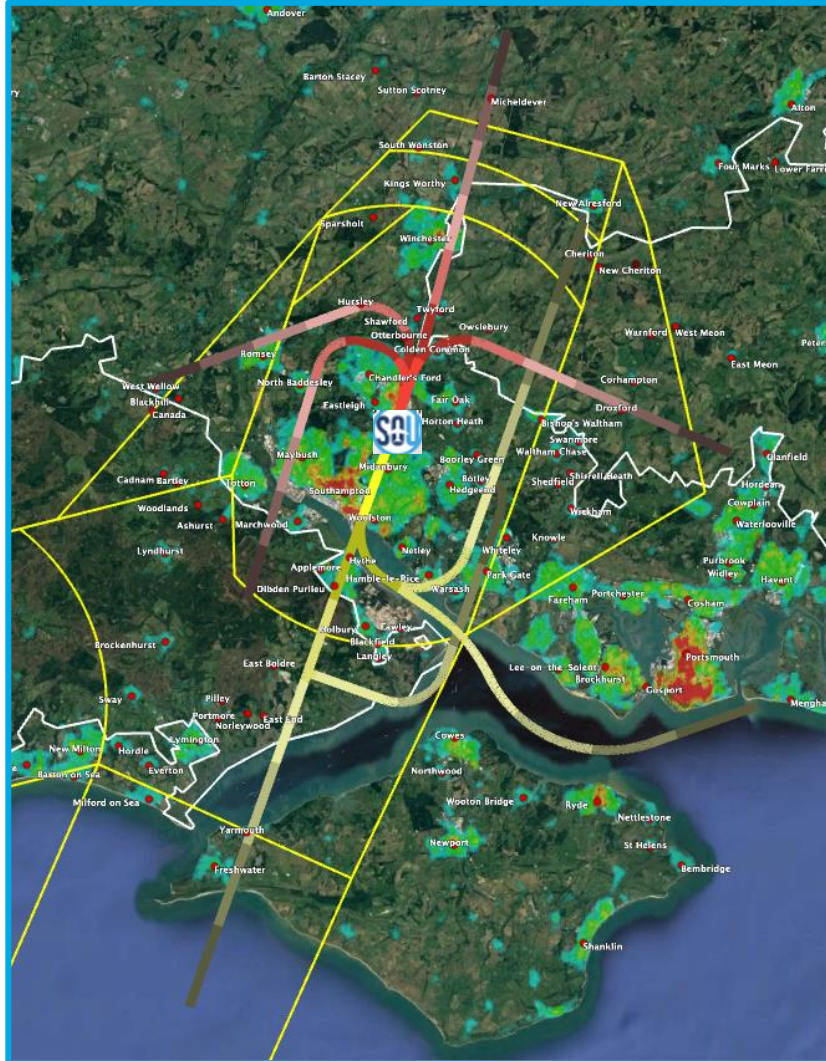


2019 NTK overlay: 2019 departures (orange), arrivals (red)

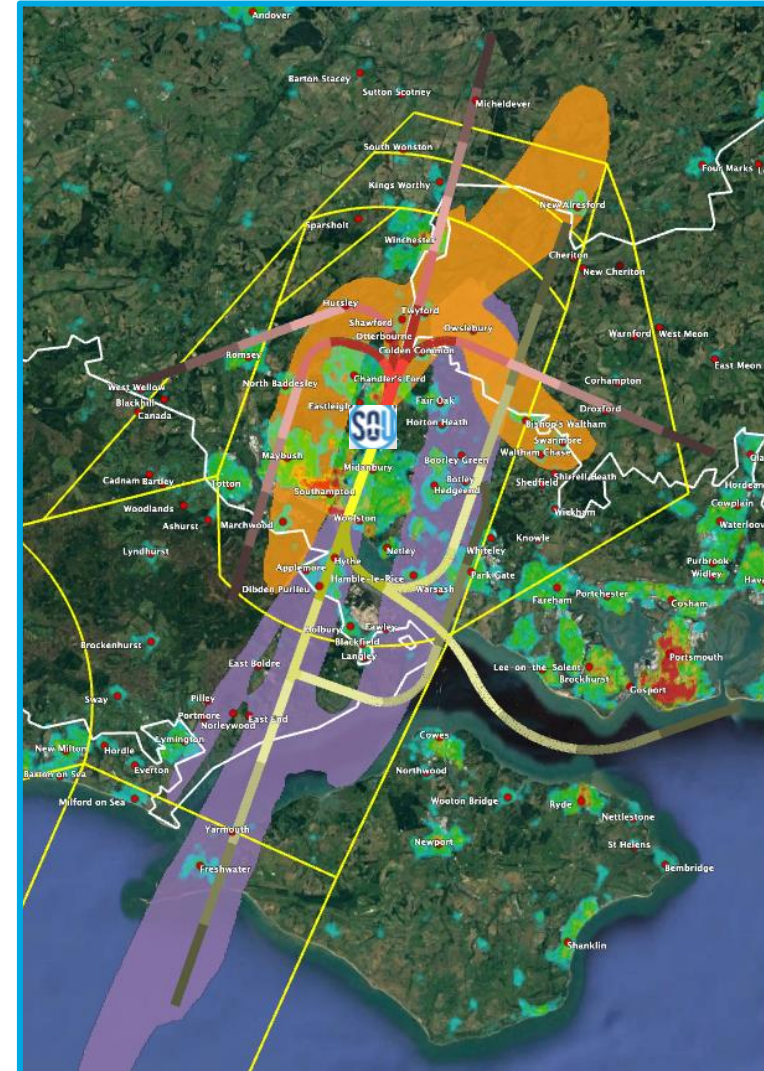


# Comprehensive List of Options: Runway 02

## Option 4



Runway 02 Option 4 departures (red in 1000ft bands), arrivals (yellow in 1000ft bands), existing CAS structure (solid yellow), population density (graduated red - green)

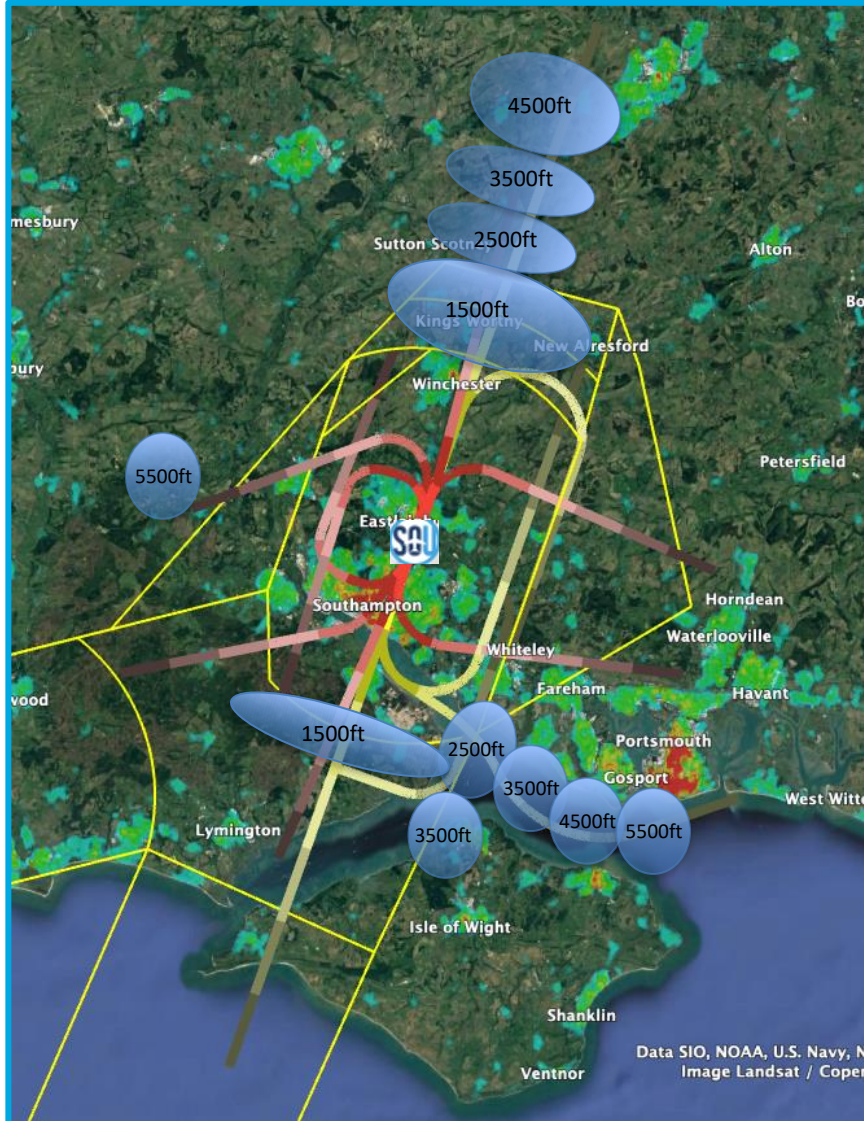


2019 NTK overlay: 2019 departures (orange), arrivals (purple)



# Comprehensive List of Options

## Option 4. Controlled Airspace considerations



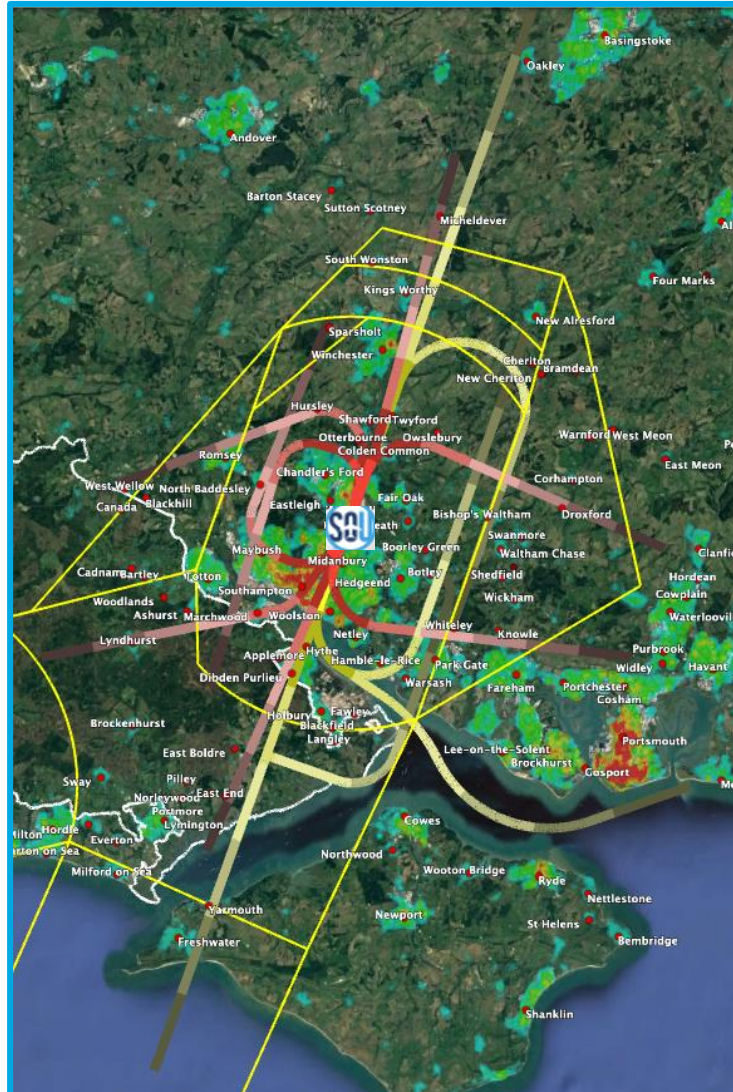
CTR/CTA dimensions depend very much on the Instrument Flight Procedures and/or Radar Vectoring patterns to and from the aerodrome. Therefore, until very detailed IFP design takes place and locations of the waypoints, fixes, PBN specifications and associated protection areas are available we can only provide some indications as to the general areas where changes are likely to be required to accommodate the options. With all options, it is not possible to contain a RWY 20 RNP Approach or a PBN transition to RWY 20 final approach within the existing structures. Amendments to Solent CTA 3 and possibly CTA 5 required with lowering of those bases in some areas.

There may be scope to **reduce** the volume of the existing CTR by decreasing it's width either side of the extended centreline, stepping up to a 1500ft base then progressively higher. We would hope to enable a raising of parts of CTA 2, CTA 4, CTA 6 and CTA 8 and with an overall reduction in the volume of Southampton's CAS.

Appreciating that all reduction in CAS are welcome, this slide only aims to highlight the general areas where **more** CAS would be required to enable feedback on the potential impacts to GA in those areas.

# Comprehensive List of Options

## Option 4. Design Principle indicators



Broad Design Principle Category	Design Principles	Notes on option development
Safety	DP1	Options developed by SMEs using concepts developed in collaboration with ATC and flight paths designed to meet the basic principles of PANS-Ops.
Air Quality	DP2 DP6	Change to RWY 20/02 NPR could lead to variations air quality
Controlled Airspace	DP2 DP3 DP5 DP13	See previous slide. Adjustments required to CTA3/5/6. More required to the West, lower base required to SE around Portsmouth CTA 1 and LTMA 13. Significant lowering of Portsmouth CTA 12 required to accommodate direct arrival from the North to RWY 20.
CO <sub>2</sub>	DP 2 DP6 DP10 DP11	Significant reductions available for RWY 02 arrivals (subject equipage) and NORRY/THRED departures turning North/South earlier
Noise: Population	DP2 DP7 DP9	Lower due to concentration of tracks and use of Solent but RWY 02 THRED and RWY 20 NORRY could now overfly more people and at lower altitude than today.
Aircraft Capability	DP 2 DP4 DP9 DP10 DP12	Option aims to meet RNAV 1 standards but RNP-AR required for RWY 02 arrivals over Solent. Use of RF for RWY 02 arrivals could help reduce CAS impact.
Sharing of noise	DP2 DP7 DP8	Increased overflight at lower levels to the West of the airport. RWY 02 NORRY departure overflies same areas as RWY20 final approach between Eastleigh and Kingsworthy.
Operational performance	DP2 DP3 DP4 DP5 DP10 DP11	Enhanced due to PBN arrival transitions to final approach, particularly with the 'straight in' for RWY 20 and more CAS over Portsmouth CTA assists positioning of RWY 02 arrivals
Noise: AONB / New Forest	DP2 DP7 DP9	Reductions due to use of Solent but PBN RWY 20 THRED departure could result in more frequent overflight of the same parts of the New Forest

\*ANG2017 states that due to the effects of mixing and dispersion, emissions from aircraft above 1,000 feet are unlikely to have a significant impact on local air quality)



Any Questions?



# Our Questions for you

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- The questions we are asking:
  - **Are you satisfied that we have taken into account the Design Principles when developing our comprehensive list of route options?**
  - **Are there any further considerations that relate to the Design Principles which we have not taken into account?**
  - **For General Aviation stakeholders: Please can you provide feedback on how the various additional sections of Controlled Airspace would affect your operations for each option. Please can you also advise of any amendments/suggestions/recommendations you may have regarding the existing volume of Controlled Airspace which would most benefit your operation.**
- We will use your feedback to try and address any concerns raised. We are able to refine or develop more options, based on your feedback.
- A link to this presentation and a feedback form will be circulated to all identified Stakeholders after this session.
- Please send your feedback, comments and enquiries to: [airspace.change@southamptonairport.com](mailto:airspace.change@southamptonairport.com) by **26<sup>th</sup> July**

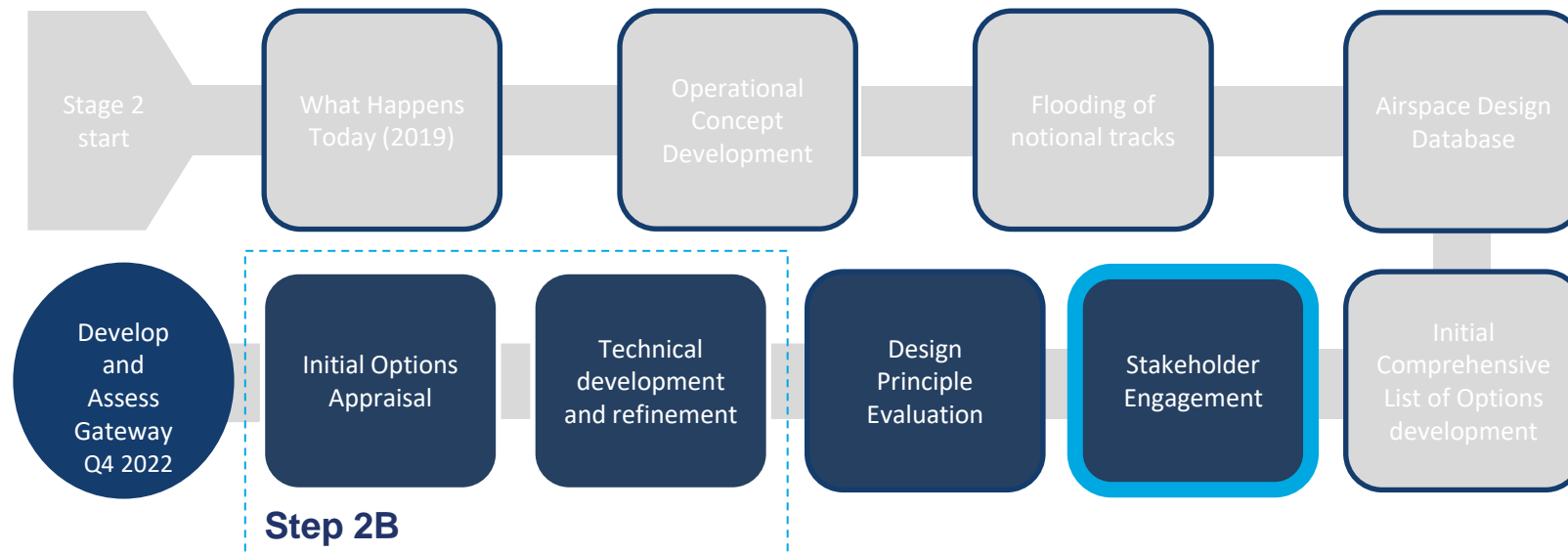
# Next Steps



# Next Steps

## Design Principle Evaluation

- Following the close of the feedback period we will review all suggestions and refine or create new options as appropriate.
- Our full comprehensive list of options will then be taken forward to the Design Principle Evaluation. This is where we assess each option against each design principle to understand whether it has met, partially met, or not met that principle. This is a qualitative assessment although quantitative data from the airspace design database will be used to support the qualitative analysis undertaken where applicable.
- The outcome of the Design Principle Evaluation may be a shorter list of options taken forward to the Initial Options Appraisal at Step 2B.





**In-person stakeholder briefing session, held on 27<sup>th</sup> June 2022.**



# Southampton Airport FASI-S Airspace Change Proposal

Frequently Asked Questions



## Introduction

This frequently asked question document provides a short summary of information in advance of the Stage 2 workshops which will be held in November and December 2021. The document is intended as an optional pre-reading for stakeholder planning to attend the sessions.

## General

### 1. What is Airspace?

Airspace is the 'invisible infrastructure' in the sky which helps aircraft operate safely. It includes the flight paths that aircraft take when arriving and departing from an airport, which are usually the responsibility of an airport up to 7000ft, and the routes on the airspace network above 7000ft which are the responsibility of NATS.

Airspace can be controlled and uncontrolled; this means that in some areas there are restrictions on which aircraft and/or pilots can fly in the airspace to protect other airspace users such as commercial airliners. To enter controlled airspace, pilots must get permission from Air Traffic Control. There are different classifications of controlled airspace that have varying requirements. For more information about different types of controlled airspace, please see [here](#).

### 2. What is airspace change?

Airspace change is the process through which flight paths, routes, controlled airspace boundaries and controlled airspace classification can be changed. The Department for Transport (DfT) is responsible for all aviation policy in the UK, including airspace. The Civil Aviation Authority (CAA) is responsible for its regulation and for the Airspace Change Process (see question 3) which all airports must follow where changes to airspace are proposed. Southampton Airport is responsible for the design of any changes to flight paths into and out of the airport up to approximately 7,000ft, and NATS is responsible for changes to airspace above 7,000ft.

### 3. What is CAP 1616?

The aviation industry is regulated by the Civil Aviation Authority (CAA) in the UK, and they ensure that the environmental impact of aviation on local communities is managed through efficient use of airspace. When changes to airspace are proposed, an airport is required to follow the CAA's Airspace Change Proposal (ACP) process, this is known as [CAP1616](#).

CAP1616 is a 7-stage process which places great importance on engaging and consulting on airspace proposals throughout the process with a wide range of stakeholders, including potentially affected communities.

Southampton Airport are currently in Stage 2 of the CAP1616 process. More information on Stage 1 can be found on the CAA's Airspace Change Portal, [here](#).

#### **4. What is the Airspace Modernisation Strategy?**

The Airspace Modernisation Strategy ([AMS](#)), also known as CAP1711, is a document published by the DfT and CAA in December 2018. The document describes how the airspace within the UK is reaching capacity and due to the age of the design, includes features that restrict the aviation industry's ability to improve its operational and environmental performance.

The AMS sets out a new shared objective between the CAA and the DfT for modernising airspace which is to deliver quicker, quieter, and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace.

#### **5. What is Performance Based Navigation?**

Performance based navigation (PBN) is a type of navigation that uses satellite-based technology. This is similar to the type of technology used in car sat-navs, or in GPS-based sports watches. PBN is being introduced across the world and Southampton Airport are required to implement it as part of meeting the requirements of the Airspace Modernisation Strategy (see question 3 above).

PBN improves the accuracy of where aircraft fly and offers opportunities for different flight path locations by moving away from the constraints of outdated conventional navigation using ground-based beacons. This helps improve operational performance, reduce delays, and improves resilience.

#### **6. What is FASI-S?**

Many of the airspace changes that the airports and NATS are required to deliver overlap. In the busiest areas of Southern England, Northern England, and Scotland the airspace changes have been grouped into two major programmes:

- Future Airspace Implementation (FASI) North: The fundamental redesign of the terminal airspace in northern England and Scotland that is based on the widespread adoption of satellite navigation procedures.
- Future Airspace Implementation (FASI) South: The fundamental redesign of the terminal airspace in Southern England. This includes Southampton airport.

The FASI North and South airports are responsible for upgrading their individual arrival and departure routes from the ground to 7000ft. NATS are responsible for redesigning the route network above 7000ft that guides traffic to and from the boundaries of the UK's airspace. The airports and NATS are working closely to ensure that their individual ACPs are aligned, and the final set of changes can be combined seamlessly.

## 7. What is ACOG?

ACOG is the Airspace Change Organising Group, and they are the team tasked with coordinating the redesign of the UK's airspace (FASI-N & FASI-S programmes). ACOG was formed in 2019 and are a fully independent organisation within NATS, under the direction of the DfT and the CAA.

ACOG's role is to coordinate the delivery of key aspects of the AMS. The cornerstone of ACOG's work is to create and maintain the Airspace Masterplan, which will provide detailed information on the airspace design options under development, the overlaps between airports changes and the compromises and trade-offs that may need to be made to integrate each airspace change effectively. The latest iteration of the Masterplan can be found here [<https://www.acog.aero/airspace-masterplan/masterplan/>]. More information on ACOG can be found [here](#).

## 8. What is Southampton Airport proposing and why?

Southampton Airport is conducting an ACP to upgrade the airport's arrival and departure routes. It will cover a review of all routes from the ground up to 7000ft and will also include a review of the boundaries of controlled airspace.

Southampton Airport, along with other airports across the UK, is required by the Department for Transport (DfT) and the Civil Aviation Authority (CAA) to modernise its airspace to remove reliance on old technology. This is part of a UK-wide airspace modernisation programme, which you can find out more about [here](#).

Southampton Airport is required to meet regulatory requirements to introduce routes and procedures compliant with PBN criteria and the requirements of the Airspace Modernisation Strategy. New arrival and departure routes and procedures below 7000ft must be designed to connect to the en-route airspace network in an efficient manner to deliver required capacity gains.

The redesign of Southampton Airport's arrival and departure routes using satellite navigation standards will also enable the airport to address several local airspace issues associated with operations from the surface to 7000ft, specifically:

- The lack of Standard Instrument Departures (SIDs) from both runways.
- The lack of a PBN approach to Runway 20

More information about Southampton Airport's airspace change proposal can be found on the CAA's Airspace Change Portal [here](#).

## 9. CAP 1616 Stage 1: What are Southampton Airport's Design Principles?

At Stage 1B of the CAP1616 process, the following design principles were developed with stakeholders. For more information about Stage 1, please see our submission documents on the Airspace Change portal [here](#).

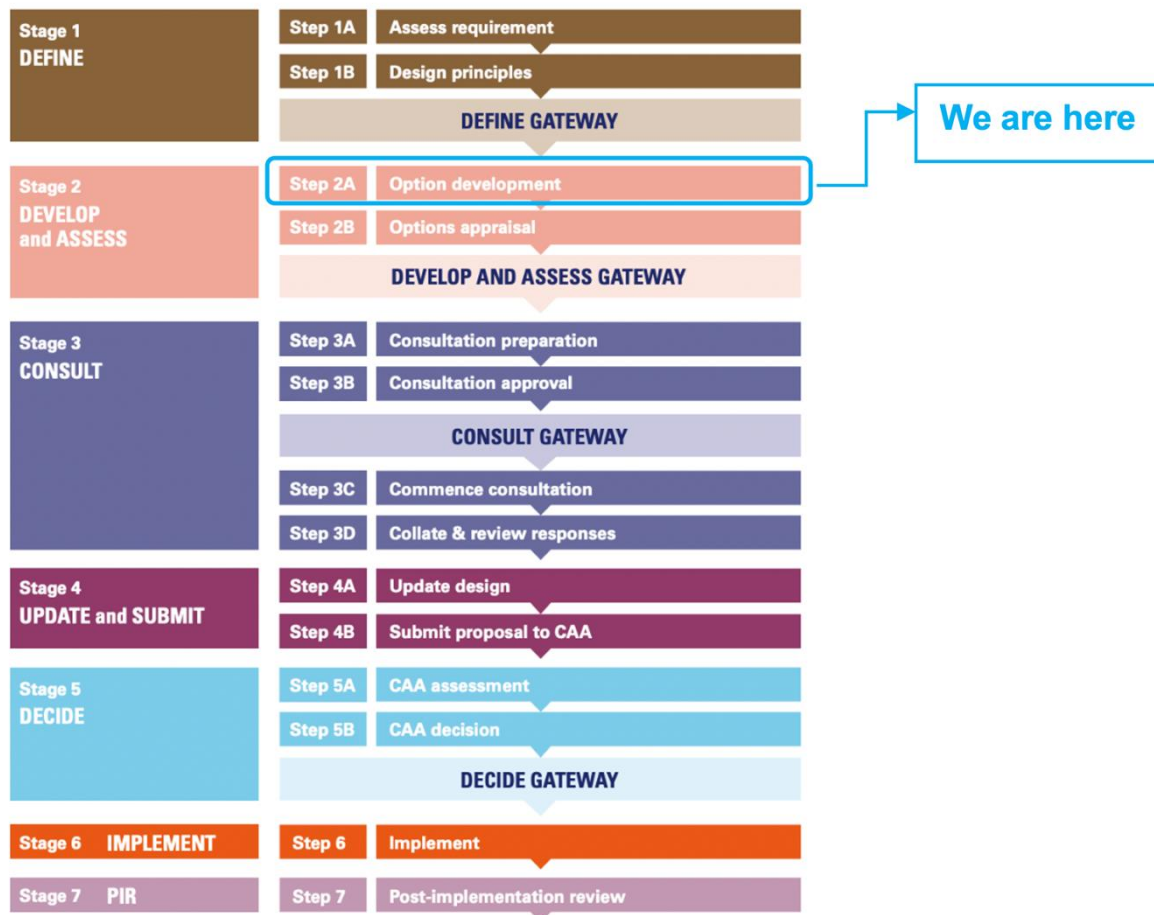
#	Airspace design principle
DP1	<b>Top priority:</b> Be as safe or safer than today for both commercial air transport and general aviation users that are affected by the airspace change.
DP2	<b>Second priority:</b> The SOU ACP accords with the CAA's published Airspace Modernisation Strategy (CAP1711) and any current or future plans associated with it.
DP3	Avoid introducing additional complexity and bottlenecks into controlled and uncontrolled airspace and contribute to a reduction in airspace infringements.
DP4	Minimise tactical intervention by Air Traffic Control (ATC) below 7000ft.
DP5	Ensure sufficient airspace capacity to accommodate SOU's master plan traffic forecasts while providing for the integration of GA traffic.
DP6	Minimise, and where possible, reduce aircraft emissions, the degradation in air quality and adverse ecological impacts.
DP7	Minimise and where possible reduce, the total adverse effects on health and quality of life from aircraft noise.
DP8	Ensure a predictable, fair and equitable share of traffic across all routes, through multiple route options and respite routes.
DP9	Avoid overflying densely populated residential areas, national parks, AONBs, noise sensitive buildings and other areas prized for tranquillity.
DP10	Maximise operational efficiency for commercial air transport and general aviation users affected by the airspace change.
DP11	Ensure that aircraft operating at SOU climb and descend continuously to/from at least 7000ft.
DP12	Adopt the most beneficial form of enhanced navigation standards for arrivals and departure routes.
DP13	Avoid increasing the overall volume of controlled airspace and where deemed necessary, mitigate the impact by including measures that improve access to GA and do not increase airspace segregation.
DP14	Consider the use of electronic conspicuity to improve airspace integration where possible.
DP15	Take into account the combination of effects on the operations at neighbouring airports that are affected by the airspace change.
DP16	Offer flexibility in the route structure to strengthen resilience against adverse weather and network issues that may affect operations at SOU.

As part of our CAP1616 Stage 1 work, where we developed the Airspace Change Design Principles, the CAA mandated that the airport include a design principle around the AMS (DP2).

These Design Principles will be used throughout Stage 2A when we are developing our comprehensive list of options and then evaluating the performance of these options (See question 10 for more details)

## 10. Where is Southampton airport in the airspace change process?

We are currently in Stage 2 of the 7-stage CAP1616 process which is called 'develop & assess'. As part of Step 2A, Options Development, we are developing a first comprehensive list of options which address the Statement of Need and align with the design principles from Stage 1. More information on Stage 1 can be found [here](#).



Following the development of the initial comprehensive list of options, we will engage with the same Stakeholders engaged at Stage 1B, to ensure that they are satisfied that the design options are aligned with the design principles and that we have properly understood and accounted for stakeholder concerns specifically related to the design options.

## 11. 11 When can we see the flight path options?

### Step 2A

We are currently at Step 2A, where we are required to engage on our comprehensive list of options with our stakeholders including those we engaged with during Stage 1. The aim of this engagement is to gain feedback from stakeholders about Southampton Airport's process for developing its design options. Specifically, stakeholders will be asked to consider if Southampton Airport has taken full account of the Step 1B Design Principles as listed in point 9 above.

### Step 2B

Following this, Southampton Airport will commence Step 2B, which involves an initial appraisal of the options presented to stakeholders at Step 2A. This step will determine what flight path options are taken forward to Stage 3.



### **Stage 3**

During Stage 3 Southampton Airport will undertake detailed quantitative appraisal of the benefits and impacts of these options. These flight path options will then be shared via a public consultation process. At this stage the public will have the opportunity to see and understand what is being proposed and respond to the consultation.

#### **12. How will airspace change options be assessed?**

We will initially qualitatively assess options against each Design Principle as part of the Design Principle Evaluation. This takes place at Stage 2A after we have developed our comprehensive list of options and tested these with stakeholders.

In Step 2B, we will undertake an Initial Options Appraisal of our options which is a more detailed qualitative appraisal and choose our preferred options to take into Stage 3. The outcomes of Step 2A and 2B will be published on the Airspace Change Portal following submission to the CAA.

At Stage 3, as options are developed and refined into detailed designs, we will build upon the Initial Options Appraisal with quantitative analysis as part of the Full Options Appraisal. The material published as part of the consultation will include a Full Options Appraisal. This will include a full analysis of the option(s) being proposed by Southampton Airport.

More information about the options appraisals can be found in Appendix E of [CAP1616](#).

#### **13. When can I have my say?**

Stakeholders who have already been part of the process will continue to be engaged throughout stage 2. Our stage 2 documents will be published on the [Airspace Change Portal](#) following submission to the CAA.

The wider public will be informed of the proposals during Stage 3, with a full public consultation. A key element of this consultation is that it takes place when proposals are at a formative stage, so that feedback from the consultees can potentially impact the proposal.

Southampton Airport is expecting the public consultation to take place in 2024.

#### **14. Will there be a public consultation?**

Yes. At Stage 3 of the CAP1616 process we will hold a public consultation. This is anticipated to take place in 2024.

## 15. Where can I find out more information?

You can find out more about this airspace change on the CAA Portal [here](#). You can register an email address on the site to receive email updates about this airspace change proposal.

The Southampton Airport website is also updated with information about the airspace change and can be used to register your interest in the ACP: [here](#).